

An Investigation of Graduate Students' Vocabulary Problems in Academic Writing

การศึกษาปัญหาคำศัพท์ในการเขียนเชิงวิชาการของนักศึกษา ระดับบัณฑิตศึกษา

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บทคัดย่อ

คำศัพท์มีบทบาทสำคัญอย่างยิ่งในการเรียนรู้ภาษาอังกฤษและมีความจำเป็นอย่างมากในการเขียนเชิงวิชาการ อย่างไรก็ตาม นักศึกษาระดับบัณฑิตศึกษามักประสบปัญหาในการใช้คำศัพท์ในการเขียนบทความวิชาการ การวิจัยเชิงปริมาณนี้จึงมีวัตถุประสงค์เพื่อศึกษาปัญหาด้านคำศัพท์ที่นักศึกษาระดับบัณฑิตศึกษาประสบในการเขียนบทความวิชาการของนักศึกษาระดับบัณฑิตศึกษาจำนวน 23 คน ซึ่งคัดเลือกโดยการสุ่มตัวอย่างแบบเจาะจง เครื่องมือในการวิจัย ได้แก่ แบบสอบถามที่พัฒนาขึ้นจากกรอบความรู้ด้านคำศัพท์ของ Nation (2005) ในการประเมินระดับความคิดเห็นเกี่ยวกับปัญหาในด้านคำศัพท์ และวิเคราะห์ข้อมูลโดยใช้ค่าเฉลี่ย และส่วนเบี่ยงเบนมาตรฐาน ผลการวิจัยพบว่าผู้เข้าร่วมการวิจัยประสบปัญหาในหลายมิติของความรู้คำศัพท์ โดยมีค่าเฉลี่ยของระดับความคิดเห็นรวม 4.01 (เห็นด้วย) ซึ่งปัญหาที่พบมาก คือ คำที่มีหลายความหมาย (ค่าเฉลี่ย 4.17) และคำที่มีความหมาย

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แตกต่างกันในบริบทต่าง ๆ (ค่าเฉลี่ย 4.13) รวมถึงความวิตกกังวลในการเขียน (ค่าเฉลี่ย 3.91) ผลการวิจัยยืนยันว่าคำศัพท์ยังคงเป็นเรื่องท้าทายที่สำคัญในการเขียนเชิงวิชาการสำหรับนักศึกษาระดับบัณฑิตศึกษา นอกจากนี้ การศึกษานี้ยังชี้ให้เห็นถึงความจำเป็นในการสอนคำศัพท์เฉพาะทางและกลยุทธ์ เพื่อลดความวิตกกังวลในการเขียนเชิงวิชาการ

คำสำคัญ: ปัญหาด้านคำศัพท์ การเขียนเชิงวิชาการ นักศึกษาระดับบัณฑิตศึกษา

Abstract

Vocabulary is vital in English language learning and crucial for academic writing. However, graduate students frequently experience difficulties in employing appropriate vocabulary effectively in academic writing. This quantitative study aimed to investigate vocabulary problems in graduate students' academic writing at a university in Thailand. Using purposive sampling, 23 Thai EFL graduate students were selected as participants. A questionnaire based on Nation's (2005) vocabulary knowledge framework was distributed to participants to investigate their vocabulary problems. Data were analyzed using Mean and Standard Deviation. Findings indicated that participants experienced difficulties across multiple aspects of vocabulary knowledge, with an overall mean score of 4.01 (agree). The most challenging areas were words with multiple meanings (average = 4.17) and words that differ in different contexts (average = 4.13). Participants also reported experiencing writing anxiety (average = 3.91). The results affirm that vocabulary poses

significant problems in academic writing for graduate students. This study highlights the need for targeted vocabulary instruction and strategies to reduce writing anxiety in academic contexts.

Keywords: Vocabulary problems Academic writing Graduate students

Introduction

While vocabulary knowledge is crucial for language learning (Firda et al., 2021), it can cause significant problems, especially for EFL learners (Al Qunayeer, 2021; Saenpakdeejit, 2014), at the university level, especially in the realm of academic purposes (Evans & Morrison, 2011). Notably, postgraduate students encounter the subject matter in their academic writing (Al Fadda, 2012; Al-Khasawneh, 2010; Ibrahim and Nambiar, 2011; Lusta, 2012), albeit being aware of vocabulary's essence in their educational goals (Nagy & Townsend, 2012).

Tellingly, in the context of postgraduate students in the English program at a university in Thailand, academic writing is embedded in every course. Students must acquire academic writing abilities for various tasks, from summaries to theses. The native Thai language of most students, however, may hinder their academic productivity, as even native English speakers struggle with academic language (Zhao, 2017).

Therefore, understanding vocabulary limitations in graduate academic writing merits systematic research, following the research question posed in this study: *What are the vocabulary problems in*



graduate students' academic writing? In doing so, this study can identify specific vocabulary problems in graduate students' academic writing, which will inform targeted interventions and teaching strategies for EFL learners. Therefore, the findings can lead to improved academic writing support, curriculum design, and potentially better student outcomes in graduate-level academic writing.

Objective

This study aims to examine the vocabulary problems in graduate students' academic writing.

Literature Review

1. Knowing a word

Researchers have extensively explored the concept of “knowing a word.” Richards (1976) emphasized understanding a word's occurrence, syntax, form, derivation, and semantic associations. Ellis and Sinclair (1989) focused on comprehension, recall, usage, and contextual appropriateness. Taylor (1990, 1992) identified eleven aspects, including linguistic awareness and discourse usage. Coady (1993) emphasized word occurrence understanding, while Ooi and Lee (1996) highlighted multiple meaning dimensions and linguistic relationships. Ur (1996) concentrated on form, grammar, and semantic relationships. Qian (2002) linked word knowledge to vocabulary breadth and depth.

Among these various conceptualizations, Nation's (2005) framework stands out as particularly comprehensive and influential. Tellingly, Nation (2005) presented a comprehensive framework comprising 18 questions across three aspects of vocabulary knowledge— form, meaning, and use, each with receptive and productive components (see Table 1). This framework encompasses word parts, spoken and written forms, meaning associations, grammatical functions, collocations, and usage restrictions. Nation's (2005) model illustrates the interconnectedness of vocabulary knowledge components from morphological, semantic, and pragmatic perspectives.

Table 1 Three aspects of vocabulary knowledge

Form	spoken	R	What does the word sound like?
		P	How is the word pronounced?
	Written	R	What does the word look like?
		P	How is the word written and spelled?
	word	R	What parts are recognizable in this word?
		P	What word parts are needed to express the meaning?
Meaning	form and meaning	R	What meaning does this word form signal?
		P	What word form can be used to express this meaning?

	concept and referents	R	What is included in the concept?
		P	What items can the concept refer to?
	associations	R	What other words does this make us think of?
		P	What other words could we use instead of this one?
	grammatical functions	R	In what patterns does the word occur?
		P	In what patterns must we use this word?
Use	collocations	R	What words or types of words occur with this one?
		P	What words or types of words must we use with this one?
	constraints on use	R	Where, when, and how often would we expect to meet this word?
	(register, frequency ...)	P	Where, when, and how often can we use this word?

Note. R = receptive knowledge, P = productive knowledge derived from Nation (2005, p. 584)

Synthesis of the abovementioned studies on word knowledge reveals that understanding a word encompasses form, meaning, and use. Form includes pronunciation, spelling, and grammatical variations; meaning involves collocations, connotations, and registers; and usage

pertains to patterns and contexts of word employment. Comprehensive word knowledge requires both receptive and productive language abilities across diverse linguistic contexts.

Significantly, vocabulary knowledge bears significance in academic writing as a crucial proficient skill for university students to effectively articulate their ideas and knowledge. The following discusses the importance of vocabulary's roles in academic writing.

2. Vocabulary in Academic Writing

Coxhead (2012) suggests that students and lecturers need vocabulary for high-stakes writing. Aligning with this matter, Dhuli et al. (2023) captured a positive correlation between students' vocabulary knowledge and their writing performance in ESL/ EFL contexts, suggesting that increased lexical knowledge contributes to more effective writing skills. For example, Asaad (2024) supported that vocabulary knowledge mediates postgraduates and academic writing- proficiency in vocabulary can improve students' writing skills. However, bearing in mind that Thai EFL students frequently encounter difficulties in English owing to inadequate vocabulary (Saenpakdeejit, 2014), undoubtedly in academic writing, vocabulary can be perceived as a problem for EFL learners to achieve their academic progression, especially in the context of Thai EFL learners. The following section further addresses this issue.



3. Vocabulary Problems in Academic Writing

Çelik (2020) observed that even experienced graduate students experience difficulties in writing skills and such a problem can be due to one of the common writing problems like vocabulary (Al-Khairi, 2013; Phan, 2022). Azies et al. (2022) supported that a lack of vocabulary mastery will greatly affect the writing results mostly in terms of, for instance, errors in choosing the appropriate vocabulary (Alharbi, 2017; Basir et al., 2015; Lusta, 2012; Maharani et al., 2023), particularly in the use of synonyms (Mutlu, 2016), and omission/ incompleteness and misspellings (Basir et al., 2015).

4. Anxiety in Academic Writing

Asnas and Hidayanti (2024) recently argued that writing research articles continues to induce anxiety in EFL students, as they must adapt their writing to conform to the English academic writing style, rendering academic writing the most challenging skill to master due to its complex process. Consequently, writing anxiety obstructs academic writing, impacting both the quality and students' perceptions of writing (Rohmah & Muslim, 2021), and may lead to task-irrelevant thoughts while diminishing students' intrinsic motivation (Geng & Yu, 2022).

From the abovementioned points, it can be contended that not only does vocabulary knowledge and academic writing primarily interrelate but also the aspect of academic writing anxiety. As such, it is

imperative to be aware of this subject matter from the pivotal stage of vocabulary problems to anxiety in academic writing.

Methods

1. Participants

The participants of this study comprised 23 Thai EFL graduate students (41% of the target population) selected through purposive sampling from a population of 56 at one university in Thailand. The selection criteria included current enrollment in graduate-level programs requiring academic writing in English, completion of at least one semester of graduate studies, and willingness to participate. This sample was appropriate as participants regularly engaged in academic writing tasks (e.g., course assignments, research proposals, and theses), allowing for an in-depth investigation of vocabulary challenges across various academic disciplines while maintaining a manageable sample size for qualitative analysis.

2. Research Instruments

This study employed an 8-item questionnaire developed from Nation's (2005) vocabulary knowledge framework to investigate vocabulary problems in academic writing. Seven items examined vocabulary knowledge aspects: forms (spelling and word parts), meaning (words in contexts, synonyms, range of meanings), and use (collocation and formal/informal language), while the eighth item addressed writing



anxiety based on literature review. The questionnaire’s content was reviewed by an applied linguistics teacher for theoretical alignment and clarity, with additional input from a graduate student in applied linguistics. Based on their feedback, minor revisions were made to improve item clarity and comprehensibility. The questionnaire used a five-level Likert scale ranging from 1 to 5 (see Tables 2 and 3) to measure participants’ responses.

Table 2 Five-level Likert scale

Level	Interpretation
5	Strongly agree
4	Agree
3	Moderate
2	Disagree
1	Strongly disagree

Table 3 Interpretation of mean scores

Mean	Interpretation
5 (4.51-5.0)	Strongly agree
4 (3.51-4.50)	Agree
3 (2.51-3.50)	Moderate
2 (1.51-2.50)	Disagree
1 (1.0-1.50)	Strongly disagree

3. Data Collection

The questionnaire administered via Google Forms was distributed to 23 participants. The participants then evaluated their academic writing problems using the abovementioned rating scale, submitting over one week.

4. Data Analysis

The participants' responses collected through Google Forms were then analyzed using mean (\bar{x}) and standard deviation (S.D.) via the Statistical Package for Social Sciences (SPSS) program.

Results

Table 4 demonstrates participants' perceptions of vocabulary problems in academic writing. The key findings show that participants perceive vocabulary in academic writing as challenging in the three most notable aspects: 1) problems in complex words ($\bar{x} = 4.17$, SD = 0.83), 2) problems from contextual differences in word meaning ($\bar{x} = 4.13$, SD = 0.97), and 3) problems in differentiating between formal and informal language ($\bar{x} = 4.08$, SD = 0.94), respectively.



Table 4 Participants' vocabulary problems in academic writing

No.	Questions	\bar{x}	S.D.	Interpretation
1	I think spelling words is challenging because I am not familiar with these academic words which cause problems in academic writing.	4.04	1.19	Agree
2	I think various word parts are the cause for often committing errors in word usage in academic writing.	3.57	1.31	Agree
3	I think a word with a range of meanings that requires extreme concern about its appropriate context perplexes me and causes problems in academic writing.	4.17	0.83	Agree
4	I think a word that can differ in different contexts causes problems in academic writing.	4.13	0.97	Agree
5	I think synonyms bear only near meanings, so they cannot be used completely interchangeably. Hence, it causes problems in academic	4.17	0.83	Agree



No.	Questions	\bar{x}	S.D.	Interpretation
	writing, for example, the two adjectives ‘Happy’ and ‘Jubilant’ (<i>Happy</i> means feeling, showing, or causing pleasure or satisfaction, while <i>Jubilant</i> denotes great joy or satisfaction from the accomplishment of something.)			
6	I think several words are often collocation words in which two or more words always co-occurrence and cause problems in academic writing, for example, different (adj.) + from or difference (n.) + between A and B).	3.96	0.82	Agree
7	I think the different levels of words, such as formal and informal words, are difficult for me in academic writing.	4.08	0.94	Agree
8	I found that I have writing anxiety.	3.91	1.08	Agree
Total		4.01	0.77	Agree



Tellingly, it is noteworthy that not only do persistent difficulties in academic writing proficiency among graduate students primarily stem from vocabulary knowledge deficits but are also associated with writing anxiety.

Conclusion

Taken together, this study validates Nation's (2005) theory on the form, meaning, and use of vocabulary and its significance in the complexity of academic writing and acknowledges anxiety as a significant problem in English academic writing. Additionally, this study's findings might be helpful, but there are numerous addresses to better understand vocabulary problems in graduate students' academic writing. To do so, these might include larger cohorts for sample size and methodologies; a thorough, longitudinal, mixed-methods study on linguistic problems; and the relationship between vocabulary and writing anxiety, as well as discipline-specific vocabulary problems to offer insight.

Discussion

This study acknowledges that vocabulary acquisition remains challenging for EFL learners (Saenpakdeejit, 2014) , including Thai graduate students. In particular, this study corroborates Al-Khairi's (2013) and Phan's (2022) identification of vocabulary as one of the common writing problems for EFL learners, especially in the realms of the use of inappropriate words (Alharbi, 2017; Basir et al. , 2015; Lusta, 2012;

Maharani et al., 2023) thanks to words' multiple meanings and synonyms (Mutlu, 2016). Of this, it is inevitable to address the importance of vocabulary knowledge related to word form, use and meaning (Nation, 2005) as a key indicator of academic writing performance, especially in postgraduate students (Asaad (2024).

Moreover, writing anxiety appears to remain a significant obstacle to EFL learners' academic writing success. This finding is consistent with Asnas and Hidayanti (2024) that writing research articles causes anxiety for EFL students due to the need to adapt to English academic writing styles. The aspect of academic writing anxiety is thus deemed crucial to further exploring its impacts on EFL learners' academic performance and vice versa.

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