Interdisciplinary Academic and Research Journal, 5 (5), September-October 2025
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index

Measuring English Vocabulary Size and Exploring Factors Affecting Vocabulary Learning in University Students

Panyanut Saksittanupab
Affair (English) Faculty of Humanities and Social Sciences, Sisaket Rajabhat University, Thailand
E-mail: panyanut.s@sskru.ac.th, ORCID ID: https://orcid.org/0009-0000-7603-5363
Received 26/01/2025 Revised 23/02/2025 Accepted 25/03/2025

Abstract

Background and Aims: Understanding the factors that influence vocabulary acquisition is crucial for enhancing language learning in higher education. This study investigates the vocabulary size of students within the Faculty of Humanities and Social Sciences at Sisaket Rajabhat University, exploring the role of major-specific differences and motivation in vocabulary learning.

Methodology: The sample group consisted of 169 third-year students from the Faculty of Humanities and Social Sciences at Sisaket Rajabhat University. Data were collected through a vocabulary size test and a questionnaire, and the results were analyzed using the SPSS 17.0 statistical software. The reliability of the instruments was assessed (Cronbach's alpha), as well as percentages, mean scores, and standard deviations.

Results: The findings revealed that students had an average vocabulary size of 4,490 words out of a total of 14,000 words, or 26.54%. The highest score was observed at the 1,000-word level, with an accuracy rate of 46.70%, which gradually declined at higher levels, reaching a low of 13.80% at the 14,000-word level. Notably, students majoring in Business English and language-related majors, such as Japanese and Chinese, scored higher than students in other majors at all levels. A more detailed examination of factors affecting vocabulary learning motivation indicated that overall, students had a high level of motivation to learn vocabulary. Factors such as presenting vocabulary in real-life contexts, the difficulty level of vocabulary, and learning in a relaxed atmosphere all contributed to students' motivation to learn English vocabulary.

Conclusion: The results indicate that students at Sisaket Rajabhat University have an average vocabulary size of 4,490 words, representing 26.54% of the total target vocabulary. Students performed best at the 1,000-word level, but accuracy decreased at higher levels, with the lowest score at the 14,000-word level. Notably, those majoring in Business English and language-related fields such as Japanese and Chinese had higher vocabulary scores across all levels. Additionally, students exhibited strong motivation to learn vocabulary, with key motivating factors including the use of real-life contexts, vocabulary difficulty, and a relaxed learning environment.

Keywords: Vocabulary Knowledge; Vocabulary Size Test; Motivation

Citation:
Saksittanupab, P. (2025). Measuring English Vocabulary Size and Exploring Factors Affecting Vocabulary Learning in University Students. Interdisciplinary Academic and Research Journal, 5 (5), 797-812.
DOI: https://doi.org/10.60027/iarj.2025.285442

Interdisciplinary Academic and Research Journal, 5 (5), September-October 2025
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index

Introduction

Vocabulary knowledge plays a crucial role in learning and communication, especially at the university level, where students are required to use a wide range of vocabulary for learning, research, and academic communication. This is particularly vital for students in the fields of humanities and social sciences. Having a broad and deep vocabulary base helps students understand course content, communicate effectively, and establish a solid foundation for advanced studies.

Research by Nation (2006) highlights that measuring vocabulary size is a significant aspect of instructional planning. Learners need to know approximately 5,000-word families for everyday communication and 9,000–10,000 words for reading academic texts. Alderson (2000) and Qian (1998) emphasize that vocabulary knowledge is a key factor in developing language skills, particularly reading and communication, which require multi-dimensional capabilities. Tests such as the Vocabulary Level Test (VLT) and the X_Lex Test have been developed to measure learners' vocabulary size and serve as convenient tools for assessing vocabulary gaps (diagnostic tests) or progress (achievement tests), according to Schmitt (1994).

In the context of Sisaket Rajabhat University, several challenges hinder students' vocabulary development and overall English proficiency. One major issue is the lack of initial assessment, as English proficiency tests are not administered before enrollment. This prevents instructors from tailoring lesson plans to students' foundational knowledge, resulting in a one-size-fits-all approach that may not effectively address individual learning needs. Additionally, low vocabulary proficiency is a significant concern, with a 2022 survey revealing that only 18.11% of fourth-year students met the CEFR B1 standard set by the university. This gap in vocabulary knowledge suggests that many students struggle with reading and understanding academic texts and communicating effectively. Consequently, delayed graduation and additional training have become common, as students who fail to meet the university's English proficiency requirements must undergo supplementary training, increasing their academic workload and financial burden. Furthermore, curriculum limitations for non-language majors exacerbate the problem, as these students often lack subject-specific vocabulary support, making it difficult to apply English effectively in their fields of study. Addressing these issues requires integrating diagnostic vocabulary assessments, adjusting the curriculum to better support non-language majors better, and incorporating vocabulary learning tools to enhance students' proficiency and academic success.

Despite the growing recognition of vocabulary proficiency as a critical factor in academic success, there is a lack of research focusing on higher education students, particularly non-language majors, and their vocabulary acquisition challenges. Most existing studies emphasize

Citation: Saksittanupab, P. (2025). Measuring English Vocabulary Size and Exploring Factors Affecting Vocabulary Learning in University Students. Interdisciplinary Academic and Research Journal, 5 (5), 797-812.
DOI: https://doi.org/10.60027/iarj.2025.285442

language-major students or general English learners, leaving a gap in understanding how non-language majors develop and apply vocabulary in their academic and professional fields. Without targeted research, universities may struggle to design effective vocabulary instruction that aligns with the specific needs of these students. This study aims to address this gap by investigating vocabulary learning difficulties, instructional gaps, and potential strategies to enhance vocabulary acquisition for non-language majors in higher education.

Therefore, studying the vocabulary knowledge of students in the Faculty of Humanities and Social Sciences is of utmost importance. Research findings can be utilized to develop curricula and improve teaching methods to align with students' knowledge levels. This would enhance teaching effectiveness, help students graduate on time, and better prepare them for the labor market, thereby meeting future societal needs.

Objectives

The objectives of this study were to examine the differences in vocabulary size among students in various disciplines and to investigate the factors influencing the motivation to learn English vocabulary among students in universities.

Literature Review

Second Language Acquisition

Second Language Acquisition (SLA) provides valuable insights into the processes involved in learning a second language. Krashen's Input Hypothesis (1985) posits that language acquisition occurs when learners are exposed to comprehensible input, which is language slightly above their current level (“i+1”). For instance, Krashen suggests that consistent exposure to meaningful and understandable language content can facilitate vocabulary development. The Interactionist Approach, as proposed by Long (1983), emphasizes the importance of social interaction and meaningful communication for language learning. This theory underscores the value of conversational exchanges where learners negotiate meaning, as these interactions create opportunities for vocabulary development through feedback and clarification requests. These theories highlight the significance of creating a rich and supportive language learning environment where learners can actively engage with the target language. For example, implementing task-based language learning activities in classrooms has been shown to encourage meaningful communication and foster vocabulary growth (Ellis, 2003).

Motivation

Motivation is crucial for understanding the factors that drive and sustain language learning efforts. Self-determination theory (Ryan & Deci, 2000) emphasizes the importance of intrinsic

Citation: Saksittanupab, P. (2025). Measuring English Vocabulary Size and Exploring Factors Affecting Vocabulary Learning in University Students. Interdisciplinary Academic and Research Journal, 5 (5), 797-812.
DOI: https://doi.org/10.60027/iarj.2025.285442

motivation, which is driven by internal factors such as interest and enjoyment. Learners who are intrinsically motivated are more likely to engage in sustained and self-directed vocabulary learning activities. Expectancy-Value Theory (Eccles & Wigfield, 2002) suggests that motivation is influenced by learners' beliefs about their ability to succeed (expectancy) and the perceived value of the learning task. For example, Thai university students who perceive English vocabulary acquisition as essential for career advancement may exhibit higher levels of motivation. These theories underscore the need to create learning environments that foster intrinsic motivation and provide opportunities for learners to experience a sense of autonomy, competence, and relatedness. Research by Dörnyei (2001) also highlights the role of motivation in setting achievable learning goals and using effective strategies to attain them.

Vocabulary Learning and Assessment

To understand how vocabulary is acquired and how it can be effectively measured, a vocabulary assessment is beneficial. Nation (2001) emphasizes the importance of both breadth (the number of words known) and depth (the level of understanding of each word) in vocabulary knowledge. Breadth knowledge enables learners to comprehend a wide range of texts, while depth knowledge allows for nuanced understanding and appropriate word usage. Various assessment methods, such as the Vocabulary Size Test (VST) by Nation & Beglar (2007) and the Vocabulary Levels Test (VLT) by Nation (1983), have been developed to measure different aspects of vocabulary knowledge. These tools are valuable for identifying gaps in learners' vocabulary and tailoring instructional strategies to address specific needs. For example, Schmitt (2010) advocates for the integration of diagnostic assessments to track vocabulary growth and inform targeted interventions.

Research on English vocabulary learning in Thailand has provided valuable insights into the vocabulary size and factors influencing vocabulary development at various educational levels. For example, Chiramanee and Nirattisai (2014) explored the relationship between vocabulary size and learning strategies among 347 third-year Rajabhat University students. Their findings revealed that the highest-performing students possessed a vocabulary size of 11,000-word families, while the lowest-performing group managed only 1,000 words. Similarly, Srisawat (2017) used the Vocabulary Level Translation Test with first-year Rajabhat University students and found that they scored an average of 42.59% on basic 2,000-word vocabulary and just 9.03% on academic vocabulary, falling short of Nation's (2001) 80% standard. Additionally, Sukying (2023) found that vocabulary depth significantly correlated with graduate students' writing skills, emphasizing the importance of diverse vocabulary for writing quality. Research also highlights the role of intrinsic motivation that internal factors, such as interest and challenge, were more impactful on vocabulary learning than external motivators like exam preparation. Furthermore, Tandjitanon et

Citation: Saksittanupab, P. (2025). Measuring English Vocabulary Size and Exploring Factors Affecting Vocabulary Learning in University Students. Interdisciplinary Academic and Research Journal, 5 (5), 797-812.
DOI: https://doi.org/10.60027/iarj.2025.285442

al. (2020) demonstrated that the PLEARN teaching strategy, focusing on engagement and enjoyable activities, effectively enhanced motivation and creativity in students.

International research similarly underscores the critical role of vocabulary in language skill development. Milton and Treffers (2013) pointed out that vocabulary knowledge is pivotal for developing language skills, with English as a Foreign Language (EFL) learners typically having smaller vocabularies than native speakers. Waldvogel (2013) found a significant relationship between vocabulary knowledge and learning strategies among Spanish learners. Coxhead, Nation, and Sim (2015) observed that high school students in New Zealand had sufficient vocabulary for general reading but lacked domain-specific terms. Studies by Olmos (2009) and Cobb & Horst (1997) indicated that students in Spain and Hong Kong had vocabulary sizes below the 3,000-word threshold. Kyle and Crossley (2016) revealed that increased vocabulary size improved reading abilities among Japanese EFL learners, while Asli-Badardi (2023) developed the LexArabic test to effectively measure and improve Arabic vocabulary skills. Regarding motivation, Lai (2013) found that intrinsic motivation was more effective for vocabulary development than extrinsic factors in Chinese learners. Similarly, Kimura, Nakata, and Okumura (2001) reported that social factors, such as family and peer support, influenced learners' motivation in Japan. Gardner and Lambert (1972) highlighted the importance of both integrative and instrumental motivation in learning English vocabulary. These studies collectively emphasize that vocabulary size, depth, and intrinsic motivation are crucial for enhancing language skills, particularly in reading and writing.

In conclusion, the studies collectively emphasize three key variables crucial for enhancing language skills, particularly in reading and writing. First, vocabulary size refers to the total number of words a student knows and can use effectively, with research indicating that a larger vocabulary correlates with improved academic performance and language skills, as evidenced by varying results across different studies. Second, vocabulary depth encompasses the richness of understanding of known words, including their meanings, usages, and associations; findings show that vocabulary depth significantly impacts writing quality and overall language proficiency. Lastly, intrinsic motivation represents the internal drive to learn and engage with vocabulary, influenced by personal interest, challenges, and enjoyment. Research indicates that intrinsic motivation is a stronger predictor of vocabulary development than extrinsic factors, highlighting the importance of fostering a positive learning environment. By classifying these variables, the research can better address the specific needs of higher education students, particularly non-language majors, and contribute to the development of effective vocabulary instruction strategies.

Citation:
Saksittanupab, P. (2025). Measuring English Vocabulary Size and Exploring Factors Affecting Vocabulary Learning in University Students. Interdisciplinary Academic and Research Journal, 5 (5), 797-812.
DOI: https://doi.org/10.60027/iarj.2025.285442

Interdisciplinary Academic and Research Journal, 5 (5), September-October 2025
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index

Conceptual Framework

The conceptual framework for this study examines the English vocabulary size of university students in the Faculty of Humanities and Social Sciences at Sisaket Rajabhat University, as illustrated in Figure 1. The framework consists of three key components: (1) Input Variables, which include student characteristics such as academic background, individual learning strategies, and fields of study; (2) Process, which utilizes two tools—the Vocabulary Size Test (VST) and interviews; and (3) Output Variables, which focus on evaluating students' overall English vocabulary size, vocabulary knowledge across various majors, and the factors influencing their vocabulary learning.

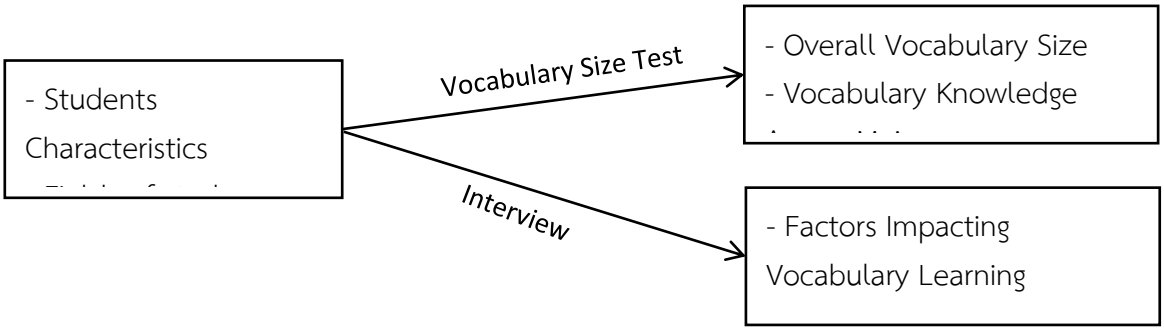

Figure 1 Research Conceptual Framework

Research Methodology

1. **Participants:** The study targeted 195 third-year students from eight majors: Community Development, Chinese, Japanese, Business English, Arts and Design, History, Thai Language for Communication, and Communication Arts, of the Faculty of Humanities and Social Sciences at Sisaket Rajabhat University. These students, enrolled in the second semester of the 2023 academic year, had completed at least three English courses and were scheduled for an English proficiency test organized by the university's Language and Arts Center. Third-year students were specifically selected because they had acquired a foundational level of English proficiency through prior coursework and were at a critical stage in their academic journey where language skills were essential for future studies or career preparation. To avoid placing students under duress by requiring them to approve or decline the request in person, the researcher met with the participants to explain the study's objectives and procedures in the first week of their classes. Before participation, students were required to review and sign a consent form, ensuring their voluntary involvement and understanding of the research process.

2. **Research Tool**

Citation: Saksittanupab, P. (2025). Measuring English Vocabulary Size and Exploring Factors Affecting Vocabulary Learning in University Students. Interdisciplinary Academic and Research Journal, 5 (5), 797-812.
DOI: https://doi.org/10.60027/iarj.2025.285442

2.1 Vocabulary Size Test: The Bilingual English-Thai Vocabulary Size Test, developed by Nirattisai and Palanukulwong (2016), was employed. This test measures vocabulary knowledge up to 14,000-word families, using 140 multiple-choice items with Thai translations. The tool, validated for reliability (0.94) and validity, ensures an accurate measurement of vocabulary size.

2.2 Questionnaire: A questionnaire was designed to explore motivational factors affecting vocabulary learning. It included three sections: demographic information, Likert-scale items on motivation, and open-ended questions.

3. Data Collection: Data were collected through a single testing session in January 2024, divided into four classrooms of 50 participants each. Students completed the vocabulary test without external aids and subsequently filled out the questionnaire.

4. Data Analysis:

4.1 Vocabulary test responses were scored (correct = 1, incorrect = 0) and analyzed using Excel. Scores were converted into vocabulary size estimates using the formula:

Vocabulary Size=Score×100\text{Vocabulary Size} = \text{Score} \times 100

Vocabulary Size=Score×100

4.2 Questionnaire responses were analyzed descriptively to calculate means, standard deviations, and percentages, with a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Results

1. Vocabulary Knowledge of Humanities and Social Sciences Students at Sisaket Rajabhat University

The study assessed students' English vocabulary knowledge through tests that spanned 14 levels, each containing 10 items, resulting in a total of 140 items. Each correct answer earned one point, while incorrect answers received zero. The analysis of the results revealed a consistent decline in the number of correct responses and their corresponding percentages as vocabulary levels increased, as shown in Figure 2.

On average, students demonstrated a vocabulary size of 4,490 words, which constitutes 26.54% of the total 14,000 words tested. The highest accuracy was recorded at the 1,000-word level, where students achieved 46.7% accuracy. However, as the levels advanced, accuracy rates steadily decreased, with the lowest accuracy observed at the 14,000-word level, where students achieved only 13.8%.

Interestingly, a slight improvement was noted at the 7,000-word level, where accuracy increased to 35.6%. Despite this temporary rise, the scores resumed their downward trajectory at subsequent levels. This pattern underscores the challenge of mastering advanced vocabulary and

Citation: Saksittanupab, P. (2025). Measuring English Vocabulary Size and Exploring Factors Affecting Vocabulary Learning in University Students. Interdisciplinary Academic and Research Journal, 5 (5), 797-812.
DOI: https://doi.org/10.60027/iarj.2025.285442

Interdisciplinary Academic and Research Journal, 5 (5), September-October 2025
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index

highlights the necessity of implementing effective strategies to support vocabulary development, particularly at higher proficiency levels.

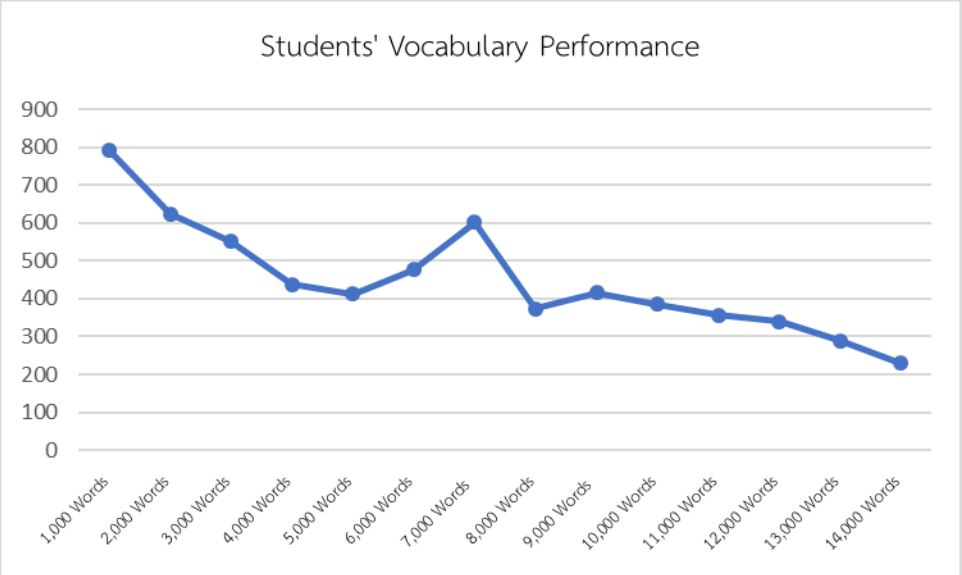

Figure 2 Vocabulary Knowledge Classified by Vocabulary Level

2. Vocabulary Knowledge Differences Across Majors in Humanities and Social Sciences

The performance of students in language-related majors, such as Business English, Japanese, and Chinese, consistently surpassed that of students from other disciplines across all vocabulary levels. At the basic vocabulary level (1,000 words), Japanese majors achieved the highest accuracy rate at 51.67%, followed closely by Business English students at 50.97%.

In the intermediate vocabulary range (2,000–7,000 words), Business English and Japanese majors continued to demonstrate superior performance, maintaining their leading position. However, as the vocabulary levels progressed to advanced words (8,000–14,000 words), all groups of students showed a noticeable decline in accuracy, with average scores dropping below 25%. Students from Communication Arts and Fine Arts exhibited the lowest performance in these higher-level categories.

This trend highlights the challenges faced by students, particularly those in non-language-focused majors, when tackling advanced vocabulary. The findings suggest a pressing need for tailored interventions to support vocabulary acquisition in these groups, especially at the higher proficiency levels, as shown in Table 1.

Citation: Saksittanupab, P. (2025). Measuring English Vocabulary Size and Exploring Factors Affecting Vocabulary Learning in University Students. Interdisciplinary Academic and Research Journal, 5 (5), 797-812.
DOI: https://doi.org/10.60027/iarj.2025.285442

Interdisciplinary Academic and Research Journal, 5 (5), September-October 2025
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index

Table 1 Percentage of English Vocabulary Knowledge Classified by Field of Study

Word Level	Community Development	Chinese	Japanese	Business English	Arts & Design	History	Thai Language	Communication Arts
1,000	44.38	42.67	51.67	50.97	41.00	37.50	45.26	42.50
2,000	31.88	42.00	42.50	42.58	25.00	26.25	33.16	28.75
3,000	24.38	31.33	34.17	38.71	31.00	30.00	29.47	20.00
4,000	28.75	28.67	22.50	27.90	21.00	22.50	25.26	16.25
5,000	20.00	19.33	21.67	29.52	24.00	21.25	23.42	15.00
6,000	18.75	22.67	27.50	28.87	29.00	27.50	31.32	38.75
7,000	30.00	34.00	30.00	38.23	32.00	32.50	38.68	31.25
8,000	14.38	19.33	17.50	26.61	14.00	20.00	24.21	17.50
9,000	18.13	24.67	24.17	30.65	19.00	17.50	20.79	22.50
10,000	20.00	32.00	30.00	24.35	16.00	20.00	19.21	16.25
11,000	12.50	26.67	26.67	26.94	20.00	17.50	14.47	11.25
12,000	20.00	21.33	24.17	25.97	12.00	12.50	13.68	13.75
13,000	10.63	20.67	17.50	23.39	12.00	10.00	12.37	8.75
14,000	11.88	19.33	15.83	17.58	7.00	11.25	8.16	8.75

3. Factors Influencing Motivation to Learn English Vocabulary

Survey results reveal a high level of overall motivation among students to learn English vocabulary, with several key factors significantly influencing their enthusiasm. Among these, the use of real-world contexts for vocabulary application emerged as the most impactful motivator, with a mean score of 4.59 (SD=0.63). Students also reported that overly challenging vocabulary could diminish their motivation, as reflected in a mean score of 4.55 (SD=0.69). Furthermore, a relaxed and supportive classroom environment was identified as another major contributor to increased motivation, with a mean score of 4.48 (SD=0.72). Additionally, students regarded vocabulary learning as vital for their future career opportunities, with this factor receiving a mean score of 4.24 (SD=0.61).

Despite these positive motivators, certain challenges hindered students' learning experiences. The difficulty of retaining vocabulary during conversations was a notable issue, with

Citation: Saksittanupab, P. (2025). Measuring English Vocabulary Size and Exploring Factors Affecting Vocabulary Learning in University Students. Interdisciplinary Academic and Research Journal, 5 (5), 797-812.
DOI: https://doi.org/10.60027/iarj.2025.285442

Interdisciplinary Academic and Research Journal, 5 (5), September-October 2025
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index

a mean score of 3.14 (SD=0.65). Similarly, the lack of engaging and diverse teaching materials, such as videos, games, and interactive exercises, posed a barrier to effective learning, earning a mean score of 3.69 (SD=0.56).

To address these concerns, students suggested several strategies to enhance vocabulary learning. These included incorporating real-life scenarios and contexts for vocabulary application, utilizing diverse teaching tools like multimedia and interactive exercises, fostering collaborative and supportive classroom environments, and providing incremental vocabulary challenges to avoid overwhelming learners.

This analysis underscores the importance of interactive and meaningful teaching approaches in sustaining and improving students' motivation to learn English vocabulary. By addressing these factors, educators can create more effective and engaging learning experiences that align with students' needs and aspirations. The overall finding is shown in Figure 3.

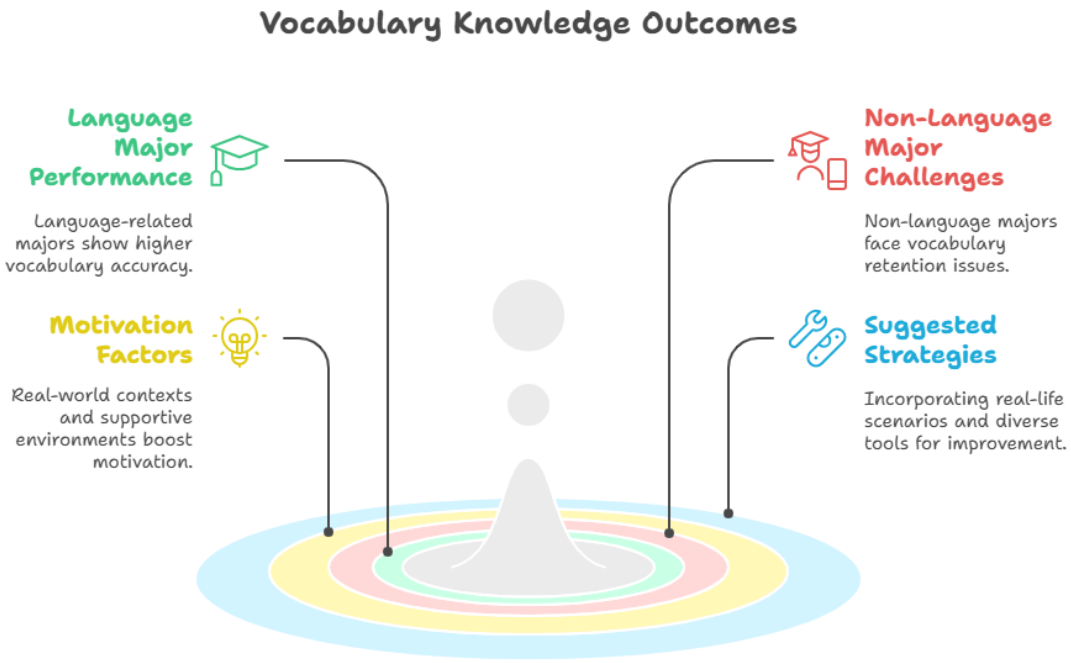

Figure 3 Overall Finding

Discussion

The study revealed that students possess an average vocabulary size of 4,490 words, representing 26.54% of the estimated 14,000-word standard. The results of this research indicate that students have a much lower-than-average vocabulary standard. This level of vocabulary knowledge is sufficient for basic communication but inadequate for more complex or specialized

Citation: Saksittanupab, P. (2025). Measuring English Vocabulary Size and Exploring Factors Affecting Vocabulary Learning in University Students. Interdisciplinary Academic and Research Journal, 5 (5), 797-812.
DOI: https://doi.org/10.60027/iarj.2025.285442

contexts. The findings align with earlier research, such as Nation (2006), which highlights that while students manage common vocabulary well, they encounter difficulties with advanced terms. Similarly, Kotchana et al (2015) noted that university students often excel in basic vocabulary but struggle as word complexity increases. Studies by Schmitt et al. (2011) corroborate these results, showing that students in non-English-speaking countries like Japan and South Korea exhibit similar patterns. They perform well on frequently used words but falter when faced with less familiar or specialized terms. These challenges are likely due to limited exposure to advanced vocabulary in everyday life and learning environments. The lack of opportunities for the practical application of complex words further exacerbates this issue, as highlighted by Laufer and Nation (1995). Additionally, motivation and effort play critical roles in vocabulary acquisition, particularly at higher levels. Without clear incentives to expand their vocabulary, students may struggle to make significant progress (Gardner & Lambert, 1972).

To improve learners' vocabulary, Webb (2010) suggested that interactive vocabulary learning techniques, such as games and group activities, can significantly enhance retention and engagement among students in non-English speaking contexts. Additionally, Hsu (2014) highlighted the effectiveness of technology-based tools, such as vocabulary apps and online platforms, in facilitating vocabulary learning among learners in Taiwan. Finally, the necessity of contextualized vocabulary instruction that connects new words to students' lives and cultural contexts, thereby improving relevance and retention.

In the context of the Thai education system, there is a pressing need to develop strategies that elevate English vocabulary standards for Thai students. Implementing the insights from these studies could be instrumental in bridging the vocabulary gap and fostering better language proficiency, ultimately preparing students for more successful academic and professional futures.

The study also found significant variations in vocabulary knowledge among students from different majors. Language-focused students, such as those studying Business English or foreign languages like Japanese and Chinese, demonstrated a broader vocabulary compared to students from non-language fields, such as History or Art. Business English and language-major students likely performed better due to greater exposure to English instruction, specialized curricula, and frequent language practice. Their coursework emphasizes linguistic proficiency through contextual learning activities such as presentations, case studies, and role-playing exercises, which enhance vocabulary retention and practical application. Regular assessments and active language use in reading, writing, and speaking further strengthen their skills. In contrast, non-language majors encounter English in more limited contexts, receiving less structured vocabulary instruction. These curriculum differences suggest the need for tailored vocabulary integration in non-language programs, incorporating industry-specific English, interactive tools, and real-world applications to

Citation:
Saksittanupab, P. (2025). Measuring English Vocabulary Size and Exploring Factors Affecting Vocabulary Learning in University Students. Interdisciplinary Academic and Research Journal, 5 (5), 797-812.
DOI: https://doi.org/10.60027/iarj.2025.285442

bridge the gap. This finding supports previous research indicating that students in language-intensive disciplines often have greater vocabulary diversity due to the higher frequency of language use in their studies (Schmitt, 2008).

The necessity of mastering foundational vocabulary for professional applications, such as business negotiations or intercultural communication, likely motivates language-focused students to prioritize vocabulary learning (Nation, 2006). Gardner and Lambert (1972) also emphasize the role of motivation driven by real-world applications, which explains the higher performance among these students. Conversely, non-language majors tend to lack consistent opportunities for vocabulary practice, which may account for their lower scores.

Motivation emerged as a crucial factor in vocabulary acquisition. The study indicated high levels of motivation among students, driven by career prospects, real-world relevance, and social support from instructors and peers. These findings are consistent with Dörnyei's (2001) research, which underscores the importance of aligning learning with practical contexts to enhance motivation. However, the difficulty of advanced vocabulary and the lack of practical context for its use are other demotivated factors for Thai learners, as Laufer and Hulstijn (2001) observed that complex words often overwhelm students, leading to frustration and disengagement. Without meaningful contexts, students may perceive vocabulary learning as irrelevant, further diminishing their motivation (Schmitt, 2008).

Several factors can significantly influence this motivation, particularly future goals, the perceived relevance of English, and the surrounding contexts or environments in which students live. One major factor is learners' future goals. Many Thai students may not see the immediate importance of mastering English, especially if they perceive their future careers as not requiring proficiency in the language. In fields where English is not the primary medium of communication, such as local business or certain vocational paths, students might prioritize other skills over English learning. This lack of perceived relevance can lead to decreased motivation, as learners may not recognize the long-term benefits of being proficient in English, such as enhanced job prospects or the ability to engage in global conversations.

Additionally, the context and environment in which students live can significantly impact their motivation to learn English. In areas where English is not commonly spoken, learners may have fewer opportunities to practice the language in real-life situations, which can hinder their confidence and enthusiasm for learning. A lack of exposure to English in everyday life, whether through media, social interactions, or academic settings, can create a disconnect between the language and its practical applications. In contrast, learners in urban areas or environments with more exposure to English, such as international schools or universities, may find themselves more motivated to engage with the language due to increased opportunities for practice and use.

Citation: Saksittanupab, P. (2025). Measuring English Vocabulary Size and Exploring Factors Affecting Vocabulary Learning in University Students. Interdisciplinary Academic and Research Journal, 5 (5), 797-812.
DOI: https://doi.org/10.60027/iarj.2025.285442

Interdisciplinary Academic and Research Journal, 5 (5), September-October 2025
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index

Furthermore, the social dynamics within the classroom can also influence motivation. A supportive learning environment, characterized by encouragement from teachers and collaboration with peers, can foster a positive attitude toward English learning. Conversely, a competitive or high-pressure environment may lead to anxiety and decreased motivation. Teachers who incorporate engaging materials and activities that resonate with students' interests can also enhance motivation by making learning more relevant and enjoyable.

Recommendation

1. Recommendations for Teaching

The study highlights significant gaps in English vocabulary knowledge among humanities and social sciences students at Sisaket Rajabhat University, particularly between language-related majors and non-language disciplines. Despite a strong motivation to learn, these students struggle with vocabulary retention and are hindered by a lack of engaging teaching materials. The following recommendations are offered for language teachers and curriculum designers.

1.1 Contextualized Learning Activities: Educators should design activities that integrate vocabulary with real-world scenarios, such as workplace simulations, field-specific reports, and practical conversations. Such approaches help students recognize the value of vocabulary and improve retention.

1.2 Support for Non-Language Majors: For students in non-language disciplines, tailored vocabulary materials related to their fields should be developed. Supplementary tools, such as mobile applications and memory aids, can also facilitate vocabulary acquisition.

1.3 Encouraging Motivation through Support: Creating a positive and collaborative learning environment is essential. Instructors should provide constructive feedback and organize group activities where students can practice vocabulary together. Such measures can build confidence and sustain motivation.

1.4 Curriculum Recommendations: Based on these findings, curriculum designers should consider integrating real-life vocabulary applications into courses for non-language majors. This could involve incorporating field-specific vocabulary into subject courses, designing interdisciplinary projects that require practical language use, and providing opportunities for students to apply vocabulary in authentic contexts. Aligning vocabulary instruction with students' academic and career needs will enhance learning outcomes and better prepare them for future professional challenges.

1.5 To enhance vocabulary acquisition in non-language majors, curriculum design should incorporate interactive and technology-driven learning tools. For instance, instructors can integrate Quizlet and Anki into coursework, allowing students to review industry-specific

Citation: Saksittanupab, P. (2025). Measuring English Vocabulary Size and Exploring Factors Affecting Vocabulary Learning in University Students. Interdisciplinary Academic and Research Journal, 5 (5), 797-812.
DOI: https://doi.org/10.60027/iarj.2025.285442

vocabulary through flashcards and spaced repetition techniques. Gamification platforms can be used for in-class vocabulary quizzes, fostering engagement through friendly competition. Additionally, students can practice real-world language applications with ChatGPT or Elsa Speak, which provide AI-driven conversations and pronunciation feedback.

2. Future Research Suggestions

Our understanding is limited by the constraints of participant diversity and context. Therefore, the following recommendations are provided for future research.

2.1 Technology Integration Investigating the use of modern tools, such as language learning apps and educational games, could offer insights into innovative methods for enhancing vocabulary acquisition.

2.2 Long-Term Studies: Longitudinal research could track vocabulary growth and motivational trends over time, providing a comprehensive view of the factors influencing language learning.

References

Alderson, J.C. (2000). *Assessing Reading.* Cambridge University Press, Cambridge. https://doi.org/10.1017/CBO9780511732935

Asli-Badarneh, A., & Asadi, I. (2023). LexArabic: A receptive vocabulary size test to estimate Arabic proficiency. *Behavior Research Methods*. Available: https://doi.org/10.3758/s13428-023-02077-1

Brown, H.D. (2007). *Principles of Language Learning and Teaching.* Pearson Education.

Chiramanee, T., & Nirattisai, S. (2014). Vocabulary size and vocabulary learning strategies of Thai *University* students. *Journal of Education and Practice*, 5(31), 72-80.

Coxhead, A. (2000). A New Academic Word List. *TESOL Quarterly*, 34(2), 213-238.

Coxhead, A., Nation, P., & Sim, D., (2015). Measuring the Vocabulary Size of Native Speakers of English in New Zealand Secondary Schools. New Zealand Journal of Educational Studies. 50(1). https://doi.org/10.1007/s40841-015-0002-3.

Dörnyei, Z. (2001). *Motivational strategies in the language classroom.* Cambridge University Press.

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology, 53*(1), 109–132. https://doi.org/10.1146/annurev.psych.53.100901.135153.

Ellis, R. (2003). *Task-Based Language Learning and Teaching.* Oxford: Oxford University Press.

Gardner, R. C., & Lambert, W. E. (1972). *Attitudes and Motivation in Second Language Learning.* Rowley, MA: Newbury House.

Citation: Saksittanupab, P. (2025). Measuring English Vocabulary Size and Exploring Factors Affecting Vocabulary Learning in University Students. Interdisciplinary Academic and Research Journal, 5 (5), 797-812.
DOI: https://doi.org/10.60027/iarj.2025.285442

Kimura, Y., Nakata, Y., and Okumura, T. (2001). Language Learning Motivation of EFL Learners in Japan—A Cross-Sectional Analysis of Various Learning Milieus. *JALT Journal,* 23, 47-68.

Kotchana, S., & Tongpoon-Patanasorn, A. (2015). EFL Learners' Vocabulary Size: A Case in the Northeastern Region of Thailand. *ASEAN Journal of Education*, *1*(1), 9–26. retrieved from https://so01.tci-thaijo.org/index.php/AJE/article/view/180797

Krashen, S. (1985). *The input hypothesis: Issues and implications.* New York: Longman.

Kyle, K., & Crossley, S. A. (2016). The relationship between lexical sophistication and independent and source-based writing. *Journal of Second Language Writing, 34*, 80-93.

Lai, HY. T. (2013). The Motivation of Learners of English as a Foreign Language Revisited. *International Education Studies*, 6(10), 90-101.

Laufer, B. & Nation, P. (1995). Vocabulary Size and Use: Lexical Richness in L2 Written Production. *Applied Linguistics,* 16 (3), 307.

Laufer, B., & Hulstijn, J. (2001). Incidental vocabulary acquisition in a second language: The construct of task-induced involvement. *Applied Linguistics*, 22(1), 1-26.

Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist, 57*(9), 705–717. https://doi.org/10.1037/0003-066X.57.9.705

Long, M. H. (1983). Linguistic and Conversational Adjustments to Non-Native Speakers. *Studies in Second Language Acquisition*, 5, 177-193. http://dx.doi.org/10.1017/S0272263100004848

Milton, J., Treffers-Daller, J. (2013). Vocabulary size revisited: The link between vocabulary size and academic achievement. *Applied Linguistics Review,* 4(1), 151-172.

Nation, I. S. P. (2006). How large a vocabulary is needed for reading and listening? *Canadian Modern Language Review*, 63(1), 59-82.

Nation, I. S. P., & Beglar, D. (2007). A Vocabulary Size Test. *The Language Teacher*, 31(7), 9-13.

Nation, I., & Beglar, D. (2007). A Vocabulary Size Test. *The Language Teacher,* 31, 9-13.

Nation, I.S.P. (2003). *Learning Vocabulary in Another Language*. Cambridge University Press.

Nation, P. (2001). *Learning Vocabulary in Another Language.* Cambridge University Press.

Nirattisai, P., & Palanukulwong, T. (2016). A New Measure for Thai Students' Vocabulary Size: The English-Thai Version of Vocabulary Size Test. *Journal of English Studies*,14, 155-181.

Olmos. C. (2009). An assessment of the vocabulary knowledge of students in the final year of secondary education. Is their vocabulary extensive enough? International Journal of English Studies, 9(S), 73-90.

Qian, D., and Schedl, M. (2004). Evaluation of an in-depth vocabulary knowledge measure for assessing reading performance. *Language Testing,* 21(1), 28-52.

Citation: Saksittanupab, P. (2025). Measuring English Vocabulary Size and Exploring Factors Affecting Vocabulary Learning in University Students. Interdisciplinary Academic and Research Journal, 5 (5), 797-812.
DOI: https://doi.org/10.60027/iarj.2025.285442

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68

Schmidt, R. W. (1994). Deconstructing consciousness: In search of useful definitions for Applied Linguistics. *AILA Review*, 11, 11-26.

Schmitt, N. (2008). Instructed second language vocabulary learning. *Language Teaching Research*, 12(3), 329-363.

Schmitt, N. (2010). *Researching vocabulary: A vocabulary research manual.* Palgrave Macmillan Basingstoke.

Schmitt, N., Schmitt, D., & Clapham, C. (2001). Developing and exploring the behavior of two new versions of the Vocabulary Levels Test. *Language Testing*, 18(1), 55-88.

Schunk, D. H., Pintrich, P. R., & Meece, J. L. (2014). *Motivation in Education: Theory, Research, and Applications*. Pearson.

Srisawat, C. (2017). *The Vocabulary Size of Rajabhat Maha Sarakham University Students.* Rajahbat Mahasarakham. Available: https://fulltext.rmu.ac.th/fulltext/2561/M126135/Srisawat%20Chawin.pdf

Sukying, A. (2023). The Role of Vocabulary Size and Depth in Predicting Postgraduate Students' Second Language Writing Performance. *LEARN Journal: Language Education and Acquisition Research Network, 16*(1), 575-603.

Tandjitanon, P., Saetnan, K., Konchaieb, S., & Kurakan, P. (2020). Fostering students' English Learning motivation and creativity of student teachers through the PLEARN learning strategy. *Journal of Education, Naresuan University*, 22(1), 134-146.

Waldvogel, D. A. (2013). The Relationship between Vocabulary Learning Strategies and Vocabulary Size among Adult Spanish Foreign Language Learners. *Journal of Language Teaching and Research*, 4, 209-219.

Webb, T.L., Joseph, J., Yardley, L. and Michie, S. (2010). Using the Internet to Promote Health Behavior Change: A Systematic Review and Meta-Analysis of the Impact of Theoretical Basis, Use of Behavior Change Techniques, and Mode of Delivery on Efficacy. *Journal of Medical Internet Research,* 12, e4. http://dx.doi.org/10.2196/jmir.1376

Citation: Saksittanupab, P. (2025). Measuring English Vocabulary Size and Exploring Factors Affecting Vocabulary Learning in University Students. Interdisciplinary Academic and Research Journal, 5 (5), 797-812.
DOI: https://doi.org/10.60027/iarj.2025.285442