

The Challenges and Strategies in Acquiring English Vocabulary among University Students

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ABSTRACT

In this modern era, the English language is widely used in most sectors such as Engineering, Medicine, Tourism, Entertainment, Business, and Education. Numerous studies, especially in the Malaysian context, have reported that ESL learners specifically at the tertiary education level, have yet to achieve the standard university-level vocabulary. In exploring learners' challenges in acquiring English vocabulary and vocabulary learning strategies, quantitative methods were employed, involving a survey using a set of questionnaires that consisted of closed-ended questions. Forty Graphic Design and Digital Media students participated in this study. Findings from the study indicate that the most prominent challenges are allocating enough study or learning time, learning technical terms, and learning homophones. The most used discovery strategies are learning new words when working with others in the class, asking classmates for meaning, and analysing pictures and gestures accompanying the new words. As for consolidation



strategies, pictorial representations of meanings, connecting them with personal experiences, and using English social media are the top three most used strategies. Hence, educators could use the data as a reference in exploring and implementing the highlighted vocabulary learning strategies to improve their pedagogical practices in language classrooms.

Keywords: general vocabulary, vocabulary learning strategies (VLS), language learning

INTRODUCTION

The United Nations Sustainable Development Goal (SDG) 4 aims to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”, emphasizing the importance of the English language proficiency in achieving educational equity and quality. In English as a Second Language (ESL) contexts, particularly among tertiary-level students, vocabulary acquisition is pivotal for attaining language proficiency. Studies indicate that non-native English speakers require a substantial vocabulary size to achieve adequate reading comprehension. For instance, Laufer and Ravenhorst-Kalovski (2010) suggest that a 95% comprehension level necessitates knowledge of 4,000–5,000-word families, while an ideal comprehension level of 98% requires knowledge of approximately 8000 word families. These benchmarks are vital for effective engagement with academic materials, especially at the university level, where academic texts are often dense and vocabulary-rich. In line with this, the Ministry of Higher Education Malaysia (2013) has recognized the importance of improving English proficiency among university students. The Malaysia Education Blueprint 2013–2025 highlights ways to improve English language teaching, including upskilling English educators and providing greater opportunities for language exposure.

Despite these initiatives, recent studies have reported that Malaysian tertiary students consistently fall short of the vocabulary levels needed for academic success. As reported by Jasim et al. (2019), Malaysian undergraduates generally lack the vocabulary size required to comprehend university-level texts. Similarly, Kaur (2020) found that undergraduates were generally unable to meet the vocabulary levels required to understand academic texts, which significantly affected their reading comprehension. Khan and Ariffin (2023) also found that while most English major undergraduates had mastered the 2000 word level, only about 60% reached the 3,000-word level, 42% reached the 5,000-word level, and just 21% attained the 10,000-word level, which is far below the 8,000-word family threshold typically associated with 98% comprehension. Amir and Sulaiman (2024) also reported inadequate academic vocabulary knowledge among ESL undergraduates, particularly in lower-frequency word sublists of the Academic Word List, further underscoring the persistent gap in vocabulary proficiency at the tertiary level. This consistent gap among Malaysian tertiary learners raises questions about the challenges they face in acquiring English vocabulary.

Despite years of formal instruction, many ESL learners still struggle due to challenges such as limited exposure to English and a lack of effective vocabulary learning strategies (Zaidi et al., 2022). Many ESL learners heavily rely on passive methods like memorization rather than active strategies like using vocabulary in context or extensive reading (Hassan & Noor, 2019). Similarly, ESL students still rely on rote learning techniques, which do not support long-term



vocabulary acquisition and application (Ganesan et al., 2025). Lee (2023) adds that learners receive limited exposure to authentic English use in daily life, reducing their chances for incidental vocabulary growth. Many ESL learners struggle to achieve the desired vocabulary level because their learning environment and strategies may not be conducive to long-term acquisition and practical usage.

While vocabulary learning strategies (VLS) are essential for vocabulary development (Fan, 2020), ESL learners may not use them effectively. For instance, Khan and Ariffin (2023) find that English majors have a moderate vocabulary size, which is attributed to their limited use of effective vocabulary learning strategies. This indicates a need to explore not only which strategies students use but also how these strategies influence their vocabulary growth. Although earlier studies have shown that many tertiary ESL learners do not meet the desired vocabulary thresholds (e.g., Kaur, 2020; Khan & Ariffin, 2023; Amir & Sulaiman, 2024), there is a lack of current, in-depth investigations into the specific challenges they face in acquiring English vocabulary and how they attempt to overcome them using VLS (Schmitt, 1997). Thus, the research objectives of this study are:

1. To identify challenges in acquiring English vocabulary among university students.
2. To determine the vocabulary learning strategies employed by university students in learning English vocabulary.

Based on these objectives, the study is guided by the following research questions:

1. What are the challenges in acquiring English vocabulary among university students?
2. What vocabulary learning strategies are employed by university students in learning English vocabulary?

This dual focus is crucial for informing more effective and practical support for vocabulary growth among Malaysian university ESL students.

LITERATURE REVIEW

Previous Studies on Challenges in Vocabulary Learning

Learning general English vocabulary presents prominent challenges and struggles for students, which hinder their overall language usage and proficiency. Andriani and Sriwahyuningsih (2020) discovered that grammar, pronunciation, meaning, and spelling are the main challenges learners face in mastering vocabulary because some words are spoken differently from how they are written and because of difficulties in using different past verb forms. Furthermore, Wulandari et al. (2020) revealed similar difficulties in pronouncing and understanding the meaning of the words, using the words appropriately, followed by having a lack of motivation to learn English. In more recent studies, a similar pattern is revealed as students struggle with pronouncing and spelling words and are unable to apply vocabulary correctly (Hasan, 2024; Kaphle, 2024). This is in line with Aldbea (2024), who reported that students face similar issues to those in previous studies, in addition to difficulties comprehending phrasal verbs. Salawazo et al. (2020) further reported a new challenge where students also tend to forget words easily. Apart from that, applying vocabulary in context is also a challenge as they struggle in choosing appropriate meanings to convey intended ideas. In short, while numerous studies have identified common



challenges in learning vocabulary, there remains limited exploration into how these challenges affect students' decisions in choosing appropriate strategies.

Previous Studies on Vocabulary Learning Strategy (VLS)

Employing suitable and effective strategies is vital for language learning as they assist in widening vocabulary knowledge, enhancing communication and leading to more effective and enjoyable learning. According to Simamora and Oktaviani (2020), determination strategies are found to be the most used techniques in learning vocabulary. Their study argues that watching English-language films helps students acquire new vocabulary by exposing them to unfamiliar words and training them to infer meaning from sentences, expressions, and visual context in movie scenes. Consequently, this further helps them to learn how to use language in both speech and writing. This is in line with Rosyada-As and Apoko (2023), where students opted for strategies like using media content, note-taking, and referring to dictionaries to aid them in using the language accurately. This contradicts Al-Khresheh and Al-Ruwaili (2020) who stated that memory strategies were often the most favoured, such as using graphical representations, linking words to categories, making associations with synonyms, and learning how to spell new words, whilst cognitive strategies were the least used. In recent studies, ESL students often employ metacognitive strategies to acquire English vocabulary and rarely opt for memory strategies (Mahardika, 2023). Moreover, Wu (2024) reveals that a blended approach includes deliberate learning and incidental learning using multimedia tools, and contextual learning helps to enhance students in acquiring acquisition and language development. However, a study by Nurfauziah et al. (2024) found that despite using various strategies to learn new words, students still face challenges with motivation and understanding word forms. Overall, only a few strategies were highlighted, while others remain unexplored. This limits clarity regarding which strategies are most effective as perceived by the students in real learning contexts.

Schmitt Taxonomy of Vocabulary Learning Strategies (1997)

Past studies indicate that vocabulary acquisition is shaped by a combination of persistent challenges and diverse learning strategies, yet the relationship between the two remain underexplored. Although certain strategies have been shown to facilitate vocabulary growth, their effectiveness appears contingent upon the specific difficulties learners encounter. This highlight the importance of establishing a more systematic framework to connect identified challenges with the strategies employed. Accordingly, the following taxonomy is proposed to provide a structured basis for examining how students navigate vocabulary learning in practice. Schmitt (1997) modified Oxford's (1990; 2001) language acquisition strategies into four categories for language methods that he found useful: social, memory, cognitive, and metacognitive strategies. He viewed Oxford's system as lacking a particular categorization for vocabulary learning strategies. Furthermore, it omitted strategies that students might employ on their own to acquire the meanings of new words without relying on others in the class. As a result, along with social strategies (SOC), memory strategies (MEM), cognitive strategies (COG), and metacognitive strategies (MET), he formed a new category called determination strategies (DET). In order to facilitate vocabulary learning, Schmitt (1997) extended this framework by dividing the five categories of strategies listed above into two primary groupings



(discovery and consolidation) of vocabulary strategies, based on the distinctions highlighted by Cook and Mayer (1983) and Nation (1990), as shown in Figure 1 below.

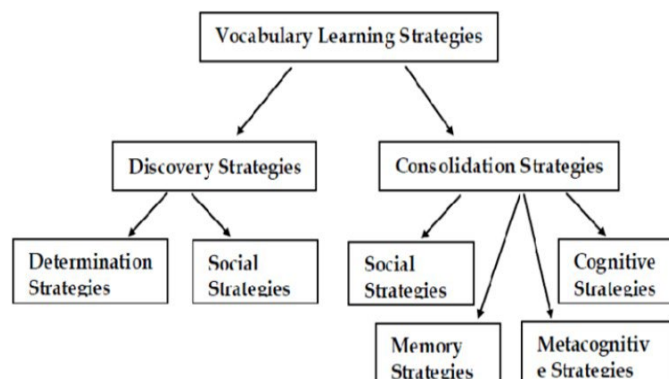


Figure 1. Schmitt's Taxonomy of Vocabulary Learning Strategies (1997)

Although several taxonomies of language strategies exist (e.g., Oxford, 1990; Nation, 2001; Gu & Johnson, 1996), Schmitt's (1997) framework was chosen for this study as it is specifically tailored to vocabulary learning, distinguishes between discovery strategies (for initial word acquisition) and consolidation strategies (for long-term retention), and has been widely employed in empirical research. Other taxonomies are acknowledged to highlight the diversity of approaches, but Schmitt's taxonomy was selected as it integrates cognitive, metacognitive, memory, and social aspects of vocabulary learning into a single, comprehensive framework. This makes it particularly relevant for capturing the range of strategies used by learners in the present context, and for ensuring comparability with a substantial body of previous research that has also adopted Schmitt's classification.

METHODOLOGY

The quantitative methods were employed using survey research design to answer the following research questions:

1. What are the challenges in acquiring English vocabulary among university students?
2. What vocabulary learning strategies are employed by university students in learning English vocabulary?

This study employed a quantitative research design through a questionnaire as its primary data collection instrument. According to Taherdoost (2017), questionnaires provide standardized data that allows reliable identification of students' vocabulary learning challenges and strategies. The questionnaire was divided into three sections. Section A consisted of the respondents' background information, with six closed-ended questions. Additionally, section B, which was adopted from Afzal (2019), consisted of 15 closed-ended questions to identify the challenges in acquiring English vocabulary. Section C, which was adopted from Omaar (2016), consisted of 42 closed-ended questions. This section was divided into two parts: Part A focused on discovery strategies, while Part B focused on consolidation strategies. On a five-point Likert scale, respondents were asked to rate the items by indicating their level of agreement: (1) SD = Strongly Disagree, (2) D = Disagree, (3) N = Neutral, (4) A = Agree, and (5) SA = Strongly



Agree (Joshi et al., 2015). The reliability of the questionnaire was assessed using Cronbach's alpha, a coefficient ranging from 0 to 1, with higher values indicating greater internal consistency (Conroy, 2021). A pilot test with 12 participants confirmed the instrument's local reliability, yielding Cronbach's alpha values of 0.95 for Section B and 0.87 for Section C, indicating high reliability and the data were analysed using SPSS V27. SPSS was employed since it was widely recognized in educational research for its ability to handle large datasets and perform rigorous statistical analysis (Williams et al., 2010). As values above 0.70 are considered acceptable (George & Mallery, 2003), these results indicate acceptable internal consistency of the adapted questionnaire for the study context.

The target population of this study was third-semester Diploma in Graphic Design and Digital Media students at a public university in Perak who enrolled in ELC151 (Integrated Language Skills I) in the previous semester—a foundational English course aimed at developing students' proficiency in the four language skills including listening, speaking, reading, and writing with an emphasis on academic communication. The sample was selected using convenience sampling as the respondents had undergone a structured language learning syllabus (i.e., a course with defined learning objectives, materials, and skills), which was directly relevant to the focus of this study. A total of 40 students participated, which was deemed sufficient for the scope and aims of the study. The data collection procedures were: (1) The researcher contacted all respondents via the WhatsApp application; (2) those who agreed to participate in this study were asked to complete a consent form to ensure voluntary participation and confidentiality, and were invited to complete an online questionnaire provided by the researcher via a Google Forms; (3) access to the Google Forms was enabled for three weeks; and (4) after achieving the targeted number of respondents, the form was closed. The data collected were analysed using SPSS V27, employing descriptive statistics (mean and standard deviation) to answer the research questions.

RESULTS AND DISCUSSION

This section presents the findings of the study which are arranged into two sections as according to the research questions.

Demographic Profile

Based on the data collected, the respondents were 18 to 19 years-old students in the third semester of a Diploma in Graphic Design and Digital Media program, with 31 females (77.5%) and 9 males (22.5%), with (n=40). All of them (100%, n=40) enrolled in ELC151 (Integrated Language Skills I) in the previous semester. For their ELC151 grades, three students (7.5%) obtained A+, 11 obtained A (27.5%), followed by A- with 17.5% (n=7), B+ with 17.5% (n=7), B with 17.5% (n=7), followed by three respondents with B- (7.5%). Lastly, only two students obtained C+ (5%). This indicates that the respondents were relatively homogeneous in terms of age, program, and English course background. However, the variation in their grades suggests differences in vocabulary learning ability and strategies, which is relevant to understanding the challenges faced and the vocabulary learning strategies employed.



Research Question 1: What are the challenges in acquiring English vocabulary among university students?

Results indicate that the most challenging aspect of acquiring English vocabulary is the item “*I find it challenging to give enough time to study*” ($M=3.70$, $SD=1.159$). This is followed by the second-highest rating, which is “*I find it challenging to learn the meaning of technical terms*” ($M=3.60$, $SD=1.172$) and the third-highest is the item “*I find it challenging to learn homophones (a word that sounds the same as another word but has a different meaning and/or spelling)*” ($M=3.60$, $SD=1.194$). These findings highlight broader challenges related to one’s cognitive demand and contextual factors in vocabulary acquisition. This implies that students’ struggles are related to external demands and deeper semantic understandings as well as the complexity involved. On the other hand, the item “*I find it challenging to recognize new vocabulary*” ($M=2.70$, $SD=1.381$) receives the lowest mean rating, followed by the second-lowest rating, “*I find it challenging to spell new vocabulary*” ($M=2.75$, $SD=1.276$). Finally, the respondents rated the item “*I find it challenging to pronounce new vocabulary*” ($M=2.75$, $SD=1.235$) as the third-lowest. These items reflect the basic skills of vocabulary recognition and phonological awareness. This shows that the respondents were competent in the early stages of word processing, including recognizing, spelling, and pronouncing new words. This suggests that their difficulties are not related to basic lexical processing, but possibly in areas that require a higher-level of cognitive processing and semantic application.

Research Question 2: What vocabulary learning strategies are employed by university students in learning English vocabulary?

Discovery strategies refer to techniques used the respondents to acquire English vocabulary with the purpose of discovering new words and their meanings. The highest-rated item is “*I discover the meaning of new words when I work with others in the class*” ($M=4.32$, $SD=.797$). This is followed by the second-highest rating “*I ask classmates for the meaning of the new word*” ($M=4.15$, $SD=1.145$) and lastly, the third-highest is the item “*I analyze any pictures or gestures accompanying the new word*” ($M=4.05$, $SD=1.037$). This pattern indicates that students predominantly rely on peer interaction, which entails collaborative tasks and direct questioning over solitary methods. It can be inferred that students are comfortable with a socially mediated and context-rich learning style. Conversely, the lowest rating is the item “*I use a monolingual dictionary; for example, a Malay-English dictionary to find the meaning of new words*” ($M=2.78$, $SD=1.544$) by the respondents. This is followed by the second-lowest rating, “*I use flash cards to learn new words*” ($M=2.83$, $SD=1.466$). Finally, the respondents rated the item “*I use a bilingual dictionary; for example, English-Malay, a Malay-English dictionary to find the meaning of new words*” ($M=3.03$, $SD=1.609$) as the third-lowest. The data indicate that they may find traditional strategies less engaging and rarely rely on individual or traditional reference-based strategies.

In short, the findings highlight that the main discovery strategies are learning with others in the class, asking classmates the meaning of new words, and analysing pictures associated with the words. This also illustrates that the discovery strategies used include both memory and social strategies. The respondents’ overall use of discovery strategies in acquiring English vocabulary is high ($M=4.32$, $SD=0.797$), indicating frequent engagement with such strategies.



Next, consolidation strategies are techniques employed by respondents to retain and reinforce newly learned English vocabulary. The highest-rated item is *“It is easy for me to learn new words when they have a pictorial representation of their meaning; for example, pictures images, and drawings with words”* (M=4.45, SD=.639). Then, followed by the second-highest rated item, which is *“I try to connect the new word to personal experience”* (M=4.40, SD=.778). Lastly, the third-highest is the item *“I use English social media to learn new words”* (M=4.30, SD=0.911). This implies that students engage multiple senses, personal relevance and digital environments to enhance vocabulary learning and reinforcement. Even so, the lowest-rated item is *“I listen to word lists from an English language book with a compatible CD”* (M=2.43, SD=1.299). This is followed by the second lowest-rating, the item *“I ask the lecturer to check my flashcards or word lists for accuracy”* (M=2.45, SD=1.377). Finally, the respondents rated the item *“I keep a vocabulary notebook”* (M=2.63, SD=1.444) as the third lowest. These results suggest a declining reliance on conventional tools. The low usage of CDs, flashcards checked by lecturers, and vocabulary notebooks reflects a shift away from conventional tools and instructor-led validation towards more autonomous and modern approaches. This suggests that students are into flexible, self-directed and technology-integrated strategies over conventional vocabulary learning tools.

On the whole, the findings highlight that the main consolidation strategies used are learning through English social media platforms, connecting with personal experiences, and using pictorial representations of the meanings. This also suggests that the consolidation strategies opted include both memory and metacognitive strategies. The respondents’ overall use of consolidation strategies in acquiring English vocabulary is high (M=4.45, SD=0.639), indicating frequent engagement with such strategies.

This study reveals that university students face prominent challenges in acquiring English vocabulary which includes allocating enough studying/learning time, learning technical terms, and learning homophones. These findings suggest that they struggle with higher-order vocabulary tasks that require cognitive effort. This aligns with Li’s (2025) study where the learners claimed not to have enough time to study vocabulary. This lack of engagement may result in difficulties retaining and using new words in real-life contexts. However, Xodabande and Hashemi (2022) argued that diversifying learning methods can increase engagement and save students’ time. Interestingly, basic lexical skills were rated the least challenging, indicating that surface-level tasks may not disrupt the vocabulary learning process. Moreover, Pazoki and Alemi (2019) support this study’s finding where learning English technical terms is seen to be a challenge. They further explained that it is highly related to the learners’ low motivation mainly due to having negative attitudes towards learning such words. This challenge is heightened as technical terms are rarely encountered in daily conversations. Since it is also revealed that learning homophones is a central challenge for learners, Adha and Astri (2020) and Hussein (2024) asserted that limited vocabulary knowledge, lack of exposure, and inadequate practice contribute to persistent difficulties. They added that poorly designed teaching materials and stereotyped teaching methods further hinder learning. Hence, educators may consider incorporating strategy training into their vocabulary lessons.



Besides, the findings indicate that the main discovery strategy is the social strategy where it involves students learning with others in the class. Damayanti and Listyani (2020) support the view that teachers play a prominent role in aiding students and this is further supported by Nasir and Aziz (2020) where effective collaborative learning requires assigning responsibilities to learners, the use of teaching aids, evaluation of the learning process and outcomes, as well as the provision of more language-based activities. As for the consolidation strategy, the main approach is the metacognitive strategy, specifically learning vocabulary through English social media. This is in line with Isnaini and Aminatun (2021) as learners acquire new and unfamiliar words, as well as accurate word pronunciation, with the aid of English songs. This notion is also supported by Zainal and Rahmat (2020), whose study on the influence of social media on vocabulary and language learning proved that social media clearly piques English language learners' interest in language study. It appears that while students may use memory, social and metacognitive strategies, they tend to neglect the cognitive strategy. This misalignment likely underpins their difficulties with homophones and technical vocabulary as these aspects require deeper engagement beyond surface recall. Thus, future interventions should train students with cognitive strategies to support deeper lexical acquisition and effective application in various contexts.

CONCLUSION AND RECOMMENDATION

To conclude, the findings reveal that although learners face numerous challenges in acquiring English vocabulary, they also actively employ diverse strategies to enhance their learning. The most prominent challenge is managing time effectively, followed by difficulties in understanding technical terms and homophones. The data indicate that they struggle more with high-level tasks with maintaining consistent learning habits. The ESL tertiary students show a strong preference for discovery and consolidation strategies—social interaction, visual aids and personal associations play vital roles in discovering and remembering new vocabulary. Modern approaches like collaborative learning, reading, the use of digital tools, and daily practice are preferred over conventional ones such as flashcards, vocabulary notebooks, and the use of dictionaries.

However, future research could address several limitations. One suggestion is to include participants from different courses and regions, and use a larger, randomly selected sample to improve the generalizability of the findings. It is also recommended to triangulate the results by incorporating qualitative data through exploring educators' perspectives, as they play a key role in classroom instruction and can offer valuable insights into teaching practices.

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Declaration of Generative AI and AI-assisted Technologies in the Writing Process

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Conflict of Interest

The authors have no conflicts of interest to declare.

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Authors' Contributions

The main author, FAMF, was responsible for writing the introduction, literature review, methodology, findings and discussion sections. The second author, MMA, supervised the entire research process and provided critical suggestions and guidance across all sections. The third author, FAMF, also contributed in refining the introduction, methodology, findings and discussion to enhance clarity and coherence.