The Effects of E-Books Towards Pupils' Vocabulary-A Literature Review

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Abstract
The Fourth Industrial Revolution, also known as Globalization 4.0, has demonstrated the significance and importance of digital technology in various sectors, including education. This revolution has led to the rise of Education 4.0, which advocates for a student-centred, technology-driven, and future-oriented approach to education. The Malaysian education system has responded to this paradigm shift with the Malaysia Education Blueprint 2013–2025. This blueprint focuses on 21st-century skills, aiming to develop pupils' communication, collaboration, critical thinking, creativity, and ethical values. The English Language Education Roadmap for Malaysia 2015-2025 complements the education blueprint by elevating English teaching and learning standards to ensure Malaysians can compete globally. Despite these initiatives, challenges remain in vocabulary acquisition among young learners. Early exposure to English is crucial for building a solid foundation in the language. However, many pupils face limitations due to environmental factors, such as speaking their mother tongue at home and lacking opportunities to engage with English in natural contexts. Socioeconomic factors also play a significant role, with children from lower socioeconomic backgrounds often demonstrating weaker vocabulary skills. Traditional learning methods can be monotonous and unengaging, making vocabulary learning a chore for pupils. To address these challenges, it is essential to incorporate interactive and engaging teaching methods that cater to individual learning paces and preferences. With multimedia elements and interactive features, E-books offer a promising solution by making vocabulary learning more engaging and effective. In conclusion, the study aims to contribute to vocabulary acquisition and ESL research by exploring the literature review of e-books in enhancing vocabulary learning among young learners in Malaysia. The findings are expected to inform teachers, language experts, and policymakers in refining vocabulary teaching approaches and improving English language education.
Keyword: English as second language (ESL), Vocabulary, Lower Primary, E-Books, Digital Learning

Introduction
The Fourth Industrial Revolution, also referred to as Globalisation 4.0, has demonstrated the importance and significance of digital technology in different domains of society, including

the economy, education and culture. The impact of globalisation on technology leads to substantial transformations in the methods of production, corporate strategies, opportunities, and abilities. The impacts of the Industrial Revolution on the system of education were quite significant and paved the way to Education 4.0. This new era entails human beings' ability to incorporate technology to create unique and innovative solutions. Education 4.0 represents a paradigm shift in terms of student-centred and technological education, which aims to prepare individuals for the future. Its primary purpose is to equip them with those crucial skills and competencies that would prepare the learners for the dynamic globalized society. Therefore, it is crucial for the education system not to be static but to be dynamic and adaptable, incorporating new technological advancements to meet the requirements of the 21st century.

The advent of Malaysian Education Blueprint 2013-2025 for Malaysian Education, which incorporated innovative 21st-century teaching and learning approaches, marked a shift in the education system. These methods have been carefully developed to equip the students with the necessary skills for the new-age digital world (David et al., 2022). The Malaysian Ministry of Education has provided a suggested framework for 21st-century skills comprising students' communication, teamwork, problem-solving skills, creativity, values, and ethics (Thornhill-Miller et al., 2023). It aims to deliver an integrated and well-rounded curriculum that includes students' academic, social, and emotional development. The blueprint provides comprehensive plans and methods in multiple essential areas, including restructuring the curriculum and evaluation, professional development for teachers, upgrading school facilities, and implementing technology into the curriculum. (David et al., 2022; Hafsah Taha et al., 2020).

The Ministry of Education initiated the Digital Education Policy (DEP) in 2023 with the aim of developing a highly competent and technologically savvy generation. To promote the vision of digital education, the DEP has embarked on the following goals and strategies: Operating objectives: 4, Major thrusts: 6, Strategies: 18, Initiatives: 41. DEP aims at producing students who are proficient in digital technology. This policy also promotes the use of digital technology by teachers and other authorities in the education sector. Apart from that, it also involves enhancing the infrastructure, information system, and digital education material. Additionally, DEP aims to increase the participation of strategic partners in digital education. (MOE 2023). The DEP is a significant initiative that is shaping the future of education in Malaysia.

The English Language Education Roadmap for Malaysia 2015-2025 was launched as a continuation of the Malaysian Education Blueprint to enhance the quality and standard of English teaching and learning in Malaysia. This roadmap is essential to guarantee that all Malaysians can reach an excellent level of English fluency and possess the necessary skills to competently participate in the global marketplace (Liyana et al., 2019). This ten-year reform plan seeks to modernize the English language curriculum, improve teacher training programmes, enhance evaluation techniques, and integrate technology into teaching and learning (Adelina Asmawi, 2022). The roadmap provides clear instructions for English teachers and curriculum developers to ensure that the English language curriculum and students' language assessments are per the Common European Framework of Reference for Languages

(CEFR), the global benchmark for language education and proficiency (Muhammad & Hamidah Yamathis, 2019). CEFR was established in 2001 by the Council of Europe with the purpose of providing a standardised structure for creating curriculum guidelines, language syllabuses, textbooks, exams, and other educational materials throughout Europe (Council of Europe 2001). It offers a comprehensive structure for the acquisition, instruction, and evaluation of languages. It has emerged as a prominent and universally acknowledged benchmark for describing language competency (Erdawati Bakar, 2020). The roadmap is a comprehensive plan that outlines the strategies and initiatives to improve English language education in Malaysia.

According to Norshaidatul Md Nawawi et al. (2021), the CEFR framework provides a descriptive approach to assessing language learning and usage needs. It divides communicative competence into six levels: elementary users (A1, A2), independent users (B1, B2), and proficient users (C1, C2). The CEFR employs an action-oriented approach that emphasises practical tasks and addresses real-world communicative needs (Ahmet Acar, 2020). The English Language Education Roadmap for Malaysia 2015-2025 and CEFR are firmly linked, as they share identical objectives and associated goals (Ngu & Azlina Abdul Aziz 2019). Ultimately, both frameworks have the primary goal of enhancing the standards of English language instruction and promoting language competency among students in Malaysia. According to the CEFR framework, vocabulary skills are essential components of linguistic competency for determining a person's degree of language proficiency. They serve as a scaffolding structure for the fundamental components of language acquisition, particularly at the A1 and A2 proficiency levels (Boştina-Bratu et al., 2022).

According to McKeown (2019), vocabulary repertoire refers to one's ability to accurately identify, understand, and utilize words in numerous situations and contexts. In other words, a vocabulary repertoire refers to an array of phrases and words that one possesses and can utilize efficiently in a specific language (Instr. Angham T. & Saleh J. 2019). A robust vocabulary is crucial for effective language acquisition as it establishes a firm basis for achieving proficiency in other language abilities (Anisa Mutia et al., 2023). Naeem Afzal, in 2019, asserts that without a strong foundation in vocabulary, learners will struggle to grasp other language components and skills, such as comprehension and writing, not to mention speaking fluently. This is supported by a 2018 study by Westby, which found that students with a limited vocabulary often face difficulties understanding intricate texts and articulating their thoughts effectively in both spoken and written language.

As technology in education evolves, e-books are emerging as a cutting-edge resource to revolutionize the old vocabulary teaching and learning method. E-books are referred to as electronic publications that can be accessed and read on electronic devices, such as computers, tablets or mobile phones. Multimedia components like text, images, music, and video are typically included (Indrawan et al., 2023). By offering interactive and multisensory learning experiences along with interactive elements like animated graphics, audio narration, dictionaries, games, and interactive tools embedded in them, e-books can promote students' active engagement more than paper-printed reading materials (López-Escribano et al., 2021). Similar to printed books, e-books provide a practical means of accessing reading material and enhancing traditional reading resources. By incorporating e-books into their lesson plans,

teachers can successfully address various teaching and learning challenges in the classroom. E-books enhance language proficiency in general and vocabulary in particular, which helps students perform better academically and feel more comfortable speaking English outside the classroom.

Literature Review
Challenges in Learning Vocabulary
Vocabulary is the backbone of the English teaching and learning. Pupils may face difficulties when they go to an advanced level if their vocabulary repertoire is insufficient (Taufik et al., 2023). This can be proven by a study in 2022 by Karnine et al. (2022), who investigated the challenges and perceptions of ESL students regarding the Malaysian University Examination Test (MUET). MUET is a vital English proficiency assessment for admission to Malaysian public universities. However, the study findings stated that limited knowledge of vocabulary and grammar impedes students' performance in MUET, particularly in reading and writing.

 According to a study by Surmanov and Azimova in 2020, numerous students faced difficulties pronouncing words correctly, impeding their ability to learn and use new words when speaking English. This is supported by a study from Annisa et al. (2023), which stated that pupils frequently make errors with words that are tricky to pronounce or spell. Especially when the sounds and spellings are not the same. The challenges students face in spelling English words stem from the complex alphabet, sound-spelling mismatches, vowel and consonant substitutions, and the presence of silent letters. (Urai Salam & Nurnisa 2021).

One of the most effective approaches to learning vocabulary is when a word is learned together with its context. Without a firm grasp of sentence structure and limited exposure to English, students will struggle to build a robust vocabulary. Without a thorough comprehension of word usage within sentences, compounded by a lack of extensive exposure to the language. In a study by Surmanov and Azimova in 2020, students frequently struggle to distinguish words that have similar meanings and to pick the correct interpretation depending on the context. Salam and Nurnisa (2021) highlight that students frequently encounter difficulties applying many English words in real-life situations as they may not come across these phrases in their day-to-day experiences. For instance, young children in Malaysia may lack familiarity with the term 'cellar' since houses in Malaysia typically do not own a cellar. If the teacher solely translates the definition of a word without providing sufficient contextual details, the students will likely encounter difficulties retaining the word in their memory.

Students must be provided ample contextual learning opportunities, significantly affecting their ability to comprehend, remember, and proficiently use new words. Frances et al. (2020) demonstrated that exposing students to words in diverse contexts can boost their ability to recall, recognize, and connect words with their definitions in their first language and target foreign languages. The study by Urai Salam and Nurnisa in 2021 investigated the difficulties encountered by 33 Pesantren (boarding school) students in West Kalimantan while learning English vocabulary. The study aims to uncover specific challenges early English learners face, particularly those with low achievement in vocabulary mastery. Based on the results, the students have difficulties in memorizing and understanding long words compared to shorter ones. A good English lesson should accommodate the pupils' needs to remember and spell new words effectively.

In their study on students' opinions on problems and solutions to learning English in the Malaysian ESL context, Nur and Melor (2019) provided a detailed analysis of the difficulties encountered by learners. Based on a study conducted on students in upper-secondary school, it has been found that they have challenges comprehending the language utilised in textbooks and other educational resources. The pupils also face difficulties in applying grammatical rules in their sentences. Maslawati et al. (2023), in their study on educational issues in the 21st century, found that students with a narrow vocabulary range faced obstacles in developing critical thinking skills and tackling higher-order learning challenges. This constraint will cause the students to feel demotivated and negatively affected by flipped classroom activities.

Previous studies have compellingly demonstrated the vital need for educators to prioritize vocabulary learning from the earliest stages of language instruction. This strategy can significantly reduce the learning obstacles students encounter as they advance to higher levels of English language proficiency. By building a solid vocabulary foundation in the formative years, educators can equip students with the linguistic tools necessary to navigate more complex language challenges in their academic journey.

Factors Affecting Vocabulary Acquisition
Many factors affect vocabulary acquisition. Identifying the factors involved will facilitate improving vocabulary teaching and learning.

Embarking the journey of English language acquisition at a young age is vital. Exposing children to English at a young age, whether through family interactions, different media outlets, or official and informal schooling, will give them an advantage or a strong foundation to become proficient in the language (George, 2022; Sheena et al., 2023). Research conducted by Serrat-Sellabona et al. in 2021 highlighted that pre-linguistic factors, such as imitation and the use of gestures, play a more significant role in early vocabulary development than sociodemographic factors. This marks the significance of developing a wide range of languages early on. Nevertheless, numerous students encounter difficulties in achieving proficiency due to not having plenty of opportunities for vocabulary enrichment starting at a young age.

This leads to the factors contributing to the issue. The limited language development among many young learners is frequently associated with environmental circumstances. In Malaysia, children may face limitations in acquiring English vocabulary due to their predominant use of their native language at home. In their comprehensive study, Nur and Melor (2019) provided substantial evidence supporting the notion that students' acquisition of the English language is significantly influenced by interference from their first language. Their limited access to enriching learning environments may result in a lack of opportunities to interact with English language input in authentic settings (Sultana et al., 2020). Ooi and Juliana, in their study in 2023, stated that despite English being regarded as a second language in Malaysia, there are still issues regarding learners' exposure to the language.

Incidental learning is another powerful strategy for enhancing vocabulary development in young learners. Accidental learning occurs when a student is exposed to new words and is not fully aware of them or is not deliberately learning the words as they learn through reading, listening, speaking, or writing. The combination of both intentional and unintentional learning approaches improves the ESL students' vocabulary (Karami & Bowles, 2019; Meganathan et al., 2019). Many educators excessively prioritize the completion of the syllabus, which leads to a strong reliance on intentional learning in their teaching methods. They prefer to deliver

their lessons through structured exercises and activities, such as asking the students to read new words and their meanings multiple times to help them remember them (Carney, 1993). From the study, the methodology employed by the teacher appeared to be one of the contributing factors to the students' challenges in acquiring vocabulary proficiency. In the study conducted by Maslawati et al. (2023), it was shown that certain teachers excessively depended on conventional, instructor-focused approaches. This is supported by research conducted in 2023 by Kashinathan and Azlina, which focuses on the difficulties ESL learners face when speaking English in Malaysian classrooms. The teachers' excessive emphasis on the curriculum and textbook led to a lack of diverse teaching resources and fresh approaches, such as Project-Based Learning (PBL), which is advantageous for fostering critical thinking abilities. Consequently, many students may see the process of acquiring vocabulary as monotonous and tiring due to the expectation of memorizing unfamiliar terms and producing accurate responses to assigned tasks. Furthermore, Traditional methods like memorizing and flashcards can become tedious and uninteresting, making the process of learning feel like a task (Fengyu, 2023).

Moreover, socioeconomic factors also play a crucial role in developing English vocabulary. Arne Lervåg et al. (2019) found that socioeconomic status (SES) influences children's language abilities directly. According to Levine et al. (2020), children from homes with lower socioeconomic status (SES) typically have poorer vocabulary abilities and develop vocabulary at a slower rate than their counterparts from better SES backgrounds regarding vocabulary product, syntax product, and language learning process. Both internal and external factors are noted as impacting the vocabulary or language acquisition process in Ida's research from 2022. This study indicates that younger children typically pick up new languages easily and quickly. Furthermore, people who have grown up multilingual or previously exposed to another language usually show faster vocabulary growth. Therefore, it is crucial to maintain consistent language usage at home and school in conjunction with implementing appropriate teaching methodologies.

Strategies to Improve Vocabulary Teaching

In 2022, Nermeen Singer's study explored how cartoons unintentionally facilitate vocabulary acquisition among English Language Learners (ELLs). The study has demonstrated that youngsters are more likely to remember and understand words when they watch cartoons with subtitles. This is due to the combination of visual and verbal information, which helps to strengthen the meaning of the words. The study's findings suggest that cartoons can be a valuable tool for ELLs to acquire vocabulary incidentally, providing an additional method to supplement conventional language training. The study by Jassim and Dzakiria in 2019 investigates the impact of digital games on vocabulary acquisition in children learning English as a Foreign Language (EFL). According to their studies, digital games have been found to enhance vocabulary learning significantly compared to traditional methods. Studies cited in the paper showed that children exposed to vocabulary through games perform better in vocabulary acquisition than those using conventional textbook exercises.

Furthermore, studies also examine the approaches utilised to improve pupils' language repertoire. Teachers have a wide range of strategies at their fingertips to use in the classroom. In their study, Nadya and Ratmawati (2019) examined vocabulary acquisition strategies and identified three factors teachers should consider while using these strategies in their lessons. First of all, educators have the ability to integrate a variety of approaches in

order to accommodate diverse learning preferences. Furthermore, digital tools and resources, such as educational applications and online platforms, can be employed to offer interactive and tailored learning experiences. Finally, this study proposed that teachers should actively engage in professional development programs that specifically target innovative, practical ways of teaching vocabulary.

The Benefits of E-Books

There are many benefits of integrating e-books in vocabulary learning, as interactive and dynamic features in e-books can make vocabulary learning a fun and engaging activity for the pupils. A study by Rini et al. in 2023 stated that e-books not only come with colourful pictures, entertaining animations, fun songs and stories but also can provide Augmented Reality (AR) elements that can capture children's attention and engagement by bringing content and scenes to life.

According to Zhang et al. (2020), in their study on e-book-based language learning, e-books are often equipped with games, quizzes, puzzles and interactive activities which can enhance learning experiences (Zhang et al., 2020). They also have built-in dictionaries and pronunciation tools that can assist vocabulary learning and improve memory retention. Ogburu et al. 2024 in their studies on the effect of electronic storybooks on preschoolers' retention of vocabulary and motivation to read, mentioned significant improvements in vocabulary retention among the pupils after the integration of e-books in the class. This is corroborated by Chelsey Heidemann (2012), who examined the influence of electronic storybooks on various facets of reading achievement in elementary school students. The study identified four significant effects of e-book integration. Firstly, electronic storybooks can enhance reading accuracy and fluency, especially when the electronic features are thoughtfully designed to complement the text. Secondly, interactive features that offer definitions and pronunciations are instrumental in improving vocabulary. Thirdly, students demonstrate better comprehension skills, as the interactive components of e-books facilitate greater engagement and understanding of the story. Lastly, these accessible features allow pupils to naturally learn and retain new words without feeling pressured or compelled (Djono & Nur Arifah, 2023).

Furthermore, e-books can help to boost pupils' motivation to learn vocabulary (Viola & Miranita, 2022). According to the findings in the study by Djono and Nur Arifah in 2023, 94% of students agree that e-books improve reading motivation. This is because e-books can provide rewards and badges after completing tasks or activities. Additionally, there are customisation options available that enable users to select their own background themes and avatars. This facilitates the development of originality and the ability to express oneself, cultivating a feeling of responsibility for one's own educational journey. Kang (2022) The benefits of e-books can also be reflected by a study by Egart et al. in 2022. This study found that when multimedia functions are included, disadvantaged children gain more significant benefits from e-book reading compared to non-disadvantaged children, as it offers visual and audio scaffolding to enhance memory retention.

However, it is important to note that integrating e-books does not mean replacing or abandoning traditional paper books; instead, they can be used together to create a blended, enjoyable learning environment (Kim et al., 2020). By integrating e-books into the curriculum, educators can offer a more engaging, effective, and personalised approach to vocabulary acquisition.

Challenges in Integrating E-Books

Although the government has implemented many transformative steps to encourage the integration of technology in education, there is still a deficiency in the actual use of digital tools for teaching and learning. Time restrictions are a vital factor. According to Makgato (2023), numerous educators believe integrating technology into their classrooms requires significant time and effort. In addition, teachers must meticulously develop their lesson plans to guarantee that the technological resources employed are in harmony with the educational goals and effectively facilitate the process of teaching and learning (Kola, 2021). Teachers often face a massive challenge in balancing this component with their other educational responsibilities.

Since not every student has equal access to technology and the internet, overcoming the technology barrier among students is definitely challenging when incorporating technology in the classroom. This is another critical problem in integrating technology into classrooms. Socioeconomic issues, geographical factors and infrastructure restrictions all contribute to this technological barrier, which disadvantages many pupils (Graves et al., 2021). Some schools may not have an Internet connection, while others have computers that must be shared with a high number of students. Teachers often have to face limited access to equipment and insufficient training in digital technologies. By providing educators with the knowledge and resources they need to incorporate technology properly, schools can improve the teaching and learning process and better prepare students for success in the digital age.

Lee and Choi conducted a study in 2022 to investigate the impact of e-books on vocabulary acquisition among young Korean EFL (English as a Foreign Language) learners, as well as their parents' attitudes towards e-books and print books. According to the study, e-books and physical books can be effectively blended into lessons. However, there is a demand for e-book publishers to include features aimed at rendering e-books as convenient as print books. According to Masitah et al. (2023), students point out changes and feedback on e-books. They were also looking forward to e-books with more videos, printable e-books, and an offline e-book app that could aid them with their assignments.

Implication

This literature review sheds light on the transformative potential of e-books for English vocabulary acquisition among young learners. Incorporating e-books into the syllabus provides a diverse learning approach that can significantly boost student engagement and motivation, as the interactive features in e-books are equipped with multimedia elements and customization options. The personalization and engaging learning experience can lead to higher memory retention and a sense of independence in students for their own learning journey.

However, there are also challenges in the implementation of e-books, such as time constraints and the digital divide. Teachers often find incorporating technology into their lesson plans complex due to the additional time and effort required. Moreover, students' lack of equal access to technology, influenced by socioeconomic factors, geographical location, and infrastructure limitations, exacerbates educational inequalities. These issues call for the government to take necessary actions to address the digital gap, strategic planning, professional development, and ongoing support for educators to integrate digital tools into their teaching practices effectively.

The literature also highlights the importance of maintaining traditional paper books. Alternatively, combining e-books with printed books in a blended learning environment can provide a more well-rounded educational approach. This method addresses various learning preferences and enriches the overall educational experience. Features that are aligned with the curriculum and syllabus need to be incorporated, as well as creating a convenient e-book, just like printed books.

Overall, the findings from various studies underscore the need for educational policymakers and language experts to refine vocabulary teaching methodologies. It is important to note that teachers are willing to transform their teaching methods, but they are hindered by technology barriers and a lack of resources. Making small transformations to address these digital learning tools, like e-books, can facilitate educators' offering more engaging and effective vocabulary instruction. By using this approach, students can improve their vocabulary while also gaining essential skills required for thriving in the rapidly evolving digital age.

Conclusion

This literature review has provided an extensive analysis of the effects of e-books on pupils' vocabulary repertoire. The findings indicate that e-books, with their interactive and multimedia features, offer significant advantages in engaging students and improving their vocabulary retention. However, the implementation of e-books in educational settings is often impeded by technological barriers and a lack of resources, highlighting a critical area for intervention. Despite the promising potential of e-books, this review points out a few limitations in the existing research, such as a focus on short-term impacts. Future studies should aim to bridge these gaps by examining long-term effects and considering various educational contexts. It is hoped that continued research and innovation in this field will be carried out to overcome the current challenges of digital learning tools in education.

References

Acar, A. (2020). Transforming communicative tasks into mini-projects. *İlköğretim Online*, 1660–1668. https://doi.org/10.17051/ilkonline.2020.734694

Afip, L. A., Hamid, M. O., & Renshaw, P. (2019). Common European framework of reference for languages (CEFR): insights into global policy borrowing in Malaysian higher education. *Globalisation Societies and Education*, *17*(3), 378–393. https://doi.org/10.1080/14767724.2019.1578195

Afzal, N. (2019). A study on Vocabulary-Learning Problems Encountered by BA English Majors at the university level of education. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3465990

Andari, I. a. M. Y. (2023). Factors influence the acquisition of vocabulary by young learners. *Kumarottama*, *2*(2), 153–166. https://doi.org/10.53977/kumarottama.v2i2.833

Asmawi, A. (2022). Notable new navigations of Malaysian English language education. In *Routledge eBooks* (pp. 78–100). https://doi.org/10.4324/9781003244769-6

Bakar, E. W. (2020). Can-Do descriptors – Realigning English Language Curriculum at Higher Education Institution to CEFR. *International Journal of Modern Languages and Applied Linguistics*, *4*(2), 84. https://doi.org/10.24191/ijmal.v4i2.7975

Barcroft, J., Grantham, H., Mauzé, E., Spehar, B., Sommers, M. S., Spehar, C., & Tye-Murray, N. (2021). Vocabulary Acquisition as a By-Product of Meaning-Oriented auditory training for children who are deaf or hard of hearing. *Language, Speech & Hearing Services in Schools*, *52*(4), 1049–1060. https://doi.org/10.1044/2021_lshss-21-00040

Boştină-Bratu, S., Negoescu, A. G., & Morar, L. (2022). Scaffolding strategies in overpassing language learning difficulties. *Revista Academiei Forţelor Terestre*, *27*(3), 210–215. https://doi.org/10.2478/raft-2022-0027

Carney, R. N., Levin, M. E., & Levin, J. R. (1993). Mnemonic Strategies Instructional techniques worth remembering. *Teaching Exceptional Children*, *25*(4), 24–30. https://doi.org/10.1177/004005999302500406

Dauletova, D., & Rahimova, D. (2022). The importance of vocabulary in language learning. *Ренессанс В Парадигме Новаций Образования И Технологий В XXI Веке*, *1*, 173–174. https://doi.org/10.47689/innovations-in-edu-vol-iss1-pp173-174

David, J., Alias, N. A., Hashim, K. S., Salleh, M. I. M., Mamat, M. N., & Ariffin, S. (2022). Issues and Challenges: Teaching and learning of General Studies in Malaysia. *Deleted Journal*, *14*(2), 1. https://doi.org/10.35609/gcbssproceeding.2022.2(79

Fengyu, Z. (2023). The impact of vocabulary learning methods on students' vocabulary application skills. *English Language Teaching and Linguistics Studies*, *5*(4), p206. https://doi.org/10.22158/eltls.v5n4p206

Frances, C., Martin, C. D., & Duñabeitia, J. A. (2020). The effects of contextual diversity on incidental vocabulary learning in the native and a foreign language. *Scientific Reports*, *10*(1). https://doi.org/10.1038/s41598-020-70922-1

George, B. (2022). A Study on the Impact of Children Learning English before Schooling. *International Journal for Multidisciplinary Research*, *4*(6). https://doi.org/10.36948/ijfmr.2022.v04i06.1232

González-Pérez, L. I., & Ramírez-Montoya, M. S. (2022). Components of Education 4.0 in 21st Century Skills Frameworks: Systematic review. *Sustainability*, *14*(3), 1493. https://doi.org/10.3390/su14031493

Graves, J. M., Abshire, D. A., Amiri, S., & Mackelprang, J. L. (2021). Disparities in technology and broadband internet access across rurality. *Family & Community Health*, *44*(4), 257–265. https://doi.org/10.1097/fch.0000000000000306

Graves, M. (2022). Vocabulary Instruction. *Vocabulary Instruction*. https://doi.org/10.4324/9781138609877-ree95-1

Hamed, A. (2023). The effect of incidental learning and deliberate learning on L2 repertoire. *International Journal of Management and Humanities*, *9*(9), 15–21. https://doi.org/10.35940/ijmh.i1606.059923

He, Y. (2023). The Literature Review of English Incidental Vocabulary Acquisition. *Frontiers in Science and Engineering*, *3*(3), 74–78. https://doi.org/10.54691/fse.v3i3.4537

Indrawan, I. P. E., Kristiyanti, N. N. E., Agustini, K., & Sudatha, I. G. W. (2023). E-book media trends in the learning process at school. *Indonesian Journal of Educational Development (IJED)*, *4*(3), 327–335. https://doi.org/10.59672/ijed.v4i3.3276

J, N. I. a. T. S. (2019). Using Wordscapes Game as a tool to develop EFL learners' vocabulary repertoire. *Journal of the College of Basic Education*, *25*(105), 129–147. https://doi.org/10.35950/cbej.v25i105.4793

Jassim, L. L., & Dzakiria, H. (2019). A literature review on the impact of games on learning English vocabulary to children. *International Journal of Language and Literary Studies*, *1*(1), 47–53. https://doi.org/10.36892/ijlls.v1i1.22

Kang, Y. (2022). E-Book Production and Online Communication Education practice for public value. *J-Institute*, *7*(1), 13–21. https://doi.org/10.22471/value.2022.7.1.13

Karami, A., & Bowles, F. (2019). Which Strategy Promotes Retention? Intentional Vocabulary Learning, Incidental Vocabulary Learning, or a Mixture of Both? *Australian Journal of Teacher Education*, *44*(9), 25–43. https://doi.org/10.14221/ajte.2019v44.n9.2

Karnine, S. M. B. B. V. K. S. V., Preece, A. S. D., Ahmad, I. B. S., & Muhammad, S. S. B. (2022). A study on difficulties encountered and perception by English as Second Language (ESL) learners in Malaysian University Examination Test (MUET). *International Academic Symposium of Social Science 2022*. https://doi.org/10.3390/proceedings2022082053

Kashinathan, S., & Aziz, A. A. (2021). ESL learners' challenges in speaking English in Malaysian classroom. *International Journal of Academic Research in Progressive Education and Development*, *10*(2). https://doi.org/10.6007/ijarped/v10-i2/10355

Kgosi, M. K., Makgato, M., & Skosana, N. M. (2023). Teachers' views on the application of educational technologies in the classroom: a case of selected Tshwane West secondary schools in Gauteng. *Journal of Curriculum Studies Research*, *5*(2), 151–166. https://doi.org/10.46303/jcsr.2023.23

Dokumen Standard Kurikulum dan Pentaksiran. 2017. *Kementerian Pendidikan Malaysia.*

Kim, J., Seo, J., Zo, H., & Lee, H. (2020). Why digital goods have not replaced traditional goods: the case of e-books. *Journal of Enterprise Information Management*, *34*(3), 793–810. https://doi.org/10.1108/jeim-05-2019-0129

Koçak, Ö., Yıldırım, Ö., Kurşun, E., & Yıldırım, G. (2020). Investigating the status of tablet computers and E-Books use of open education faculty students. In *IGI Global eBooks* (pp. 737–751). https://doi.org/10.4018/978-1-7998-1757-4.ch043

Kok, N. M., & Aziz, A. A. 2019. English language teachers' perceptions on the implementation of CEFR-aligned curriculum among primary schools in Malaysia. *Seminar Wacana Pendidikan*

Kola, M. (2019). Pre-service teachers' action research: technology education lesson planning in a South African University. *Educational Action Research*, *29*(1), 99–117. https://doi.org/10.1080/09650792.2019.1686043

Lase, D. (2019). Education and industrial revolution 4.0. *Jurnal Handayani*, *10*(1), 48. https://doi.org/10.24114/jh.v10i1.14138

Lervåg, A., Dolean, D., Tincas, I., & Melby-Lervåg, M. (2019). Socioeconomic background, nonverbal IQ and school absence affects the development of vocabulary and reading comprehension in children living in severe poverty. *Developmental Science*, *22*(5). https://doi.org/10.1111/desc.12858

Levine, D., Pace, A., Luo, R., Hirsh-Pasek, K., Golinkoff, R. M., De Villiers, J., Iglesias, A., & Wilson, M. S. (2020). Evaluating socioeconomic gaps in preschoolers' vocabulary, syntax and language process skills with the Quick Interactive Language Screener (QUILS). *Early Childhood Research Quarterly*, *50*, 114–128. https://doi.org/10.1016/j.ecresq.2018.11.006

López-Escribano, C., Valverde-Montesino, S., & García-Ortega, V. (2021). The Impact of E-Book reading on young Children's emergent literacy skills: An analytical review. *International Journal of Environmental Research and Public Health/International Journal of Environmental Research and Public Health*, *18*(12), 6510. https://doi.org/10.3390/ijerph18126510

Meganathan, P., Yap, N. T., Paramasivam, S., & Jalaluddin, I. (2019). Incidental and Intentional Learning of Vocabulary among Young ESL Learners. *Journal of Language Teaching, Linguistics and Literature/3L*, *25*(4), 51–67. https://doi.org/10.17576/3l-2019-2504-04

Milenković, D., Petković, J., & Marinković, S. (2022). Globalization and Its Impact on Technological Development. *Society's Challenges for Organizational Opportunities: Conference Proceedings*. https://doi.org/10.18690/um.fov.3.2022.48

Ministry of Education. 2023. *Digital Education Policy.*

Mohamad, M., Palani, K., Nathan, L. S., Sandhakumarin, Y., Indira, R., & Jamila, E. (2023). Educational Challenges in the 21st Century: A Literature review. *International Journal of Academic Research in Progressive Education and Development*, *12*(2). https://doi.org/10.6007/ijarped/v12-i2/16865

Mumrikoh, N. L., Djono, D., & Drajati, N. A. (2023). Urgency of E-Books based multimodal approach towards reading motivation for elementary school students. *Journal for Lesson and Learning Studies*, *6*(1), 71–80. https://doi.org/10.23887/jlls.v6i1.59399

Mutia, A., Sahardin, R., & Putra, G. M. (2023). The impact of vocabulary instruction on vocabulary achievement. *English Education Journal*, *13*(4), 464–477. https://doi.org/10.24815/eej.v13i4.30005

Nawawi, N. M., Zuhaimi, N., Sabu, K., Mahamud, N. S. R., & Nasir, N. a. M. (2021). CEFR for Languages and its effective implementation in secondary schools in Malaysia. *Asian Journal of Assessment in Teaching and Learning*, *11*(1), 63–72. https://doi.org/10.37134/ajatel.vol11.1.6.2021

Ooi, L. H., & Othman, J. (2023). Challenges faced by ESL in-service teachers enrolled in a teacher education programme via open distance learning in Malaysia. *AAOU Journal/AAOU Journal*, *18*(2), 121–131. https://doi.org/10.1108/aaouj-12-2022-0173

Pratama, S. S., & Hadi, M. S. (2023). The Vocabulary Building Audio-Visual Media: An Innovation in Vocabulary expertise. *Jurnal Studi Guru Dan Pembelajaran*, *6*(1), 1–8. https://doi.org/10.30605/jsgp.6.1.2023.1994

Ramadhani, V. Y., & Khusniati, M. (2022a). Development of Interactive E-Books containing Virtual Laboratory to Improve Students' Motivation Learning. *Journal of Environmental and Science Education/Journal of Environmental and Science Education*, *2*(1), 49–57. https://doi.org/10.15294/jese.v2i1.53125

Ramadhani, V. Y., & Khusniati, M. (2022b). Development of Interactive E-Books containing Virtual Laboratory to Improve Students' Motivation Learning. *Journal of Environmental and Science Education/Journal of Environmental and Science Education*, *2*(1), 49–57. https://doi.org/10.15294/jese.v2i1.53125

Ran, W., & Jinglu, L. (2020). The Design and Development of Digital Books for E-learning. *4th International Conference on Artificial Intelligence and Virtual Reality*. https://doi.org/10.1145/3439133.3439140

Rasulova, Z. H., & Shamuratova, M. S. (2021). Dynamics of vocabulary change and problems of lexic competence development. *Theoretical & Applied Science*, *104*(12), 766–769. https://doi.org/10.15863/tas.2021.12.104.78

Reilly, S., & McKean, C. (2023). Creating the conditions for robust early language development for all—Part 1: Evidence-informed child language surveillance in the early years. *International Journal of Language & Communication Disorders*, *58*(6), 2222–2241. https://doi.org/10.1111/1460-6984.12929

Rini, D. R., W, A. M., & W, R. T. (2023). 3D Animal Illustration Flashcard as a learning Media Innovation in early childhood Education. *KnE Social Sciences*. https://doi.org/10.18502/kss.v8i15.13929

Salam, U., & Nurnisa, N. (2021). Students' difficulties in learning vocabularies. *DOAJ (DOAJ: Directory of Open Access Journals)*. https://doi.org/10.32502/ecj.v5i1.3327

Serrat-Sellabona, E., Aguilar-Mediavilla, E., Sanz-Torrent, M., Andreu, L., Amadó, A., & Serra, M. (2021). Sociodemographic and Pre-Linguistic factors in early vocabulary acquisition. *Children*, *8*(3), 206. https://doi.org/10.3390/children8030206

Shatz, M. (2001). Vocabulary Acquisition, Psychology of. In *Elsevier eBooks* (pp. 16292–16294). https://doi.org/10.1016/b0-08-043076-7/01579-5

Singer, N. (2022). Cartoons as the incidental vocabulary acquisition tool for English language learners. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4085848

Srivastava, S. (2023). The Evolution of Education: Navigating 21st-Century challenges. *International Journal for Multidisciplinary Research*, *5*(5). https://doi.org/10.36948/ijfmr.2023.v05i05.6314

Sun, Y. (2019). An analysis on the factors affecting second language acquisition and its implications for teaching and learning. *Journal of Language Teaching and Research*, *10*(5), 1018. https://doi.org/10.17507/jltr.1005.14

Supian, N., & Asraf, R. M. (2019). A case study on vocabulary learning strategies in Malaysia: implications for teaching and learning. *The Asian ESP Journal*. http://irep.iium.edu.my/72875/

Surmanov, Sardor & Azimova, Maftuna. (2020). Analysis of difficulties in vocabulary acquisition. *The Journal of Legal Studies* 6:144-153.

Taha, H., Hanafi, Z., Dzainudin, M., Ibrahim, M. M., Yahaya, A., Ahmad, C. N. C., Masnan, A. H., Ramli, S., Taib, R. M., Mustafa, M. C., Yassin, S. M., Kastari, M. A., Daud, N., & Padmanathan, H. (2020). Malaysian Early Childcare and Childhood Education (ECCE) curriculum: Perspectives of Malaysian ECCE Educationists. *Pacific Early Childhood Education Research Association*, *14*(3), 45–71.

https://doi.org/10.17206/apjrece.2020.14.3.45

Uddin, K. M. J., & Khalfalla, B. (2022). An Investigation into the Sources, Tactics, and Limitations of ESL Vocabulary Learning, as well as, Test to Analyze Vocabulary Knowledge to Measure Efficiency. *International Journal on Studies in English Language and Literature/International Journal of Studies in English Language and Literature*, *10*(6), 1–15. https://doi.org/10.20431/2347-3134.1006001

West, G., Snowling, M. J., Lervåg, A., Buchanan-Worster, E., Duta, M., Hall, A., McLachlan, H., & Hulme, C. (2021). Early language screening and intervention can be delivered successfully at scale: evidence from a cluster randomized controlled trial. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, *62*(12), 1425–1434. https://doi.org/10.1111/jcpp.13415

Widyasari, Sutarto, J., & Pristiwati, R. (2023). Development of media based electronic book Local Wisdom to improve elementary students' literacy. *International Journal of Research and Review*, *10*(4), 309–314. https://doi.org/10.52403/ijrr.20230438

Yaccob, N. S., & Yunus, M. M. (2019). Pupils' Perspectives on Challenges and Solutions to Learning English in Malaysian ESL Context. Journal of Language and Communication (JLC), 6, 487-496.

Zhang, R., Zou, D., Xie, H., Au, O. T. S., & Wang, F. L. (2020). A Systematic review of research on e-book-based language learning. *Knowledge Management & E-Learning an International Journal*, pp. 106–128. https://doi.org/10.34105/j.kmel.2020.12.006