

THE CONNECTION BETWEEN VOCABULARY SIZE AND VOCABULARY LEARNING STRATEGIES: A CASE STUDY OF ENGLISH AS FOREIGN LANGUAGE LEARNERS AT UD-UFLS

MỐI LIÊN HỆ GIỮA VỐN TỪ VỰNG VÀ CHIẾN LƯỢC HỌC TỪ VỰNG: NGHIÊN CỨU TỪ NGƯỜI HỌC TIẾNG ANH NHƯ LÀ MỘT NGOẠI NGỮ TẠI TRƯỜNG ĐẠI HỌC NGOẠI NGỮ - ĐẠI HỌC ĐÀ NẴNG

Nguyen Anh Thi, Nguyen Le Hong Giang, Nguyen Thi My Hang*

The University of Danang - University of Foreign Language Studies, Vietnam

*Corresponding author: ntmhang@ufl.udn.vn

(Received: January 19, 2024; Revised: March 24, 2024; Accepted: March 26, 2024)

Abstract - Undoubtedly, the significance of employing effective strategies for vocabulary acquisition in language learning cannot be overstated. Following this, the authors' research delves into the potential relationship between vocabulary learning strategies (VLS) and the vocabulary size of undergraduate students at the University of Danang - University of Foreign Language Studies (UD-UFLS). This study has three primary objectives: firstly, to gather and analyze the diverse strategies employed by undergraduate students for acquiring new English vocabulary; secondly, to examine the vocabulary size of these university students; and finally, to investigate the impact of VLS on the overall vocabulary size of the learners. Through this comprehensive approach, the authors' aim to gain deeper insights into the dynamic interplay between strategies and vocabulary knowledge, ultimately serving as a foundation for students at the university to make well-informed choices as they embark on their language-learning journey.

Key words - Vocabulary learning strategies (VLS); vocabulary size; second-English-language learners

1. Introduction

1.1. Rationale

English, as a global or international language in the modern era, plays a crucial role in gathering global data, acquiring STEM (Science, Technology, Engineering, and Mathematics) knowledge, and facilitating international collaboration and exchange. The importance of English has propelled pedagogical approaches to learning into the spotlight in recent years, especially in vocabulary acquisition. Vocabulary stands as a cornerstone in the structure of the English language, serving as the fundamental foundation for fluent communication. Without a large vocabulary size, conveying thoughts and engaging in meaningful conversation becomes challenging. Therefore, it becomes imperative to enhance second language (L2) learners' vocabulary knowledge. The journey towards vocabulary development is further complicated by the large number of essential words, necessitating the identification and implementation of suitable strategies tailored to individual learners.

While previous research has primarily focused on identifying the strategies employed by groups of students in vocabulary learning, the present study takes a distinctive approach. We specifically direct our attention to examining the connection between vocabulary size and the strategies

Tóm tắt - Không thể phủ nhận tầm quan trọng của việc áp dụng các chiến lược hiệu quả trong việc học từ vựng khi học ngôn ngữ. Theo đó, nghiên cứu của nhóm tác giả tìm hiểu về mối quan hệ tiềm ẩn giữa chiến lược học từ vựng (VLS) và vốn từ vựng của sinh viên tại Trường Đại học Ngoại ngữ - Đại học Đà Nẵng. Nghiên cứu này có ba mục tiêu chính: thứ nhất, thu thập và phân tích các chiến lược đa dạng được sinh viên sử dụng để học từ mới tiếng Anh; thứ hai, kiểm tra kích thước từ vựng của những sinh viên này; và cuối cùng, điều tra tác động của VLS lên kích thước từ vựng tổng cộng của những người học này. Qua cách tiếp cận toàn diện này, nhóm tác giả mong muốn có cái nhìn sâu sắc về sự tương tác linh hoạt giữa chiến lược học và kiến thức từ vựng. Điều này nhằm đóng vai trò như một nền tảng hữu ích, giúp sinh viên đại học đưa ra quyết định sáng suốt khi họ bắt đầu hành trình học ngôn ngữ của mình.

Từ khóa - Chiến lược học từ vựng (VLS); kích thước từ vựng; người học tiếng Anh như là ngôn ngữ thứ hai

employed in the process of vocabulary acquisition. Additionally, the research highlights the varying frequency of one strategy over others, offering insights into practical scenarios of VLS among English as a Foreign Language (EFL) learners at UD-UFLS.

1.2. Aims

This study aims to identify the VLS most frequently utilized by EFL learners at UD-UFLS and demonstrate the connection between vocabulary size and the strategies employed by these learners.

1.3. Objectives

To accomplish the stated aim, the research sets the following objectives:

- To analyze the various strategies employed by EFL learners at UD-UFLS for learning new words
- To examine the level of vocabulary size among EFL learners at UD-UFLS
- To investigate the relationship between VLS and vocabulary size.

1.4. Research questions

To address the aims and objectives, the study seeks to answer the following questions:

- What is the level of vocabulary size among EFL

learners in UD-UFLS?

2. What are the frequent VLS used by EFL learners at UD-UFLS?

3. What is the connection between strategy use and vocabulary size among EFL learners at UD-UFLS?

1.5. Scope of the study

Despite the various approaches and methods available for enhancing students' vocabulary size in EFL teaching, this study focuses specifically on five strategies: Metacognitive strategy, Memory strategy, Cognitive strategy, Determination strategy, and Social strategy (see more in Section 2.2).

1.6. Significance of the study

Earlier studies on vocabulary acquisition have been largely one-dimensional, focusing either on types of VLS [1] or on students' vocabulary size [2]. Few studies explore the connection between VLS and vocabulary size [3]. This emphasizes the importance of the present study which attempts to provide educators and learners with vital insights into the significant benefits that a well-developed vocabulary size, along with strategic learning approaches, can offer. This investigation not only bridges the gap in the literature, but also serves as a valuable resource for both teachers and students. Hopefully, the findings of this research will make a humble contribution to enhancing students' and teachers' interests in learning and teaching English vocabulary, emphasizing the integral role of selecting appropriate strategies in expanding vocabulary knowledge.

2. Literature review

2.1. Vocabulary size

Vocabulary refers to the complete set of words known and used by an individual or within a particular language, field, discipline, or context. It comprises the entire lexicon that an individual, community, or group employs to communicate, express ideas, and comprehend language [1]. Vocabulary includes words of various types, such as nouns, verbs, adjectives, adverbs, and more, and it forms the foundation for effective communication, reading comprehension, and language proficiency. The breadth and depth of vocabulary influence one's ability to articulate thoughts, comprehend written and spoken language, and engage in meaningful communication within a given linguistic or specialized domain. It is widely acknowledged that a deficient understanding of vocabulary can lead to several challenges, such as poor reading comprehension and the inability to engage in natural conversations [4].

There are a great number of words in the English language, ranging from 600,000 to over a million words [5]. Vocabulary can be categorized into high-frequency words, mid-frequency words, and low-frequency words based on their occurrence levels [6]. Words between 1,000 and 2,000 frequency levels are considered high-frequency, those between 3,000 and 9,000 levels are mid-frequency, and those beyond 9,000 frequency levels are low-frequency words.

Vocabulary size represents the number of words a learner knows, serving as a reliable predictor of overall language proficiency. Research [2] suggests that a larger vocabulary size correlates positively with language proficiency, allowing individuals to express ideas more precisely and understand complex language structures. Understanding and expanding vocabulary size is particularly significant in language learning contexts, where it serves as a reliable predictor of overall linguistic competence.

2.2. Vocabulary learning strategy

Vocabulary learning strategy refers to the techniques employed by learners to remember new English words, encompassing aspects such as spelling, pronunciation, usage, and examples [7]. It is a fact that some L2 learners outperform others, often by employing distinct and more effective techniques in their language learning process. [8]. Proficient English learners understand the importance of employing diverse learning strategies to comprehend and retain numerous foreign language words, and they often utilize a broader range of cognitively demanding strategies compared to less successful learners who tend to use fewer strategies and employ them inadequately [9].

Schmitt [10] categorizes learning strategies into two main types: Discovery strategies (i.e., learners independently discover the learning of new words) and Consolidation strategies (i.e., learners repeatedly encounter words). Schmitt further subdivides them into five categories:

Determination strategies: Individual learning strategies where learners guess the meaning of a new word based on context, grammar structure, derivatives, or by consulting dictionaries.

Social strategies: Methods involving interaction with others, such as seeking help from teachers or peers, and asking for clarification.

Memory strategies: Techniques where learners link new words to mental processing by associating them with existing knowledge.

Cognitive strategies: Mechanistic means like repetition, resourcing, translation, and note-taking for coping directly with new vocabularies.

Metacognitive strategies: Processes related to monitoring, decision-making, and self-evaluation of one's progress.

The studies by Ghalebi et al. investigating VLS among Iranian English learners [11] and Thienathong and Sukying's research on Thai high school students [12] shed light on how learners of different proficiency levels approach and utilize these strategies, emphasizing the potential impact of language skill and prior exposure on strategy selection.

2.3. Connection between vocabulary size and VLS

In a study by Faraij and Kiliç [3] Iraqi EFL university students were examined to understand the relationship between vocabulary size and VLS. The findings indicated that students with High Vocabulary Size (HVS) and Low

Vocabulary Size (LVS) frequently employed Metacognitive strategies in their learning processes. Moreover, the study revealed that participants utilized different types of strategies based on their vocabulary size levels. Ghazal [13] emphasized the effectiveness of teaching learners various strategies for studying new vocabulary, such as making associations with remembered vocabularies. In a study conducted by Alsharif [14], Saudi female EFL learners who employed the most common learning strategy exhibited a larger lexical resource, while those using fewer common strategies had lower levels of vocabulary size. Despite these valuable insights, Vietnamese foreign language learners have not received sufficient attention regarding the connection between vocabulary size and VLS. This gap in research prompted the present study.

3. Research methodology

3.1. Participants

This study, conducted at the University of Danang-University of Foreign Language Studies, involved the active participation of 70 sophomore and junior students immersed in the process of learning English as a second language. These students had a minimum of seven years of cumulative EFL learning experience and were at the upper-intermediate competency level, corresponding to 5.5 to 6.0 on the International English Language Testing System (IELTS) or B2 on the Common European Framework of Reference (CEFR).

The participants, aged 20 to 21, were in the second trimester of their academic year at the time of data collection. This specific point in their academic journey offered a comprehensive snapshot of their language proficiency, reflecting years of English language education. The inclusion of students from both sophomore and junior levels enriched the study by providing insights into the language learning strategies used by students at different stages of their academic path. Consequently, the study's findings are more generalizable and applicable to similar language learning environments.

3.2. Research Instruments

In this study, two key instruments were employed: a Vocabulary Size Test [15] and a Vocabulary Learning Strategies Questionnaire (VLSQ) [10], [16]. The Vocabulary Size Test served the purpose of assessing the participants' vocabulary sizes, while the VLSQ aimed to capture the diverse range of strategies utilized by the participants in their vocabulary learning processes. These instruments were carefully chosen to provide a comprehensive understanding of both the quantitative aspect of vocabulary size and the qualitative dimension of the strategies employed by the participants.

3.2.1. The Vocabulary Size Test (VST)

To assess the English vocabulary proficiency of the participants, we administered the Vocabulary Size Test (VST) using version A (20,000-word families) [15]. This test provides an estimate of the participants' ability to recognize different word families. It is a monolingual

multiple-choice test containing 100 items, with five words for each 1,000-word family level spanning up to the 20th level [15].

Each item presents a word within a non-defining context, followed by four potential definitions. Participants were instructed to select the definition that most closely aligns with the given word. Each correct answer earns one point, and the total score is multiplied by 200 to determine the learners' receptive vocabulary size [15]. Figure 1 shows an example of a VST item.

1. They saw it

 - a. closed it tightly
 - b. waited for it
 - c. looked at it
 - d. started it up

Figure 1. Example of a VST item

The test evaluates up to 9,000-word families in this research, comprising a total of 45 items. This decision was made for practical reasons, including time efficiency, as the full test typically takes more than 30 minutes to complete. Additionally, Nation [15] suggests that non-native speakers with a vocabulary of 5,000 – 6,000-word families can effectively study at an English-speaking university, and Ph.D. candidates who are non-native speakers possess a lexicon of about 9,000 words. Combining these considerations, reducing the length of the entire exam to 9,000 words is considered reliable and supported.

3.2.2. Vocabulary Learning Strategies Questionnaire (VLSQ)

For the examination of vocabulary learning strategies, this study employed the VLSQ developed by Schmitt [10], [16]. With 30 questions, this questionnaire contains the five primary learning strategies: Social, Memory, Cognitive, Determination, and Metacognition. Utilizing a frequency scale that includes response options such as never, seldom, sometimes, often, and always, the questionnaire prompts participants to indicate the frequency with which they employ each strategy in their vocabulary-learning endeavors. This instrument offers a comprehensive understanding of the participants' approach to vocabulary acquisition through the lens of different learning strategies.

3.3. Data collection

Google Forms served as the platform for data collection, with participants receiving a survey link. The survey offered explicit instructions for questionnaire completion and detailed the study's objectives. Participants were guaranteed anonymity, and their responses were designated solely for research purposes. Academic standing was also requested to ensure alignment with the study's criteria. The survey comprised 45 questions assessing participants' vocabulary levels and 30 questionnaires related to VLS. Following data collection, the researchers screened the data collected from 74 participants. Subsequently, four cases, identified as non-students from UD-UFLS, were excluded from the final analysis.

3.4. Data analysis

Following data collection, the completed VLSQ questionnaire and the VST for each participant were

validated for accuracy before entry into Excel. The data obtained for this research were quantitative in nature.

First, descriptive statistics, including the minimum, maximum, and mean scores, were calculated for the participants' vocabulary test results. The vocabulary test comprised 45 items, with scores ranging from 0 (minimum) to 45 (maximum).

Second, for the VLSQ, a five-point scale was utilized, where A represented "Never", B denoted "Seldom", C denoted "Sometimes", D denoted "Often", and E denoted "Always". Each response was assigned a point value ranging from one (A) to five (E). The mean for each strategy was determined by creating cell ranges for each response, assigning point values, and then averaging the responses in each cell. Table 1 provides a summary of the mean scores for each strategy (see Section 4.2).

To address the third research question, multiple linear regression analyses were conducted, with vocabulary test scores as the dependent variable and the average score for each of the five learning strategy categories as independent variables. Correlation coefficients were examined to assess the strength and significance of relationships. A correlation close to 1 indicated a strong positive relationship, a correlation close to -1 indicated a strong negative relationship, and 0 indicated no relationship. Statistical significance was determined by checking if the p -value was less than 0.05 ($\alpha < 0.05$).

Finally, the data were processed and presented visually through charts and tables for a comprehensive understanding of the research findings.

4. Research finding

4.1. Learners' vocabulary size

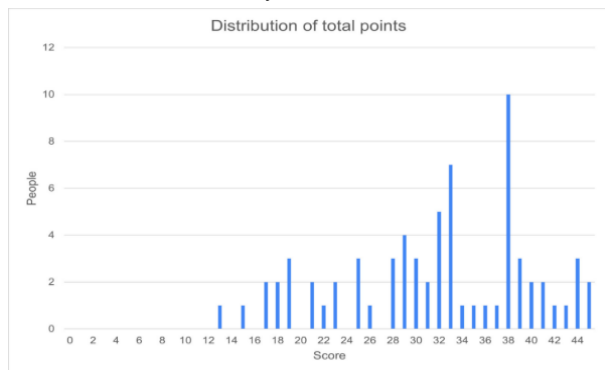


Figure 2. Scores of the vocabulary size test

The range of scores on the VST varied widely (see Figure 2), with the lowest recorded score at 13 and the highest reaching the full score of 45. The mean score, $M = 31.7$, highlighted the considerable heterogeneity in participants' vocabulary levels, representing an average vocabulary size of almost 6,000-word families. The observed range in vocabulary sizes is noteworthy, as illustrated by the lowest and highest VST scores among individuals. Those at the lower end had a minimal academic vocabulary size of around 2,000-word families, indicating a fundamental lexical repertoire. Conversely, some participants demonstrated a large vocabulary of

approximately 9,000-word families, reflecting a substantial breadth of lexical knowledge.

4.2. Learners' VLS

Analyzing the data in Table 1 provides a comprehensive understanding of the frequency of various learning strategies among EFL learners at UD-UFLS. The dominance of Metacognitive learning strategies is evident, with a substantial mean score of 3.54 securing the top position. This statistical evidence underscores the popularity of the Metacognitive method as the most prevalent strategy among these learners, demonstrating their preference for introspective and self-regulatory approaches to language acquisition.

Table 1. VLS among the second-English language learners at UD-UFLS

Number	VLS	Mean
1	Metacognitive strategies	3.54
2	Determination strategies	3.43
3	Cognitive strategies	3.04
4	Memory strategies	2.97
5	Social strategies	2.95

The Determination learning method follows closely in second place, with a mean score of 3.43, just 0.11 points behind the leading Metacognitive strategy. This slight variation suggests that second-language learners at UD-UFLS highly value endurance and tenacity as integral components of their language-learning efforts.

Cognitive techniques come in third, with a good mean score of 3.04. This placement reaffirms the significance of Cognitive strategies among the top three most frequently used learning approaches, emphasizing their pivotal role in these learners' repertoire of tactics. The complex cognitive engagement associated with this approach significantly contributes to the overall language acquisition process.

Further exploration reveals that Memory and Social methods obtained mean scores of 2.97 and 2.95, respectively. These results indicate that second-language learners at UD-UFLS employ Memory and Social strategies less frequently compared to Metacognitive, Determination, and Cognitive methods. The noteworthy finding that Social strategies do not seem to be extensively utilized for language acquisition, as indicated by the lower mean score, reveals a different trend in these learners' preferences and tendencies. This sheds light on the diverse array of tactics employed in the language learning context at UD-UFLS.

4.3. Connection between vocabulary size and VLS

The data analysis has uncovered intriguing insights into the correlations between vocabulary size and the various learning strategies employed by participants (Table 2). Notably, three distinct strategies exhibited positive associations with vocabulary size scores, shedding light on their impactful role in language acquisition.

The Metacognitive strategy demonstrated a substantial and noteworthy positive connection, emphasizing its critical role in language learning and its significant

contribution to enhancing lexical proficiency, with a robust correlation coefficient of 0.48 ($p < 0.05$). Similarly, the Determination strategy displayed a significant positive link with vocabulary size, underscoring the importance of perseverance and goal-oriented approaches in fostering lexical proficiency, with a correlation coefficient of 0.46 ($p < 0.05$). Furthermore, the Cognitive approach exhibited a positive influence on vocabulary size scores, though to a lesser extent, with a correlation coefficient of 0.24 ($p < 0.05$), suggesting that cognitive engagement and strategic thinking play a notable role in influencing an individual's vocabulary size.

Table 2. Results of data analysis on vocabulary size and VLS used by UFL students learning English as a second language

Predictor	<i>r</i>	<i>p</i>
Metacognitive	0.48	0.00001
Determination	0.46	0.00005
Cognitive	0.24	0.04
Memory	0.2	0.09
Social	0.21	0.07

Conversely, *p*-values greater than 0.05 indicated that the Social and Memory strategies had no significant relationship with participants' vocabulary size. This highlights the complex and multifaceted nature of language acquisition, where different strategies may impact vocabulary development in varied ways.

5. Discussions

5.1. Vocabulary size of the UD-UFLS students

In comparison to previous studies on Vietnamese EFL learners, our findings present a departure from the conventional narrative of uniformly low vocabulary sizes. For instance, the study by Vu and Nguyen [17] involving 500 Grade 12 students reported that 80% of participants had mastered below 2,000-word levels. Similarly, Nguyen [18] found that 422 high school students had achieved proficiency in the 1,000 and 2,000-word levels but were yet to master higher levels. The study by Nguyen and Webb [19] on 100 first-year English major students indicated that, as a group, they had only mastered the most frequent 1,000-word families, with the 2,000 and 3,000-word families yet to be mastered. Likewise, Dang's investigation into the knowledge of high-frequency words among 66 English for Academic Purposes (EAP) students showed that 21.21% had not mastered the knowledge at the 1,000-word level, 59.09% had mastered the 1,000-word level, and 19.70% had achieved proficiency at the level of 2,000 words or more [20].

Comparatively, this study challenges the notion of uniformly low vocabulary sizes among Vietnamese EFL learners. The participants, despite their diverse academic backgrounds and English language levels, demonstrated varied vocabulary sizes, with some reaching notably high levels. These variations may be attributed, in part, to differences in the vocabulary tests employed in each study. While prior research on Vietnamese learners' vocabulary knowledge utilized tests focusing on lexical mastery at specific word-frequency levels, the present study

employed a test concentrating on the overall number of words known by learners. Additionally, variations in the study findings could also be attributed to differences in learning tactics, teaching strategies, or individual aptitudes within the participant group.

5.2. VLS of the UD-UFLS students.

Our comprehensive investigation at UD-UFLS has provided intriguing insights into the diverse vocabulary acquisition strategies employed by participants. Notably, the Metacognitive method emerged as the most favored strategy, indicating a preference for self-directed and reflective approaches to language acquisition. This finding aligns with recent research by Alahmad [21], Kalajahi and Pourshahian [22], highlighting the significance of Metacognitive strategies in vocabulary development. The participants' utilization of Metacognitive strategies suggests a high degree of autonomy in their learning process, as they engage with English words through unconventional channels such as music videos, movies, and television shows.

In contrast to previous research [23], our results unveiled a distinctive pattern, with the Social technique being the least employed among UD-UFLS students. This observation raises the possibility of an increased need for social skills development, as enhanced collaboration with teachers and peers could significantly enhance language learning outcomes. The findings challenge the commonly held belief that students extensively utilize Social strategies, including teacher and peer interactions. Our participants, however, displayed a preference for personalized learning approaches.

While memorization strategies are often cited as common among language learners, this study provided a different perspective. UD-UFLS participants did not heavily rely on memorization tactics, signaling a departure from the traditional emphasis on rote memorization. This insight is consistent with the findings of Barcroft [24] and Scribner [25], who noted that the effectiveness of memorization processes varies among language learners, with less experienced learners benefiting more from memorization at lower competency levels.

Furthermore, our findings demonstrate that UD-UFLS English undergraduate participants employ a distinct set of strategies, favoring Metacognitive and Cognitive approaches over Social and Memory methods. This understanding of individual learning preferences provides educators and curriculum designers with valuable insights for tailoring instructional techniques to the specific needs and tendencies of this diverse group of learners. Future research should delve deeper into the interplay of these strategies, considering individual differences and the impact of contextual factors on vocabulary acquisition in the UD-UFLS language learning environment.

5.3. Correlation between the vocabulary size and the VLS

This study delves into the intricate relationship between vocabulary size and VLS among second-language learners at UD-UFLS, revealing five significant positive correlations and shedding light on the relationship of

strategic approaches and lexical competence. Notably, Metacognitive, Determination, and Cognitive learning strategies displayed substantial positive correlations with vocabulary size, underscoring the critical role of these cognitive processes in vocabulary development. The findings emphasize that learners employing these strategies tend to possess a larger lexical resource.

Interestingly, our investigation indicated that Memory and Social strategies did not exhibit significant associations with vocabulary quantity. This lack of a clear link suggests that individuals with a larger vocabulary may not heavily rely on memory-related or Social strategies for learning new words. This aligns with Ellis' findings [26], suggesting that proficient language learners often opt for unconventional tactics, such as Metacognitive, Determination, and Cognitive learning strategies, to enhance vocabulary.

The alignment between our results and Vann and Abraham's research [27] emphasizes the importance of employing language learning methods for effective language acquisition, particularly when learners can make Metacognitive connections between language use and study techniques. While Memory and Social learning strategies may not be as crucial for highly proficient participants, they play a vital role in supporting learners with medium or low vocabulary skills.

Moreover, our findings indicate that novice L2 learners may initially utilize basic memorization techniques to establish a foundational vocabulary before transitioning to more cognitively demanding learning approaches. This aligns with Meara's [28], [29] proposed logical sequence, suggesting that learners typically focus on memorization to build a basic vocabulary before incorporating more complex cognitive methods.

Significantly, our participants, who already possess a strong language foundation, prefer Metacognitive, Determination, and Cognitive strategies. This underscores the dynamic nature of language learning, highlighting learners' adaptability and the importance of adjusting instructional techniques to cater to the evolving needs of students with varying linguistic skills. Future research could explore the temporal dynamics of strategy usage and its impact on long-term vocabulary growth, contributing to a deeper understanding of successful language learning strategies for second-language learners.

6. Conclusion and suggestions

In conclusion, this research sheds light on the significant impact of the Metacognitive learning technique on learners, indicating that individuals who primarily utilize this strategy tend to have a larger vocabulary resource compared to their peers. Conversely, Memory and Social learning mechanisms did not emerge as substantial contributors to participants' lexical competency, underscoring the importance of selecting an effective learning approach for acquiring a large vocabulary size. This highlights the notion that not all strategies yield equivalent results in vocabulary acquisition.

Interestingly, our data reveal comparatively high vocabulary size test scores among UD-UFLS undergraduate students, indicating a commendable advanced level of vocabulary. This high proficiency allows individuals to effectively engage in cognition-related learning approaches, such as Metacognitive and Cognitive learning strategies. However, the observed variation in performance levels within the participant group suggests the presence of individuals with smaller vocabulary sizes. Fostering awareness of multiple learning styles is crucial in the current educational context, where efficiency in learning and teaching is vital.

Recognizing the self-awareness of learners and promoting autonomy in strategy selection are critical aspects of our findings. Empowering learners to choose techniques aligned with their individual competence levels not only enhances their learning experiences but also promotes autonomy. Moreover, educators can support this autonomy by creating a diverse learning environment that accommodates various approaches, incorporating materials and activities compatible with different techniques, and encouraging collaborative efforts among learners.

Our recommendations for both students and teachers include varying instructional materials to accommodate different learning styles and providing learners with a thorough understanding of each learning approach. Emphasizing the relationship between vocabulary size and the chosen vocabulary acquisition approach is crucial for informed decision-making. Learners are encouraged to explore different learning strategies to identify the one that best suits their preferences and abilities, enabling a personalized and efficient language learning experience. In essence, the collaborative efforts of teachers offering a diversified instructional environment and learners being conscious and proactive in choosing appropriate learning strategies can significantly enhance the overall language acquisition process.

REFERENCES

- [1] Z. Bai, "An Analysis of English Vocabulary Learning Strategies", *Journal of Language Teaching and Research*, vol. 9, no. 4, pp. 849-855, 2018, doi: <http://dx.doi.org/10.17507/jltr.0904.24>.
- [2] Y. B. Cetinkaya, "Vocabulary Size: Experiences of Successful Vocabulary Learners in EFL Context.", *Novitas-ROYAL (Research on Youth and Language)*, vol. 15, no. 2, pp. 21-36, 2021.
- [3] I. R. Faraj and M. Kiliç, "The Relationship between Language Learning Strategies and Vocabulary Size among Iraqi EFL University Students.", *Journal on English Language Teaching*, vol. 8, no. 4, pp. 21-35, 2018.
- [4] S. A. Alzahrani, S. M. Rashid, Y. M. Fung, and I. Jalaluddin, "Reading Comprehension Difficulties: A Case Study on Saudi High School EFL Learners", *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, vol. 12, no. 6, pp. 9275-9287, 2021.
- [5] J. L. Johns and K. H. Wilke, "High-Frequency Words: Some Ways to Teach and Help Students Practice and Learn Them", *Texas Journal of Literacy Education*, vol. 6, no. 1, pp. 3-13, 2018.
- [6] N. Schmitt and D. Schmitt, "A reassessment of frequency and vocabulary size in L2 vocabulary teaching", *Language Teaching*, vol. 47, no. 4, pp. 484-503, 2014, doi: 10.1017/S0261444812000018.
- [7] A. Asgari, S. Perdana, T. S. Perdana, S. K. Serdang, P. box, and

- G. Bin Mustapha, "The type of vocabulary learning strategies used by ESL students in University Putra Malaysia", *English Language Teaching (Toronto)*, vol. 4, no. 2, p. 84, 2011.
- [8] D. Nunan, *Second Language Teaching and Learning*, Boston: Heinle & Heinle Publishers, 1999.
- [9] M. O. Ahmed, *Vocabulary learning strategies: A case study of Sudanese learners of English*. Bangor: University College of North Wales, 1988.
- [10] N. Schmitt, *Vocabulary Learning Strategies*. Cambridge: Cambridge University Press, 1997.
- [11] R. Ghalebi, F. Sadighi, and M. S. Bagheri, "Vocabulary learning strategies: A comparative study of EFL learners", *Cogent Psychol*, vol. 7, no. 1, 2020, doi: 10.1080/23311908.2020.1824306.
- [12] O. Thienathong and A. Sukying, "Vocabulary Learning Strategies Used by Thai High School Students in Science, Language, and English Programs". *Arab World English Journal (AWEJ)*, vol. 12, no. 3, 2021, doi: <https://ssrn.com/abstract=3892966>.
- [13] L. Ghazal, "Learning vocabulary in EFL contexts through vocabulary learning strategies", *Novitas-ROYAL (Research on Youth and Language)*, vol. 1, no. 2, pp. 84–91, 2017.
- [14] R. Alsharif, "Relationship between Vocabulary Learning Strategies and Vocabulary Size: Evidence from Saudi Female EFL Learners", *International Journal of Education and Literacy Studies*, vol. 10, no. 1, pp. 188–197, 2022, doi: 10.7575/AIAC.IJELS.V.10N.1P.188.
- [15] Nation, "Vocabulary tests", *Victoria University of Wellington te herenga wka*, 2012. [Online]. Available: <https://www.wgtn.ac.nz/lals/resources/paul-nations-resources/vocabulary-tests> [Accessed: 20 March 2023].
- [16] N. Schmitt, *Vocabulary Learning Strategies*. Cambridge: Cambridge University Press, 2000.
- [17] V. V. Duy and N. C. Nhung, "An assessment of vocabulary knowledge of Vietnamese EFL learners", in *The 20th English in South-East Asia Conference*. Singapore: National Institute of Education, Nanyang Technological University, 2019.
- [18] N. C. Duc, "Lexical Features of Reading Passages in English-language Textbooks for Vietnamese High-school Students: Do they Foster both Content and Vocabulary Gain?", *RELC Journal*, vol. 52, no. 3, pp. 509–522, 2020, doi: 10.1177/0033688219895045.
- [19] N. T. M. Hang and S. Webb, "Examining second language receptive knowledge of collocation and factors that affect learning", vol. 21, no. 3, pp. 298–320, 2016, doi: 10.1177/1362168816639619.
- [20] D. T. N. Yen, "High-frequency words in academic spoken English: corpora and learners", *ELT Journal*, vol. 74, no. 2, pp. 146–155, 2020, doi: 10.1093/ELT/CCZ057.
- [21] G. Alahmad, "Vocabulary Learning Strategies and their Relation to Vocabulary Size in Saudi Female Undergraduate EFL Learners", *International Journal of Linguistics, Literature and Translation*, vol. 3, no. 6, pp. 218–223, 2020, doi: 10.32996/IJLLT.2020.3.6.22.
- [22] S. Ali, R. Kalajahi, and B. Pourshahian, "Vocabulary Learning Strategies and Vocabulary Size of ELT Students at EMU in Northern Cyprus.", *English Language Teaching*, vol. 5, no. 4, pp. 138–149, 2012, doi: 10.5539/elt.v5n4p138.
- [23] R. Ghalebi, F. Sadighi, and M. S. Bagheri, "A study of vocabulary learning strategies among high and low Iranian English vocabulary learners", *Cogent Education*, vol. 8, 2021, doi: 10.1080/2331186X.2020.1834933.
- [24] J. Barcroft, "Strategies and performance in intentional L2 vocabulary learning", *Language Awareness*, vol. 18, no. 1, pp. 74–89, 2009, doi: 10.1080/09658410802557535.
- [25] G. Scribner, "The effects of three methods of vocabulary memorization in second language acquisition: Rote memorization, mnemonics, and network of conceptual relations", Master's thesis, Brigham Young University, Provo, UT., 2000, doi: 10.4304/jltr.4.2.209-219.
- [26] N. C. Ellis, "Consciousness in second language acquisition: A review of field studies and laboratory experiments", *Language Awareness*, vol. 4, no. 3, pp. 123–146, 1995, doi: 10.1080/09658416.1995.9959876.
- [27] R. J. Vann and R. G. Abraham, "Strategies of Unsuccessful Language Learners", *TESOL Quarterly*, vol. 24, no. 2, pp. 177–198, 1990, doi: 10.2307/3586898.
- [28] P. Meara, "The Importance of an Early Emphasis on L2 Vocabulary", *JALT*, vol. 19, pp. 8–11, 1995.
- [29] P. Meara, "The vocabulary knowledge framework", *Vocabulary acquisition research group virtual library*, vol. 5, no. 2, pp. 1–11, 1996.