



Teaching Vocabulary in a Digital Era: A Study on Tools and Techniques for Engaging English Learners

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ABSTRACT

Vocabulary acquisition is a cornerstone of language learning, essential for comprehension, communication, and overall proficiency. This critical review explores the evolving landscape of vocabulary instruction in the digital era, emphasizing the integration of innovative tools and techniques to enhance engagement and retention among English learners. It examines the transition from traditional, teacher-centered approaches to dynamic, learner-focused strategies enabled by technology. Digital tools, such as gamified platforms, multimedia resources, and mobile-assisted language learning applications, are highlighted for their ability to cater to various learning styles, promote learning autonomy, and sustain motivation. The review also discusses the role of contextual and personalized learning in improving vocabulary acquisition, drawing attention to strategies like spaced repetition, collaborative tools, and the use of media for immersive experiences. Additionally, it underscores the importance of balancing modern technology with foundational teaching methods to maximize effectiveness. The findings advocate for a strategic integration of traditional and digital methodologies, providing actionable insights for educators aiming to foster meaningful vocabulary development in diverse educational settings.

Keywords: Gamification, Mobile-assisted Language Learning (MALL), Teaching vocabulary, Contextualized vocabulary instruction

Introduction

Vocabulary is fundamental to language comprehension and effective communication, serving as the foundation of language proficiency. A strong vocabulary enables learners to decode and understand the meaning of spoken and written language, allowing them to grasp nuances and context with greater ease. In terms of communication, a rich vocabulary provides individuals with the words needed to express thoughts and ideas clearly, accurately, and creatively. This clarity is crucial not only for personal expression but also for successful interactions in both social and professional settings. Moreover, vocabulary development enhances cognitive skills, such as critical thinking and memory, which contribute to overall language fluency. In educational and professional environments, a well-developed vocabulary supports reading comprehension, writing, and verbal skills, often correlating with better performance. Additionally, vocabulary knowledge aids in understanding cultural references, idioms, and context-specific language, facilitating meaningful connections in diverse settings. Thus, vocabulary is essential not only for personal communication but also for academic, professional, and social success.

Vocabulary, the building blocks of language, is crucial for effective communication. A strong vocabulary enables individuals to express themselves clearly, comprehend information accurately, and engage in meaningful interactions. However, teaching vocabulary can be a complex task, requiring innovative and effective strategies. When learning a language, students need to get a comprehensive comprehension of vocabulary. Vocabulary knowledge is essential to language acquisition and is crucial to become proficient in a foreign language. A sufficient vocabulary is necessary for effective communication in a foreign language. Speaking, listening, reading, and writing are the four language skill domains that are connected by this component. As a result, pupils need to learn a lot of terms and become proficient in using them precisely. Fauziningrum et al. (2023) state that vocabulary is critical for effective communication, and individuals must acquire and understand many vocabulary words.

The shift to digital learning has significantly transformed modern education, driven largely by advancements in technology that make learning more accessible, flexible, and interactive. Technology has enabled educators to incorporate multimedia resources, interactive exercises, and instant feedback, which enhance engagement and make learning

more dynamic. Digital tools offer unique benefits for vocabulary teaching, as they provide a range of ways to reinforce and practice new words, from interactive flashcards to gamified apps that make memorization fun and effective. Additionally, digital platforms allow for personalized learning, adapting to individual students' needs and paces, which can lead to better retention and understanding of vocabulary. The rationale for using these digital tools lies in their capacity to cater to diverse learning styles, provide immediate feedback, and encourage consistent practice, making vocabulary acquisition more efficient and engaging in today's digital world.

Talking about digital tools and techniques for enhancing vocabulary skills in English learners, Fauziningrum et al. (2023) said that to effectively engage English learners in vocabulary acquisition, a variety of digital tools and techniques are utilized to make learning both interactive and personalized. Apps like Quizlet, Memrise, and Duolingo allow students to practice vocabulary through flashcards, quizzes, and spaced repetition, which aid in long-term retention. Gamified platforms such as Kahoot and WordWall introduce a fun, competitive element that motivates learners to engage and practice regularly. Techniques like multimedia learning, incorporating visuals, audio, and video, help students associate words with images and sounds, enriching comprehension. Additionally, adaptive learning technologies personalize vocabulary exercises based on each student's pace and level, ensuring that content is neither too challenging nor too simple. Collaborative online spaces, like discussion forums and language exchange apps, encourage students to use new vocabulary in real conversations, reinforcing learning in real-world contexts. Together, these tools and techniques create a dynamic learning environment that enhances vocabulary acquisition and keeps learners actively engaged.

Research Problems

1. What is the impact of integration of digital tools such as gamification and MALL-based applications on vocabulary acquisition among EFL learners?
2. How does digital media enhance student engagement and motivation to learn new vocabulary?
3. To what extent do contextual and personalized learning strategies improve vocabulary retention in English language teaching?

4. How can modern technology be combined with traditional methods to achieve better outcomes in vocabulary learning?
5. What are the main challenges faced by teachers in implementing technology for vocabulary instruction in the digital era?

Methods

This study used a systematic review method. Systematic reviews are systematic research methods to identify, evaluate, and integrate existing research on a particular topic. This review is conducted by four processes, the first step was collecting 40 relevant the articles. The articles were sourced from journals, google Scholar, and e-theses. The second step was identification. Those articles were categorized into learning perspectives, teaching media, and instructional strategies. The third was called screening for relevance according to the sub categories. The fourth step was analyzing the articles based on predefined sub-categories and drawing the conclusions.

Result and Discussion

This section provides a detailed account of the findings and discussion. The results presented in this article are derived from a review of 40 studies. The subsequent discussion will be structured around the research questions outlined in the sub-sections below:

A. A Perspective of Teaching Vocabulary

The perspective on teaching vocabulary emphasizes the importance of creating meaningful connections between new words and learners' prior knowledge. Many researchers point to enhancing students' vocabulary in interactive activities, such as discussions, visual aids, and real-life examples. The media usage also plays as significant strategies for the teacher. In this case, Susanto (2017) examined the perspective about teaching vocabulary to English Foreign Language Learners (EFL), The study indicated that vocabulary is an important part of foreign language learning. Therefore, the teachers must have various strategies in teaching vocabulary to make the students easily understand in learning vocabulary and effortlessly enrich new vocabularies.

- **Perspective on Media for Vocabulary Teaching**

In recent years, media has become an essential tool in language education, offering a dynamic and engaging approach to vocabulary instruction. From digital platforms to traditional visual aids, media provides a range of interactive and context-rich experiences that support vocabulary learning. Research in the field highlights the potential of media to enhance language acquisition through multimodal inputs, including images, sounds, videos, and interactive elements that cater to diverse learning styles and preferences.

According to several researches which have been analyzed, it was found that the perspective in media for teaching vocabulary. With the growing integration of digital media in education, new tools and platforms have emerged as effective aids in vocabulary instruction. Digital applications like WhatsApp and Quizlet offer unique features that engage students in vocabulary learning beyond traditional classroom boundaries. This review explores how different media facilitate vocabulary learning, focusing on aspects such as student engagement, interaction, confidence-building, and the impact of gamification and personalized learning.

Research indicates that students generally respond positively to media-based vocabulary learning tools. According to Apriliani (2021), students reported a high level of satisfaction using WhatsApp for vocabulary acquisition, with an average perception score of 4.4 on a 5-point scale. This high engagement suggests that digital media can transform vocabulary learning into a more appealing and motivating experience. Similarly, another research which was conducted by Khan, et al, (2021) Quizlet was seen as enjoyable and engaging, with students likening its interactive flashcards and quizzes to playing games. Another point of view shown by Deni, et al (2020) he mentioned in his research is that based on several media for learning such as; playing games, singing a song, using real things, using and drawing pictures, using video and using text books. Students claim that playing games and singing a song is the most exciting way of learning vocabulary. The positive perceptions associated with these platforms illustrate how the media can reduce learning anxiety and increase motivation, fostering a conducive environment for vocabulary acquisition.

- **Students Vocabulary Development**

Vocabulary development is a fundamental aspect of language learning, it is considered as the building block for communication and comprehension skills. For students, expanding vocabulary insight is crucial, not only for academic success but also for personal expression

and critical thinking. Vocabulary acquisition begins in early childhood, influenced by factors such as exposure to language, cognitive development, and contextual learning experiences. Progressing through various stages of education, students' vocabulary growth impacts their ability to understand complex texts, engage in meaningful discussions, and produce academic written work.

Many of researchers have conducted such kinds of this research, for instance Viola, et al (2020) they mentioned that making them independent and active in finding new important words and they will be familiar with the words that they have already found is such a good move for them to learn and master English skills when they applied in the workplace, education, and other purposes. supported by Aisyah (2017) students believed that vocabulary teaching will positively help them in the level of understanding, in this case in understanding English vocabularies easier and in understanding English texts easier. Those researchers revealed that students' vocabulary development is crucial for students' academic performance. Viola, et al. (2020) claimed a strategy that can help students' vocabulary development, they stated that Vocabulary Self-collection Strategy provided another advantage of learning English, this strategy did not only help students to comprehend new vocabulary but also increased their vocabulary list as the students were familiar with the words that they already found in the previous meeting.

- **Academic Vocabulary Perception**

Academic vocabulary perception refers to students' ability to recognize, understand, and effectively use words and phrases commonly found in academic contexts. Academic vocabulary includes general academic terms like analyze, evaluate, and interpret that are used across disciplines. These terms are typically more formal and less common in everyday language, making them challenging for learners, especially those learning English as a Foreign Language (EFL) or English as a Second Language (ESL).

The development of academic vocabulary perception is influenced by several factors, including exposure, teaching methods, language proficiency, and motivation. Regular exposure to academic words in diverse contexts, such as reading, lectures, and discussions, strengthens students' understanding. According to Celik, et al. (2021) the t-test results of their research, all the experiment groups that used the SRS (students response system) supported think-pair-share strategy in vocabulary activities performed better in the vocabulary

achievement test compared to the control groups in statistically significant ways. SRS had a positive effect on the participation of students and it helped students to focus more on the activities and think more deeply. In another hand, to support students' perception about academic vocabulary, Makovskaya, et al. (2023) claimed in their research that the learners of both national and international universities consider the knowledge of academic words to be more important for the development of reading and writing skills. The present study contributes to the existing knowledge on the importance of academic vocabulary for tertiary studies, and the findings confirm students' needs for vocabulary development.

B. Media for Teaching Vocabularies

• Technology in ELT Method

Rahmah's (2021) said that nowadays, the use of technology is deeply embedded in our daily habits. Technology has been used by all fields, one of which is in education. The use of media technology in learning is increasingly popular. Many fields of education use technology for teaching English vocabularies, including language learning platforms, multimedia tools, educational software and mobile learning.

Nowadays, many EFL teachers are inspired by the possibility of improving student's vocabularies through Mobile Assisted Language Learning (MALL). In mobile learning there are a lot of technologies used for English language teaching such as Gamification. Still in line with gamification, the technology used is by using educational platforms such as Kahoot. In their research Reynold and Taylor (2020) state, there are many benefits while using Kahoot! including no cost, ease of use, engagement and motivation. The purpose of this study is to determine the effects of a MALL application, Kahoot! a game-based student response system (GSRS) using BYOD technology, on the vocabulary acquisition of students. In addition, this study seeks to explore teachers' experiences with the implementation of Kahoot! specifically in a university in South Korea. They conclude in their finding that students scored higher after using Kahoot! to learn vocabulary. Furthermore, the fact that the difference in scores consistently preferred Kahoot! over traditional pen and paper activities. Instructors' views on the implementation of Kahoot! respondents agreed that Kahoot! had a positive impact on all criteria to a greater or lesser extent. Mahdi (2018) states in general, mobile devices have a medium effect on the learning of vocabulary. This finding study shows adult learners get more benefit than young learners from using mobile devices for vocabulary learning. Despite that,

mobile devices have moderate effect sizes on both types of vocabulary learning (productive and receptive) and also moderate effect on all aspects of vocabulary learning.

Xiao Lei says (2022) that the integration of technology in teaching vocabulary has revolutionized language learning, offering dynamic and flexible tools. Mobile-assisted language learning (MALL) provides learners with ubiquitous access and personalized experiences. Mobile applications like e-dictionaries and vocabulary widgets enable easy access to definitions, pronunciations, and usage examples. These help learners embed vocabulary learning into their routines, improving retention and engagement.

Technology also fosters collaborative and autonomous learning. Social platforms like WhatsApp and Telegram create interactive spaces for discussions, vocabulary sharing, and feedback. These activities encourage learners to take ownership of their learning process. Additionally, multimedia resources such as English songs and gamified apps present vocabulary in engaging and meaningful contexts, making learning enjoyable and motivating learners to maintain consistent practice.

The effectiveness of technology in vocabulary teaching. Learners using mobile-based tools demonstrate improved vocabulary retention and positive attitudes compared to traditional methods. These tools promote self-regulated learning by enabling goal-setting, progress monitoring, and strategy adaptation. By combining flexibility, accessibility, and engagement, technology has become an indispensable element in modern language education, significantly enhancing vocabulary instruction.

In order, one of the most common vocabulary acquisition strategies is using multimedia tools. The use of multimedia tools in teaching vocabulary has grown significantly. Scholars have suggested that using multimedia tools for vocabulary teaching is more effective. The example is the usage of Image to Text Recognition (ITR). By using these multimedia tools learners can use ITR to create their own text content, take photos and record audio and video files to practice their language skills in the real world. While combining ITR and real learning activities, in their research Shadiev et.al (2020) argued in their finding that the learners who studied using the Image to text recognition technology learned vocabulary more easily than those who studied using the traditional approach. so, it can be concluded that the use of ITR can give a significant impact for vocabulary mastery.

The use of Computer-Assisted Language Learning (CALL) also brought a significant impact. Reducing speaking anxiety, enhancing speaking skill and facilitating vocabulary acquisition, Hanafiah et. al. (2022) state it can be done by using CALL. In the result, the scholars showed that students utilizing CALL tools outperformed their peers who received traditional instruction in vocabulary learning. Furthermore, incorporating online education within CALL offered learners flexible study options, enabling them to learn at their own pace and in diverse settings, which helped reduce learning-related stress and anxiety

- **Conventional ELT Method**

Traditional methods of vocabulary teaching in EFL contexts often focus on decontextualized and isolated word learning, limiting opportunities for active usage. As noted by Xiao Lei (2022), these methods prioritize receptive knowledge through activities like rote memorization or reading exercises, with little emphasis on productive skills such as speaking or writing. This approach restricts learners from internalizing and applying vocabulary effectively in real-world contexts. Additionally, teacher-driven activities in conventional settings do not provide the flexibility or engagement needed to foster sustained learner motivation and autonomy.

In contrast, technology-assisted methods offer significant advantages by addressing these limitations. Mobile tools provide interactive and dynamic platforms that enable learners to engage actively with vocabulary through collaborative tasks, multimedia resources, and self-paced learning. Studies cited in the article reveal that learners using mobile applications outperform those relying solely on traditional print-based methods in retention, motivation, and active usage. This shift from teacher-centered to learner-centered approaches highlights the potential for technology to complement and enhance conventional teaching methods, making vocabulary learning more engaging and effective.

In Indonesian context textbook series remain a primary choice, providing structured explanations and exercises to help build vocabulary. Rahmat and Coxhead (2021) in their study analyzed the nature of vocabulary in three EFL (English as a Foreign Language) textbooks used by high school students in Indonesia, published by the Indonesian Ministry of Education and Culture, using the Range program with the 251,000-word family lists from BNC/COCA. The results suggest that Indonesian students will encounter many unfamiliar words when reading these textbooks, which could negatively affect their reading

comprehension. The study also shows that students who are unfamiliar with many words are unlikely to be good readers of English. This emphasizes the importance of more effective and strategic vocabulary teaching in English language learning in Indonesia to help students overcome reading difficulties and improve their comprehension of English texts.

- **Media Implementation for Vocabulary Learning**

The implementation of media in English vocabulary learning is diverse and offers a variety of tools to facilitate an engaging and effective learning process (Suarez et al, 2019; Rahmat et al, 2021; Shadiev et al, 2020; Reynolds et al, 2020). One example is the use of video subtitles, which allow students to see vocabulary in context while listening to the correct pronunciation. In their study, Suarez et al. (2019) explore the impact of captioned video viewing on vocabulary learning in support of formal classroom instruction compared to traditional classroom instruction. Their findings suggest that the use of television series in the classroom does not hinder learning, as the control groups (CGs) did not significantly outperform the experimental groups (EGs). However, the study also found that the CGs benefited from guided exposure to the target vocabulary, suggesting that video viewing activities should be supplemented with targeted follow-up activities to maximize their effectiveness. The research also suggests that videos with textual support can particularly facilitate the learning of target word forms (TWs). Without these two conditions-focused video viewing and captions-the learning outcomes would likely have been less significant. In addition, the study suggests that this in-class learning experience may promote informal, out-of-class vocabulary acquisition, where incidental learning occurs with repeated exposure.

Another useful tool is image-to-text recognition, Shadiev et al (2020) argued where students learn new words by identifying objects in pictures and matching them with the appropriate terms in the real world. In addition, Reynold and Taylor (2020) state, Interactive platforms such as Kahoot also play an important role, offering vocabulary-based quizzes and games that make learning fun and motivate students to actively participate. These different media provide a dynamic learning experience that can be tailored to each student's learning style.

An example proposed by Galuh (2023) is the use of an "Expose" application which is designed with interactive and engaging features tailored to enhance vocabulary learning for young children. It includes illustrated stories with audio, which introduce vocabulary within

sentence contexts, making the learning process more meaningful and relatable. The vocab menu allows children to tap on images to hear pronunciation and see written words, facilitating the association between visuals, sounds, and text. The application also incorporates themed games, ensuring that learning remains enjoyable and engaging. By presenting vocabulary within themes such as "family" and "playing with friends," the app provides systematic and relatable content aligned with young learners' developmental needs. To maximize the effectiveness of the "Expose" application, teachers are essential in integrating it into classroom activities. They are encouraged to repeat vocabulary and sentences from the application slowly, using clear explanations and translations in the children's first language to improve understanding. Managing classroom dynamics is critical, as the enthusiasm of young learners for the application can sometimes create disruptions. Teachers must create a structured learning environment, ensuring that children's engagement with the application remains productive. By combining the app's features with effective teaching strategies, educators can enhance vocabulary learning while maintaining an orderly and supportive classroom setting.

- **Impact of Media Vocabulary Usage in EFL Students**

Using picture cards, as one of the examples to teach vocabulary, has several positive impacts on young learners. Firstly, picture cards significantly enhance vocabulary retention by creating strong visual associations, helping students remember words more effectively. This tool also improves comprehension by clarifying word meanings within the context of texts, reducing confusion and supporting a deeper understanding of new material. Furthermore, picture cards make lessons more engaging and enjoyable, motivating students to participate actively in class. The interactive nature of these visual aids fosters a fun learning environment, boosting students' confidence and encouraging more active participation. Picture cards were also beneficial for students of varying skill levels, making vocabulary learning accessible for students with different levels of English proficiency. Overall, the study suggests that picture cards are an effective tool in vocabulary acquisition, especially for learners new to English who benefit from visual and interactive methods stated by Raskova (2020).

C. Vocabulary Teaching Method

Traditional methods, often rooted in rote memorization and dictionary definitions, have given way to more dynamic and learner-centered strategies. These innovative

approaches seek to cultivate a deep understanding of words, their nuances, and their contextual applications. By incorporating a variety of techniques, such as contextual learning, word association, and semantic mapping, educators can create engaging and meaningful vocabulary experiences. Harahap, Rangkuty, et al., (2023) state that the teacher needs to master the teaching method because the students' learning will improve if the teacher practices the correct teaching technique. The other technique that can be used in teaching vocabulary is the inquiry method. The inquiry method is a teaching method where the students investigate a problem (Harahap, Rangkuty, et al., 2023). In addition, Warsono & Hariyanto in Harahap, Rangkuty, et al., (2023) opinion inquiry-based learning is a variety of uses for the kind of intelligence needed to confront real-world challenges, ability to face everything new and its complexity. In this inquiry-based learning model, understanding, transferring knowledge, high-level thinking skills, solving abilities problems, and scientific communication skills directly impact learning.

Inquiry teaching methods should be included as a teaching method in teaching vocabulary. Every English teacher should improve their ability, creativity, and skill in teaching English vocabulary by using different teaching techniques and ways to make students bored in the learning process and increase the student's interest (Harahap, Rangkuty, et al., 2023). According to Nemati (2009), The importance of teaching vocabulary through memory strategies is justifiable in different ways. First, how well information is remembered is not a function of how long a person is exposed to that information, but instead depends on the nature of the cognitive processes that are employed to process that information. On the other hand, teaching should target increasing retention without increasing study time. Because, students forget much of what they learn, applying memory strategies is a good way to benefit from learning that provides long lasting knowledge. The importance of applying images for learning new items that are related to long-term memory is clear. There are three main activities attributed to long-term memory viz, storage, retrieval and forgetting. First, chunks of information will transfer to long-term memory by applying visual images. Second, visual images may be the most potent device to aid recall. And the last one, applying memory strategies can promote long-lasting retention which is the aim of education. Furthermore, a large proportion of learners have a preference for visual images.

- **Vocabulary Teaching and Learning Strategies**

Effective vocabulary instruction is essential for language acquisition, and a variety of strategies can be employed to enhance learners' vocabulary development. In line with it, Nasri (2022) said that the methods that teachers use to help students learn language need to be updated. These strategies motivate pupils to perform, advance their conversational abilities, track their progress, and raise their level. For their students to meet their learning goals, teachers actually need to be knowledgeable about the best ways to improve lexical knowledge. Students must be introduced to a variety of vocabulary words.

To enhance students' vocabulary, the teacher can use some strategies in teaching vocabulary. Asgari and Mustapha (2011) state that the students used determination, cognitive, social and metacognitive strategies which are the most common strategies employed. Therefore, all students used at least one of the most popular strategies such as using a monolingual dictionary, guessing from the context, and learning through the English language media. The students also can enhance their vocabulary using Learning New Words through Reading, Use of Dictionaries, Applying New English Words in Their Daily Speaking, Use of Media, and Social Strategies. Furthermore, some strategies such as the learning a word through reading, the use of monolingual dictionary, the use of English-language media, and applying new English word in their daily speaking where are related to memory, determination, metacognitive strategies respectively are popular strategies and the learners are keen in using them.

Gu (2010) states that significant strategy changes had occurred during six months in his research which is focused on the change of VLS when a group of EFL learners moved from China to Singapore to begin their tertiary education. As they progressed in a six-month intensive English proficiency enhancement programmed, their passive and active vocabulary improved significantly. Differences in the learning environment may well be one of the main factors that led to these changes in strategy use. the development of active vocabulary follows a different pattern from that of passive vocabulary, and that beyond a threshold level of active vocabulary, growth is dependent on the learner's perceived need for use

Nashri (2022) identifies that the students' difficulties in studying vocabulary are words with several meanings are the root of all misunderstandings in a language, it is so frustrating to run into a word that has more than one meaning. Next is the idiomatic expressions as the

hardest thing to use or understand. Technical words are also what makes a language difficult and from their name, it can be deduced what the problem is. These words are technical, special and confined to some fields of study or life. And the last is phrasal verbs represent one category of unfamiliar words; because they are not known and there are thousands of them in the English language and it is a bit difficult to keep track of all of them and their meanings. In other words, they are some of the most inconsistent words in terms of meaning and formation.

Nashri (2022) in his research indicates that the most useful strategies used in learning more vocabulary are games, word mapping, and flashcards. The 71 participants (51.8%) stated that they prefer using games to help themselves to learn new vocabulary. This strategy is a helpful way which is filled with fun and upbeat. Students get motivated when teachers use such a tool to introduce new words. That is, it spreads a positive atmosphere among students and makes them eager to compete with each other. Word mapping was chosen by 32 participants (23.4%) as the effective way to learn vocabulary. Word mapping is a visual organizing technique that helps learners to develop their vocabulary learning. Meanwhile, 19 participants (13.9%) showed support for the idea that miming could be a great way to learn vocabulary from time to time. Miming, to most learners, is considered a kind of a fun game where one tries to give the meaning of a word or a concept to another without actually saying anything. As it has been said, games are a crucial strategy in introducing new items. In addition, 15 other participants (10.9%) chose flashcards as the technique that helps them to learn new items of vocabulary. Flashcards are an effective way of learning; they are great for both young and adult language learners. Moreover, it is fun and entertaining and that is why these participants favored it. More importantly, "flashcards have been proven to help learners remember all the vocabulary they learn.

On the other hand, Nashri (2022) also indicates that the strategies are followed by EFL learners when encountering new or unusual words, students use a dictionary to check them. In learning a second language, learners may come upon different words that they do not know. At this level, they prefer to use a dictionary to understand difficult words. In fact, a dictionary is among the first things a learner of an FL purchases. Among the research participants, there were five teachers (62.5%) who pointed out that students try to anticipate and guess the meaning of words from the context. According to half of the interviewed

teachers (50%), EFL learners tend to ask teachers for clarification and explanation of ambiguous and new words.

Using games and flashcards, for instance, could promote collaborative work among students. In other words, learners can compete with each other using their own experience or they could use their knowledge to share ideas and concepts by shaping a group where learners could benefit from each other. Applying these effective ways could encourage students to show more creativity in terms of finding enjoyable ways to enrich the vocabulary knowledge that affects the process of reading positively. Applying distinctive strategies creates a relaxed atmosphere where students can enjoy and learn.

In other research, Regandi and Edi (2024) argue that Contextual Teaching and Learning (CTL) was implemented as the core activity to enhance students' listening skills and vocabulary mastery, while also engaging them in the learning process. Since children enjoy and connect learning to real-life experiences but can easily get bored, it was essential to create varied activities during lessons. These activities needed to capture the students' attention and encourage active participation, which would, in turn, lead to improvements in their listening skills and vocabulary. Regandi and Edi (2024) in their research show that the approach of CTL or contextual teaching and learning by connecting between the song and their real lives could make their students' listening ability and vocabulary mastery getting much better in every cycle. So, applying the CTL method makes students feel happy in connecting their material with their real-experiences.

To make vocabulary learning enjoyable and interactive, we will explore a variety of games and activities that can be incorporated into the classroom. From word games and puzzles to role-playing and storytelling, these activities can motivate learners and reinforce vocabulary acquisition. In addition, Fauziningrum et al. (2023) state that some strategies can be used in teaching vocabulary; they are: Lesson strategy, find the problematic word in the textbook, Picture or object strategy, the teacher could draw a picture of a wheelchair on the board and use a picture, Mime or gesture strategy, Different Context Strategy, Explaining the meaning of word strategy, Dictionaries Strategy, Summary Strategy, and Game Strategy. The other strategies that can be used in teaching vocabulary are translation, explanation, enumeration, realia, mime, content, and presentation strategies.

By understanding and implementing these strategies, educators can empower their learners to become confident and proficient language users. Let us embark on this journey together, exploring the fascinating world of vocabulary and unlocking the potential of language learning.

Conclusion

The integration of digital tools and innovative strategies in teaching vocabulary represents a significant advancement in modern language education. By maximizing multimedia resources, gamified platforms, and personalized learning approaches, educators can create an engaging, adaptive, and effective learning environment that addresses diverse student needs. Traditional methods, while still valuable, have been enhanced by these technologies, offering greater flexibility and interactivity.

Research underscores the importance of vocabulary development not only for language comprehension but also for broader academic and professional success. Techniques such as spaced repetition, collaborative online tools, and contextualized learning have proven effective in fostering deeper retention and practical application of vocabulary. Additionally, strategies that incorporate media, from video subtitles to image-to-text recognition, highlight the transformative potential of technology in making vocabulary acquisition both accessible and meaningful.

In short, as education continues to evolve in the digital era, the emphasis on innovative and effective vocabulary teaching methods will remain central to language learning. The insights provided in this review advocate for a balanced approach that combines traditional methods with cutting-edge technology to empower learners and prepare them for a linguistically complex world.

References

Al-Ahdal, Arif & Alharbi, Mohammed. (2021). MALL in Collaborative Learning as a Vocabulary-Enhancing Tool for EFL Learners: A Study Across Two Universities in Saudi Arabia. SAGE Open. 11. 215824402199906. 10.1177/2158244021999062.

- Alakrash, Hussien & Bustan, Elaf & Razak, Norizan. (2020). The Effectiveness of Employing Telegram Application In Teaching Vocabulary: A Quasi-Experimental Study. *Multicultural Education*. 6. 2020. 10.5281/zenodo.3905099.
- Al-Awaid, SAA. (2020). EFL teachers' beliefs and their instructional practices regarding vocabulary learning strategies. *Asian ESP Journal*, academia.edu, https://www.academia.edu/download/63002441/EFL_Teachers_Beliefs_and_their_Instr_uctional_Practices_Regarding20200418-120301-1qs7y4q.pdf
- Almusharraf, N (2020). Teachers' perspectives on promoting learner autonomy for vocabulary development: A case study. *Cogent Education*, <https://doi.org/10.1080/2331186X.2020.1823154>
- Apriliani, D.N. (2021). Students' Perception in Learning English Vocabulary Through Quizlet. *Journal of English Teaching*, 7(3), 343-353. DOI: <https://doi.org/10.33541/jet.v7i3.3064>
- Asgari, A, & Mustapha, GB (2011). The type of vocabulary learning strategies used by ESL students in University Putra Malaysia. *English language teaching*, Citeseer, <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=3f732bbebf88db8b7e228936057321377dd482b9>
- Assenga, P. R., Regandi, A., & Edi, W. (2024). Improving student's vocabulary skill through contextual teaching and learning (CTL) method at the ninthyear students of Salafiyah Wustho An Nimah Batam. *International Journal of Scientific Research and Management (IJSRM)*, 12(09), 3626-3636. <https://doi.org/10.18535/ijsrm/v12i09.el06>
- Aswad, Muhammad, Yassi, Abdul hakim, Pammu, Abidin, Nasmilah, Nasmilah, Rezaei Gashti, Zeynab, An Account of Teaching Vocabulary to Indonesian EFL Learners through Web-Based Language Instruction (WLI): Attitude in Focus, *Education Research International*, 2022, 1660055, 7 pages, 2022. <https://doi.org/10.1155/2022/1660055>
- Asyiah, DN (2017). The VOCABULARY TEACHING AND VOCABULARY LEARNING: PERCEPTION, STRATEGIES, AND INFLUENCES ON STUDENTS' VOCABULARY MASTERY. *Jurnal Bahasa Lingua Scientia*, [pdfs.semanticscholar.org, https://pdfs.semanticscholar.org/d9a9/f5802d97a998fab154b556ad9efa1c080ecc.pdf](https://pdfs.semanticscholar.org/d9a9/f5802d97a998fab154b556ad9efa1c080ecc.pdf)

- Bashori, M, Hout, R Van, Strik, H, & Cucchiarini, C (2021). Effects of ASR-based websites on EFL learners' vocabulary, speaking anxiety, and language enjoyment. *System*, Elsevier, <https://www.sciencedirect.com/science/article/pii/S0346251X21000506>
- Çelik, S, & Baran, E (2022). Student response system: its impact on EFL students' vocabulary achievement. *Technology, Pedagogy and Education*, <https://doi.org/10.1080/1475939X.2021.1986125>
- Deni, R, & Fahriany, F (2020). Teachers' Perspective on Strategy for Teaching English Vocabulary to Young Learners. *Vision: Journal for Language and foreign language learning*, [pdfs.semanticscholar.org, https://pdfs.semanticscholar.org/265a/6c451e7fba400e272878d3bfb20ee5b8df48.pdf](https://pdfs.semanticscholar.org/265a/6c451e7fba400e272878d3bfb20ee5b8df48.pdf)
- Fauziningrum, E, Sari, MN, Rahmani, SF, Riztya, R, & ... (2023). Strategies used by English teachers in teaching vocabulary. *Journal on Education*, [jonedu.org, https://jonedu.org/index.php/joe/article/view/2981](https://jonedu.org/index.php/joe/article/view/2981)
- Fithriani, R (2021). The utilization of mobile-assisted gamification for vocabulary learning: Its efficacy and perceived benefits. *Computer-Assisted Language Learning Electronic Journal*, [callej.org, https://callej.org/index.php/journal/article/view/357](https://callej.org/index.php/journal/article/view/357)
- Gu, Y (2010). Learning strategies for vocabulary development. *Reflections on English Language Teaching*, [researchgate.net, https://www.researchgate.net/profile/Peter-Gu/publication/272494641_Learning_strategies_for_vocabulary_development/links/54e7b0a20cf2f7aa4d4df6cb/Learning-strategies-for-vocabulary-development.pdf](https://www.researchgate.net/profile/Peter-Gu/publication/272494641_Learning_strategies_for_vocabulary_development/links/54e7b0a20cf2f7aa4d4df6cb/Learning-strategies-for-vocabulary-development.pdf)
- Hanafiah, W., Aswad, M., Sahib, H., Yassi, A. H., & Mousavi, M. S. (2022). The impact of CALL on vocabulary learning, speaking skill, and foreign language speaking anxiety: The case study of Indonesian EFL learners. *Education Research International*, 2022, Article ID 5500077. <https://doi.org/10.1155/2022/5500077>
- Hanafiah, Waode, Aswad, Muhammad, Sahib, Harlinah, Yassi, Abdul Hakim, Mousavi, Movahede Sadat, The Impact of CALL on Vocabulary Learning, Speaking Skill, and Foreign Language Speaking Anxiety: The Case Study of Indonesian EFL Learners,

- Education Research International, 2022, 5500077, 13 pages, 2022.
<https://doi.org/10.1155/2022/5500077>
- Harahap, HRS, Rangkuty, AR, & Nasution, LE (2022). The Effect of Inquiry Teaching Method on Students' Vocabulary Achievement. *Edunesia: Jurnal Ilmiah Pendidikan*, 4 (1), 80-93. <https://edunesia.org/index.php/edu/article/view/292>
- Jiménez-Catalán, R María (2023). Exploring the Productive Vocabulary of EFL Learners Through Lexical Availability.. *International Journal of TESOL Studies*, [tesolunion.org, https://doi.org/10.58304/ijts.20230205](https://doi.org/10.58304/ijts.20230205)
- Khan, RMI, Radzuan, NRM, Farooqi, SH, (2021). Learners' Perceptions on WhatsApp Integration as a Learning Tool to Develop EFL Vocabulary for Speaking Skill.. *International Journal of Language Education*, <https://doi.org/10.26858/ijole.v5i2.15787>
- Lei, X, Fathi, J, Noorbakhsh, S, & Rahimi, M (2022). The impact of mobile-assisted language learning on English as a foreign language learners' vocabulary learning attitudes and self-regulatory capacity. *Frontiers in psychology*, [frontiersin.org, https://doi.org/10.3389/fpsyg.2022.872922](https://doi.org/10.3389/fpsyg.2022.872922)
- Liliya, M, & Ijobat, J (2023). The relationship between the perception and knowledge of academic vocabulary among EFL and EMI university students. *Journal of Language and Education*, <https://doi.org/10.17323/jle.2023.16113>
- Mahdi, H.S. (2018). Effectiveness of Mobile Devices on Vocabulary Learning: A Meta-Analysis. *Journal of Educational Computing Research*, 56(1), 134-154, ISSN 0735-6331, <https://doi.org/10.1177/0735633117698826>
- Muzakki Bashori, Roeland van Hout, Helmer Strik, Catia Cucchiari, Effects of ASR-based websites on EFL learners' vocabulary, speaking anxiety, and language enjoyment, Volume 99, 2021,102496, ISSN 0346-251X, <https://doi.org/10.1016/j.system.2021.102496>.
- Nasri, C (2022). Effective Vocabulary Teaching Strategies to Enhance EFL Learners' Reading Abilities: A Case Study. *JELITA: Journal of Education, Language Innovation and Applied Linguistics*, [jurnal.unsil.ac.id, https://jurnal.unsil.ac.id/index.php/jelita/article/view/5196](https://jurnal.unsil.ac.id/index.php/jelita/article/view/5196)

- Nemati, A (2009). Memory vocabulary learning strategies and long-term retention. *International journal of vocational and technical education*, academia.edu, <https://www.academia.edu/download/94506706/e4ca84da448e1cd3215dee3f71edb4430d28.pdf>
- Nguyen, C.D. (2019). The Effect of Content Retelling on Vocabulary Uptake From a TED Talk. *TESOL Quarterly*, 53(1), 5-29, ISSN 0039-8322, <https://doi.org/10.1002/tesq.441>
- Noor, NM, & Amir, Z (2009). Exploring the vocabulary learning strategies of EFL learners. *Language and Culture: Creating and Fosterin*, academia.edu, https://www.academia.edu/download/3455266/noorizah_and_zaini.pdf
- Rahmat, YN, & Coxhead, A (2021). Investigating vocabulary coverage and load in an Indonesian EFL textbook series. *Indonesian Journal of Applied Linguistics*, *ejournal.upi.edu*, <https://ejournal.upi.edu/index.php/IJAL/article/view/31768>
- Rasuan, ZB (2017). Teaching vocabulary mastery by using systematic game. *Tarbawy*, *repository.iainsasbabel.ac.id*, <http://repository.iainsasbabel.ac.id/id/eprint/294/>
- Reynolds, ED, & Taylor, B (2020). Kahoot!: EFL instructors' implementation experiences and impacts on students' vocabulary knowledge. *Computer-Assisted Language Learning Electronic Journal*, *old.callej.org*, <https://old.callej.org/journal/21-2/Reynolds-Taylor2020.pdf>
- Shadiev R, Wu T-T, Huang Y-M (2020). Using Image-To-Text Recognition Technology To Facilitate Vocabulary Acquisition In Authentic Contexts. *ReCALL*. 2020;32(2):195-212. doi:10.1017/S0958344020000038
- Suárez, M. del M., & Gesa, F. (2019). Learning vocabulary with the support of sustained exposure to captioned video: do proficiency and aptitude make a difference? *The Language Learning Journal*, 47(4), 497–517. <https://doi.org/10.1080/09571736.2019.1617768>
- Susanto, A. (2017). the Teaching of Vocabulary: a Perspective. *Jurnal KATA*, 1(2), 182. <https://doi.org/10.22216/jk.v1i2.2136>

- Teng, MF (2022). Incidental L2 vocabulary learning from viewing captioned videos: Effects of learner-related factors. *System, Elsevier*, <https://www.sciencedirect.com/science/article/pii/S0346251X22000173>
- Therova, D (2021). The acquisition and development of academic vocabulary: Learners' perspectives. *Journal of Academic Language and Learning*, journal.aall.org.au, <https://journal.aall.org.au/index.php/jall/article/view/669>
- Viola, D, Yanto, ES, & Mobit, M (2020). Students' perception on learning technical vocabularies through vocabulary self-collection strategy. *Journal of Languages and Language Teaching*, e-journal.undikma.ac.id, <http://e-journal.undikma.ac.id/index.php/jollt/article/view/2802>
- Yaghoubi, ST, & Seyyedi, F (2017). The effect of explicit and implicit teaching vocabulary on Iranian EFL learners' vocabulary. *Studies in English language and Education*, jurnal.usk.ac.id, <https://jurnal.usk.ac.id/SiELE/article/view/7001>