

USING DIGITAL LEARNING METHOD AS AN INTEGRATION OF TECHNOLOGY TO EXPAND EFL STUDENTS' VOCABULARY: A SYSTEMATIC RESEARCH REVIEW

Isnaeni Wahab

Isnaeniwahab23@gmail.com

English Education Department, Universitas Muslim Maros, Sulawesi Selatan, Indonesia

Heriyanti Tahang

heriyanti7@gmail.com

English Education Department, Universitas Muhammadiyah Sorong, Indonesia

Zul Astri

zulastri17@gmail.com

English Education Department, Universitas Muslim Maros, Sulawesi Selatan, Indonesia

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 age, emphasizing the integration of innovative tools and techniques to enhance engagement and retention among English language learners. Technology as a learning method in vocabulary learning has become commonplace. This research investigates the effectiveness of using technology as teaching method in enhancing students' vocabulary. This study proposed a systematic review, selecting eleven online articles published in the latest five to six years for review. The review's findings demonstrate the effectiveness of using technology to enrich students' vocabulary. Integrated digital methods in learning serve not only as teaching aids but also as core components that can enrich the learning experience and improve student achievement at all levels. Furthermore, this review underscores the importance of implementing modern technology to maximize learning, including enhancing vocabulary mastery. The application of digital learning integration provides actionable insights for educators aiming to foster meaningful vocabulary development in diverse educational settings.

Keywords: *Vocabulary skill, Digital Learning Method, Technology*

Sari

Penguasaan kosakata merupakan landasan pembelajaran bahasa, penting untuk pemahaman, komunikasi, dan kemahiran secara keseluruhan. Tinjauan kritis ini mengeksplorasi lanskap pengajaran kosakata yang terus berkembang di era digital, menekankan integrasi perangkat dan teknik inovatif untuk meningkatkan keterlibatan dan retensi di antara pembelajar bahasa Inggris. Teknologi sebagai metode dalam

pembelajaran kosakata telah menjadi hal yang lumrah. Penelitian ini menyelidiki efektivitas penggunaan teknologi sebagai metode pengajaran dalam meningkatkan kosakata siswa. Studi ini mengusulkan tinjauan sistematis, memilih sebelas artikel online yang diterbitkan dalam lima hingga enam tahun terakhir untuk ditinjau. Temuan tinjauan menunjukkan adanya efektivitas penggunaan teknologi untuk memperkaya kosakata siswa. Metode digital terintegrasi dalam pembelajaran tidak hanya berfungsi sebagai alat bantu mengajar tetapi juga sebagai komponen inti yang dapat memperkaya pengalaman belajar dan meningkatkan prestasi siswa di semua tingkatan. Lebih lanjut, tinjauan ini menggarisbawahi pentingnya menerapkan teknologi modern untuk memaksimalkan pembelajaran, termasuk meningkatkan penguasaan kosakata. Penerapan integrasi pembelajaran digital memberikan wawasan yang dapat ditindaklanjuti bagi para pendidik yang ingin mendorong pengembangan kosakata yang bermakna dalam beragam lingkungan pendidikan.

Kata kunci: *Keterampilan Kosakata, Metode Pembelajaran Digital, Teknologi*

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Introduction

In some countries, including Indonesia, English is currently considered a foreign language; however, English has become an essential part of the educational curriculum at various levels. Mastering vocabulary is an essential part of learning English since it forms the basis of all other language skills, including speaking, writing, listening, and reading. Vocabulary describes the collection of words owned by a person or in a particular language, including its definition, usage, and relationships in the context of communication. Therefore, vocabulary is the cornerstone of language ability and is essential for both good communication and language comprehension.

A strong vocabulary enables learners to interpret and understand the meaning of spoken and written language, making it easier for them to grasp nuances and contexts (Haque et al., 2024). Vocabulary mastery is one of the most important components of English language learning. Vocabulary is the first and most important fundamental aspect of English language learning and must be mastered before learning other English language skills (Astri & Wahab, 2018). As we know, the foundation of all other language skills, including reading, writing, speaking, and listening, is the ability to

understand and use words correctly (Husein et al., 2024). Furthermore, rapid improvements in vocabulary mastery increase learners' confidence when speaking English. They are better prepared to write persuasive essays, participate in discussions, and understand English-language media such as news, films, and books when they have a diverse vocabulary (Tsai, 2020).

Speaking more naturally and fluently is another benefit of having a large vocabulary. As a result, focusing on vocabulary expansion is an essential language acquisition strategy that supports both academic achievement and the use of English in social and professional settings (Khalaf, 2022). Given the significance of vocabulary mastery, teachers must choose their teaching strategies carefully in order to have an influence on students. Technology use has recently spread into the field of education as well.

The shift to digital learning has significantly transformed modern education, largely driven by technological advances that make learning more accessible, flexible, and interactive. With the advent of digital transformation, the field of education has undergone substantial changes. This is driven by technological advancements and the increasing need for innovative and creative teaching methods. One technology that has been recognized as a tool that can improve learning effectiveness is multimedia, which includes the use of text, graphics, audio, video, and other interactive elements (Husein et al., 2024). The presence of technology has brought significant changes to the education system, such as changes in the way knowledge is delivered in the classroom, which is a clear example of this transformation. Technology has transformed the landscape of English language teaching (ELT). Technology has created new challenges and responsibilities for teachers, but also provides new opportunities to make ELT more engaging, innovative, and productive (Amalia Solikhah, 2023). The integration of technology is transforming the language learning experience in the ever-changing English Language Teaching (ELT) environment (Muslimin et al., 2023).

However, a deeper understanding of its implementation is needed, particularly regarding educator perceptions, teaching methods, and their impact on student engagement and learning outcomes (Al-Habsi et al., 2022). The integration of technology into education has transformed the way teaching and learning are designed,

delivered, and experienced. In the field of English Language Teaching (ELT), technological innovations have created new opportunities for learners to access authentic materials, engage in interactive tasks, and collaborate across geographical boundaries. The use of technology as a digital method offers unique benefits for vocabulary teaching, as it provides a variety of ways to reinforce and practice new words, from interactive flashcards to gamification apps that make memorization fun and effective. Furthermore, digital platforms enable personalized learning, tailored to each student's needs and pace, which can lead to better vocabulary retention and comprehension (Haque et al., 2024). However, the effectiveness of these innovations depends heavily on teachers' ability to meaningfully integrate technology into their pedagogical practices.

The success of technology in the classroom depends heavily on the skills, knowledge, and attitudes of teachers who facilitate its use. Technology alone does not guarantee better learning outcomes. Teachers today recognize that integrating technology into their lessons is not just a passing trend; it is an effective strategy. Therefore, to create a more dynamic and engaging learning environment, a creative approach to English language teaching combined with appropriate technology integration is needed. The purpose of this systematic study is to find empirical evidence regarding the effectiveness of digital teaching methods as a form of technology integration in ESL learners' vocabulary learning.

Literature Review

Vocabulary instruction is one essential component of language acquisition and competency. As a result, English language teachers around the world have been interested in and concerned about this issue (Carroll, 2023). A review of the body of research on vocabulary instruction identifies a number of noteworthy patterns and opposing viewpoints that demand careful consideration. A basic requirement for becoming fluent in any language in the world is having a strong vocabulary. Accordingly, vocabulary knowledge is essential to language learning and has a big impact on students' language skills (Saidbakhramovna et al., 2021). Because words are necessary for using the four language abilities of speaking, reading, and writing, vocabulary is very important. Words must be accurately understood by readers or

listeners, and writers or speakers must employ a large enough vocabulary to express their ideas. It will be difficult for learners of a target language or a foreign language with a small vocabulary to express and comprehend concepts. Teachers should therefore be conscious of these challenges and work to make these responsibilities easier (Saidbakhramovna et al., 2021). Mastering a diverse vocabulary is crucial for achieving language proficiency, especially when learning a second language (Sathyaseelan et al., 2025). Learners' vocabulary knowledge is a key determinant of successful second language communication. The vocabulary learning process is complex and includes two main components: incidental vocabulary learning, which occurs naturally as a result of language use without a clear learning goal, and directed vocabulary acquisition, where students consciously concentrate on increasing their vocabulary (Joe, 2009).

All facets of life have been touched by the globalization of technology, including education. Studying English learning processes is therefore crucial so that educators may choose and apply digital technology-based teaching methods with ease (Octaberlina, 2023). Technology can also be used as an adequate teaching method to develop a learning concept. Systems needed to develop everyday human needs or performance must be utilized in educational technology. Technology, defined as a process, method, or knowledge applied to complete a task, is considered a learning task or instructional objective in the context of this study. The use of technology in the classroom encourages students to improve their English language achievement in the subject (Amalia Solikhah, 2023).

Technology as a digital method can be used to improve vocabulary skills in English language learners (Haque, 2024). (Fauziningrum et al., 2023) stated that to effectively engage English language learners in vocabulary mastery, various digital devices and techniques are utilized to make learning interactive and personalized. Digital tools such as online dictionaries, vocabulary games, and vocabulary-building apps have been shown to be effective in improving students' vocabulary knowledge and retention (Guaqueta & Castro-Garces, 2018). However, while these tools can facilitate learning, the efficacy of technology-mediated instruction often depends on students' familiarity with and access to technological resources (Shi, 2025).

Methods

This research uses a systematic research review. The value of a systematic review depends on what was done, what was found, and the clarity of its reporting. As with other publications, the quality of reporting in systematic reviews varies, limiting the reader's ability to assess the review's strengths and weaknesses. A systematic review is a review of a clearly formulated research question that uses systematic and explicit methods to identify, select, and critically appraise relevant research, to collect and analyze data from the studies included in the review (Moher et al., 2009).

A Systematic Literature Review is a more structured, explicit, and reproducible method that follows a predetermined research protocol. The stages involved are: (1) Planning: Defining the research question for journal selection, (2) Implementation: Conducting a systematic literature search using databases such as Science Direct and Google Scholar, then evaluating and reviewing the articles found, and (3) Reporting: Synthesizing the findings from the selected journals and presenting the results and conclusions.

Results and Discussion

Based on the procedures carried out, 11 articles were selected. The table below summarizes empirical evidence regarding vocabulary teaching and learning strategies with technology integration, including authors, year of publication, research sample, research methods, digital tools used, and research results.

Table 1.

<i>No .</i>	<i>Author/ Years</i>	<i>participants</i>	<i>Research design</i>	<i>Digital method used</i>	<i>Result study</i>
1	Kassim dkk (2020)	seven ESL teachers	qualitative research approach	Mobile learning	Teachers consider mobile learning an important and convenient form of learning, while expressing positive attitudes toward mobile learning integration.
2	Berliani dkk (2021)	32 students in the experimental group and 32 students in the	Quantitative research with a comparative design	Technology- Quizlet	Quizlet Application is an effective strategy to enhance students' vocabulary mastery.

3	Yunda dkk (2023)	control group 32 participants at junior high school	classroom action research (CAR).	communicative games	This study focused on improving students' speaking skills using communicative games in the classroom. Communicative games improved students' speaking skills, such as vocabulary and pronunciation.
4	Rahayu dkk (2023)	5th grade elementary school students.	Design and Development (DnD) model	Word wall	Teachers can increase student engagement and expedite the process of learning new vocabulary by incorporating Word wall into their lessons to create a more engaging and dynamic learning environment.
5	Alqahtani (2024)	31 university's SPE program on EFL learners	Qualitative research	multimedia applications	EFL learners have a positive attitude towards using multimedia applications in vocabulary acquisition and reading comprehension
6	Yahyani dkk (2024)	19 students fifth-grade class	Classroom Action Research (CAR) Method	Videos	Drilling techniques integrated with technology can stimulate learning enthusiasm and create a comfortable classroom atmosphere. The use of drilling techniques integrated with technology can improve vocabulary mastery among fifth-grade elementary school students.
7	Fathoni dkk (2024)	32 students of junior high school	Experiment with a quasi-experimental design,	Interactive multimedia	Interactive multimedia is seen as a suitable learning tool for junior and senior high school English classes
8	Emilia dkk (2025)	15 EFL students at university	Qualitative research approach	Augmented Reality (AR) technology	By offering dynamic, multimodal learning experiences that contextualize vocabulary in real-world settings, augmented reality (AR) technology dramatically improves student motivation, engagement, and vocabulary retention.
9	Qurrata'a in dkk (2025)	36 undergraduate students	Quantitative research approach	Google Site	Implementing Google Sites to transform vocabulary teaching can foster motivation, accessibility, and effective learning.
10	Dr.T.Sath yaseelan et.al (2025)	Undergraduate Engineering students from two private universities in Chennai,	Mixed research approach (quantitative and qualitative)	Computer assisted learning method.	Students have positive attitudes toward using technology in the classroom to develop their vocabulary. Digital media helps students expand their vocabulary more effectively than

		<i>India. In this study, 153 male and 77 female students</i>			<i>traditional methods.</i>
11	Siswanto dkk (2025)	50 students Madrasah Aliyah	quantitative research using a quasi-experimental research approach	ChatGPT	<i>Integrating ChatGPT into English learning can enhance students' engagement, motivation, and independence in mastering vocabulary.</i>

Discussion

This study analysed 10 articles published in the last 5 to 6 years using the Systematic Literature Review method. Based on (Kassim & Said, 2020) findings, mobile learning facilitates ESL teachers' effective vocabulary teaching. Several factors contributing to successful integration include its function as an interactive, practical, and universal tool. Mobile learning is convenient for both teachers and students, and therefore, teachers expressed positive feelings about integrating this technology. These results, in turn, benefit students in terms of technological awareness and vocabulary improvement. Therefore, it would be beneficial if teachers began using online learning in teaching English vocabulary.

(Berliani & Katemba, 2021) in his research used technology by integrating technology-Quizlet as the art of enhancing vocabulary. They believe this application is effective in enhancing students' vocabulary mastery. In (Yunda et al., 2023) article, communicative games are one of the digital methods used as technology integration that successfully improves students' speaking skills because the actions carried out in each cycle answer the formulated research questions. Communicative games improve students' speaking skills, such as vocabulary and pronunciation. This study focuses on improving speaking skills by expanding students' vocabulary.

According to (Komang Santi Widi Rahayu & I G A Lokita Purnamika Utami, 2023), there are several problems that occur in the process of learning English vocabulary related to digital media. Therefore, this study aims to develop a web-based English vocabulary learning game for fifth-grade elementary school students as a

digital-based learning medium. In developing the Wordwall-based digital media, the researcher went through several ADDIE stages, namely design, development, and evaluation. The quality of this web-based English game is considered very suitable as a learning medium in teaching English for elementary schools.

(Alqahtani, 2024) found that EFL students gave positive evaluations of the use of multimedia applications for vocabulary development and reading comprehension in their courses. They enthusiastically used these tools and learned a lot from them. EFL learners had diverse opinions about digital tools, citing Google Translate, Google Search, and Facebook as some of the most popular tools for improving English reading comprehension and vocabulary development.

According to (Cahyani et al., 2024), students' vocabulary mastery can be enhanced by using drill methods combined with technology. While online learning enables students to learn at any time and from any location, the usage of videos in the classroom offers an enjoyable and stimulating learning environment. Despite some challenges, such as limited internet access and devices, students recognize that this learning technique significantly supports learning outside the classroom. Several obstacles to implementing digital technology in learning were also expressed by (Emilia et al., 2025) that several obstacles have been identified that must be overcome in implementing AR technology, including technical constraints such as device incompatibility, internet connectivity issues, and limited device availability. However, they also assume that found that AR technology significantly increased student engagement, motivation, and vocabulary retention by providing interactive, multimodal learning experiences that placed vocabulary in real-world contexts.

While (Arifuddin Fathoni et al., 2024) stated the multimedia tools used combine real-life contexts and practical vocabulary applications, helping students better understand and retain words. Interactive multimedia is considered an appropriate learning medium for English subjects at the junior and senior high school levels. The use of technology in this type of learning is crucial to keep up with current developments and ensure students have skills relevant to today's global needs. Moreover, (Siswanto et al., 2025) added that Technology-assisted learning refers to strategies that use gadgets, teachers, and students to overcome learning difficulties. By

increasing access to educational materials, promoting active student participation, and fostering an atmosphere of ongoing learning and innovation, learning technology is essential to contemporary education.

In order to improve learning outcomes and engagement, (Qurrata'ain et al., 2025) used Google Sites, incorporating interactive tests, multimedia components, and group projects. By giving students, a range of interesting ways to engage with the content, the platform's multimedia features probably helped to explain the noted gains in vocabulary acquisition. They also noted that the use of Google Sites as digital method poses major challenges in vocabulary teaching, such as accessibility, inefficiency, and demotivation. According to (Sathyaseelan et al., 2025) students are more motivated to learn new language skills while using digital media as opposed to traditional methods since digital media offers more engaging and interactive ways to learn language. In addition, this study suggests that English language teachers use digital media in the classroom to increase students' vocabulary learning.

The entire article emphasizes the effectiveness of using technology as a digital learning method to support vocabulary acquisition in English language learning. This certainly allows for the integration of text, audio, video, and other interactive elements, thus providing a more engaging and effective learning experience for students.

Conclusion & Recommendation

According to the findings of the literature review analysis, digital methods that are utilized with students at all levels from elementary school to university include mobile learning, technology-Quizlet, communicative games, Word walls, multimedia applications, augmented reality (AR) technology, and Google Sites. All things considered, this article contributes to the increasing amount of evidence showing how successful technology is as an advanced digital teaching tool and offers helpful recommendations for educators looking to enhance vocabulary instruction. By incorporating technology into their lesson plans, teachers may create more engaging and effective learning environments that cater to the diverse needs and interests of their students.

References

- Al-Habsi, T., Al-Busaidi, S., & Al-Issa, A. (2022). Integrating technology in English language teaching through a community of practice in the Sultanate of Oman: implications for policy implementation. *Educational Research for Policy and Practice*, 21(1), 43–68. <https://doi.org/10.1007/s10671-021-09291-z>.
- Alqahtani, A. A. (2024). Using Technology to Assist in EFL Vocabulary Acquisition and Reading Comprehension. *English Language Teaching*, 17(4), 70. <https://doi.org/10.5539/elt.v17n4p70>.
- Amalia Solikhah, N. (2023). Impact of Technology in Teaching and Learning English as Foreign Language : TESOL Context. *Journal Corner of Education, Linguistics, and Literature*, 3(1), 83–91. <https://doi.org/10.54012/jcell.v3i1.194>.
- Arifuddin Fathoni, Leo Agung S, & Sri Sumaryati. (2024). The Utilization of Interactive Multimedia in Improving Vocabulary Knowledge of High School Students. *JTP - Jurnal Teknologi Pendidikan*, 26(2), 476–491. <https://doi.org/10.21009/jtp.v26i2.46279>.
- Astri, Z., & Wahab, I. (2018). the Effect of Reading Teaching Material for Different Learning Styles in Improving Students' Reading Comprehension. *Jurnal Bahasa Lingua Scientia*, 10(2), 215–230. <https://doi.org/10.21274/lis.2018.10.2.215-230>.
- Berliani, N. A., & Katemba, C. V. (2021). the Art of Enhancing Vocabulary Through Technology. *Jurnal Smart*, 7(1), 35–45. <https://doi.org/10.52657/js.v7i1.1340>.
- Cahyani, N. P. E. M., Dewi, K. S., & Mahendrayana, G. (2024). The Use of Drilling Techniques Integrated with Technology to Improve Students' Vocabulary Mastery. *Journal of Educational Study (JoES)*, 4(2), 32–43.
- Carroll, J. (2023). The Effects of Explicitly Teaching Vocabulary in the Middle School Setting. In -: Vol. (Issue).
- Emilia, Ismail, & Hasan. (2025). Utilizing Augmented Reality Technology in English Vocabulary. *Seltics*, 8(1), 44–55.
- Fauziningrum, E., Sari, M. N., Rahmani, S. F., Riztya, R., Syafruni, S., & Purba, P. M. (2023). Strategies Used by English Teachers in Teaching Vocabulary. *Journal on Education*, 6(1), 674–679. <https://doi.org/10.31004/joe.v6i1.2981>.
- Guaqueta, C. A., & Castro-Garces, A. Y. (2018). The Use of Language Learning Apps

- as a Didactic Tool for EFL Vocabulary Building. *English Language Teaching*, 11(2), 61. <https://doi.org/10.5539/elt.v11n2p61>.
- Haque, A., Ariansyah, M. R., Wiladyah, N. C., & Sari, R. N. (2024). Teaching Vocabulary in a Digital Era: A Study on Tools and Techniques for Engaging English Learners. *IREELL: Indonesian Review of English Education, Linguistics, and Literature*, 2(2), 225–245. <https://doi.org/10.30762/ireell.v2i2.4433>.
- Husein, A. M., Meisarah, F., & Sudrajat, D. (2024). the Impact of Using Multimedia in Improving English Vocabulary Acquisition Among Primary School Students. *Indonesian Journal of Education (INJOE)*, 4(2), 606–618.
- Joe, B. (2009). Effects of synonym generation on incidental and intentional L2 vocabulary learning during reading. *TESOL Quarterly*, 43(1), 79–103. <https://doi.org/10.1002/j.1545-7249.2009.tb00228.x>.
- Kassim, H. M., & Said, N.-E. M. (2020). The integration of mobile learning among esl teachers to enhance vocabulary learning. *Education and Social Sciences Review*, 1(2), 28. <https://doi.org/10.29210/07essr55400>.
- Khalaf, A. (2022). An application of multimedia stratgeic vocabulary learning model (MSVL) - the case of english for specific purposes (ESP) course during covid-19 pandemic. *Journal of Language Teaching and Research*.
- Komang Santi Widi Rahayu, & I G A Lokita Purnamika Utami. (2023). Wordwall-Based Digital Media to Stimulate Students in Learning English Vocabulary. *International Journal of Language and Literature*, 7(4), 233–240. <https://doi.org/10.23887/ijll.v7i4.81884>.
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Journal of Clinical Epidemiology*, 62(10), 1006–1012. <https://doi.org/10.1016/j.jclinepi.2009.06.005>.
- Muslimin, A. I., Mukminatien, N., & Ivone, F. M. (2023). TPACK-SAMR digital literacy competence, technostress, and teaching performance: Correlational study among EFL lecturers. *Contemporary Educational Technology*, 15(2). <https://doi.org/10.30935/cedtech/12921>.
- Octaberlina, L. R. (2023). Exploring the Use of Digital Technology in English

- Language Teaching: Strategies and Methods for Effective Implementation. *ENGLISH FRANCA : Academic Journal of English Language and Education*, 7(1), 175. <https://doi.org/10.29240/ef.v7i1.6977>.
- Qurrata'ain, Q., Putra, I. N. T. D., Evalinda, G., & Arif, M. (2025). A Digital Learning Approach to Improve Students Vocabulary in Language Teaching: Utilizing Google Sites. *Journal of Linguistics and Social Studies*, 2(2), 74–83. <https://doi.org/10.52620/jls.v2i2.185>.
- Saidbakhramovna, A. F., Valijonvna, R. N., & Sharofidinovna, K. D. (2021). Method of Educating Vocabulary in a Foreign Language or Target Language. *Linguistics and Culture Review*, 5(S1), 1649–1658. <https://doi.org/10.21744/lingcure.v5ns1.1994>.
- Sathyaseelan, T., Pettela, R., Ramesh, M., Muralikrishnan, S., Savitha, K., & Oli, L. (2025). Enhancing Students' Vocabulary Learning Through Interactive Digital Media: Learners' Perceptions and Outcomes. *World Journal of English Language*, 15(5), 127–140. <https://doi.org/10.5430/wjel.v15n5p127>.
- Shi, W. (2025). The application of systematic analytical thinking in teaching vocabulary for English majors. *Acta Psychologica*, 257(January), 105091. <https://doi.org/10.1016/j.actpsy.2025.105091>.
- Siswanto, S., Mirza, A. A., Qamariah, Z., Education, E., Program, S., & Raya, N. P. (2025). *The Effect of Using ChatGPT as a Learning Technology on EFL Students' Vocabulary Mastery Darul Ulum Palangka Raya . One research questions were addressed : is there any Vocabulary mastery ? The findings are expected to provide insights and practical solu. April.*
- Tsai, C. C. (2020). An action research study exploring the effects of augmented reality for english vocabulary learning in an elementary school in taiwan. *New Educational Review*, 59, 163–174. <https://doi.org/10.15804/tner.20.59.1.13>.
- Yunda, D. D., Maulana, D. E., Kurniawan, L., & Pham, J. (2023). Improving Student's Vocabulary Using Information and Communications Technology. *International Journal of Contemporary Studies in Education (IJ-CSE)*, 2(3), 240–248. <https://doi.org/10.56855/ijcse.v2i3.768>.

Conflict of Interest

Potential conflict of interest, if any, should be reported here during data collection.

About author

Isnaeni Wahab is a lecturer at Universitas Muslim Maros, South Sulawesi, Indonesia. She has a high interest in the studies of English language learning, applied linguistics, and ICT in English language teaching and learning. She can be contacted at Isnaeniwahab23@gmail.com.

Heriyanti Tahang is a lecturer at Universitas Muhammadiyah Sorong, Indonesia. She has a high interest in the studies of English language learning, applied linguistics in English language teaching and learning. She can be contacted at heriyanti7@gmail.com.

Zul Astri is a lecturer at Universitas Muslim Maros, South Sulawesi, Indonesia. Her research interest falls within the area of reading, sociolinguistics, and ELT methodology. She can be contacted at zulastri17@gmail.com.