# Exploring the Integration of Corpus-Based Approach in Vocabulary Instruction in Thai EFL School Context: A Quantitative Report

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**ABSTRACT**
Concordance analysis has highlighted the value of electronic corpora in enhancing vocabulary acquisition in language education. However, the integration of the corpus-based approach into vocabulary instruction remains underexplored, especially for low-level EFL learners. Despite the potential benefits of the approach in vocabulary acquisition, it is unclear to what extent Thai EFL teachers have adopted this approach in their classroom practices. Guided by the TPACK framework, this article presents quantitative results from a survey designed to examine how EFL in-service teachers in Thai secondary schools incorporate corpus-based approach into their instruction. 138 secondary school teachers from Narathiwat province, Thailand, were selected through stratified sampling to participate in the study. Data were collected via questionnaires and analyzed.
The results showed that although Thai EFL teachers were aware of corpus tools for pedagogical use, they lacked comprehensive understanding of these tools and the corpus-based approach. This gap in knowledge hindered their ability to effectively integrate corpus methods into vocabulary instruction. The study highlighted challenges in classroom application and, through the lens of the TPACK framework, underscored the need for targeted professional development to enhance teachers' corpus literacy and competence in using corpus technology for vocabulary teaching in Thai school contexts.
**Keywords**: corpus-based approach, concordance, vocabulary instruction, TPACK, Thai EFL school context

## 1. Introduction

Vocabulary plays a central role in language education, serving as the foundation upon which all other language skills are built. A robust vocabulary is essential not only for constructing grammatically correct sentences but also for expressing ideas clearly and conveying meaning effectively (Bai, 2018). It promotes advancement in listening, speaking, reading, and writing by enabling learners to comprehend and produce language with greater fluency and accuracy (Huyen & Nga, 2003). Nation (2001) emphasizes the reciprocal relationship between vocabulary knowledge and language use, noting that a rich vocabulary enhances learners' ability to engage in meaningful communication. Furthermore, lexical knowledge is widely recognized as a key determinant of both language acquisition and communicative competence (Schmitt & Schmitt, 2020), making vocabulary instruction a vital component of any effective language education program.

For effective vocabulary instruction, language teachers should focus on three essential aspects: form, meaning, and use (Nation, 2001). Each of these components includes both receptive and productive dimensions of vocabulary acquisition. When instructors aim to enhance learners' vocabulary and phrase knowledge, supporting the development of these elements significantly contributes to learners' general vocabulary knowledge and usage. Several scholars have proposed various techniques to facilitate vocabulary learning, one of which is teaching vocabulary in rich, meaningful contexts (Celce-Murcia, 2001). Words embedded in context are more likely to be retained and understood by learners, making contextualized instruction a powerful strategy for vocabulary development.

The integration of digital technologies into educational environments has become increasingly widespread. Incorporating technology into teaching is now essential for educators, both to support effective learning and to foster students' 21st-century skills (Shafie et al., 2022). The advent of digital tools has significantly transformed professional practices across various domains, including education. Mishra and Koehler (2006) introduced the Technological Pedagogical Content Knowledge (TPACK) framework, for using technology to enhance teaching and learning processes. This framework assists teachers in selecting appropriate technologies that align with instructional content and pedagogical strategies (Lestari & Asari, 2022). Through technology integration,

educators can enhance their creativity in designing instructional materials, thereby increasing student motivation, engagement, and comprehension (Lestari & Asari, 2022).

In language education, particularly within the English as a Foreign Language (EFL) context, corpus tools represent an emerging technology with significant potential for pedagogical integration through corpus-based instruction. According to Flowerdew (2012), a corpus is a large, compiled set of authentic written or spoken language, stored electronically for analysis. Corpora expose learners to real-world language use and serve as valuable tools for enhancing EFL learners' ability to use language more naturally and accurately (Nakkaew, 2020). The use of corpus tools has gained increasing attention among educators and researchers, with applications in language teaching expanding rapidly. Moreover, language corpora have revolutionized dictionary compilation and significantly influenced the development of language teaching materials (O'Keeffe et al., 2007).

The effectiveness of corpus-based approach in vocabulary instruction has been well-documented in recent studies. Research by Siddiq et al. (2021), and Sinturat et al. (2022) demonstrates that corpus tools significantly enhance vocabulary learning by enabling learners to understand word meanings in varied contexts and retain vocabulary over extended periods. Additionally, Paker and Ergül-Özcan (2017) found that students held positive attitudes toward corpus-based vocabulary activities, with interview data highlighting their perceived benefits in supporting vocabulary acquisition. Collectively, these findings suggest that corpus-based instruction plays a valuable role in promoting vocabulary development, particularly in EFL settings, by allowing learners to get exposure to authentic language use and fostering deeper lexical understanding.

Despite growing attention to vocabulary instruction through corpus tools in EFL contexts, significant gaps remain in both pedagogical practices and teacher preparedness. Research indicates that many teachers lack confidence and clear strategies for effective vocabulary instruction, often relying heavily on textbooks or unsystematic materials that may not address the diverse needs of learners (Berne & Blachowicz, 2008; Fonghoi et al., 2019; Sangkapan et al., 2015). Students frequently struggle to acquire vocabulary due to ineffective instructional methods and limited exposure to authentic language use, particularly in contexts where English proficiency is low (Elmahdi & Hezam, 2020). Traditional approaches, such as grammar-translation and decontextualized word teaching, remain prevalent, limiting students' ability to infer meanings from context and apply vocabulary in real-life communication (Pookcharoen, 2007; Sun & Wang, 2003). Furthermore, there is insufficient evidence regarding the extent to which Thai EFL teachers utilize corpus tools alongside context-based strategies in vocabulary instruction, highlighting a critical need for further research and innovation in this area.

Previous studies indicate that while the corpus-based approach—particularly the concordance function within corpus tools—has been widely explored in university-level vocabulary instruction, their application in school-level EFL contexts, especially with low-level learners, remains underexplored (Li et al., 2025). It is unclear to what extent EFL teachers in secondary education are familiar with or effectively implement these tools in classroom practice. Moreover, the potential of corpus-based approach to enhance vocabulary acquisition in these settings has not been sufficiently examined. Existing research has also paid limited attention to the technological competencies of EFL teachers in integrating corpus tools into pedagogy. Few studies have investigated how Thai EFL teachers perceive, adopt, and adapt corpus tools in real teaching contexts, particularly in relation to their technological, pedagogical, and content knowledge and competencies. To address these gaps, this study adopts the TPACK framework to examine how corpus tools (technology), corpus-based instruction (pedagogy), and vocabulary teaching (content) intersect in Thai secondary school EFL classrooms.

These gaps present a valuable opportunity to expand the existing body of knowledge by investigating how corpus-based approach is integrated into vocabulary teaching practices in school contexts. By addressing this under-researched area, the current study contributes to a deeper understanding of how corpus tools can be operationalized in diverse educational settings, offering insights that inform teacher training, instructional design, and curriculum development. Ultimately, this research supports the broader call for innovative, data-driven methods in language education that align with the demands of 21st-century learning.

## 2. Purpose and Research Questions

To address the research gaps identified above, this article—part of a larger project—aims to report quantitative findings by investigating whether Thai EFL teachers integrate corpus-based approach into their vocabulary instruction, and to examine the extent and manner in which these approaches are applied in classroom practice. Based on this objective, the study is guided by the following research questions:

1. Do Thai EFL teachers integrate the corpus-based approach in vocabulary instruction?
2. To what extent do they implement the corpus-based approach in vocabulary teaching within the classroom?

## 3. Literature Reviews

### 3.1 TPACK in Language Learning

The concept of the Technological Pedagogical Content Knowledge (TPACK) framework by Koehler and Mishra (2009), highlights the complexities involved in integrating technology into teaching. As Information and Communication Technology (ICT) continues to evolve, technological integration has become a crucial component of educational transformation. The TPACK framework emphasizes the need for teachers to effectively incorporate digital tools—such as computers, software, and other technological resources—into their instructional practices. It encompasses not only the presentation and teaching of subject matter, but also the understanding of relevant theories and approaches, the productive use of technology, and the selection of appropriate instructional methods (Dietrich, 2018).

Research has highlighted the positive impact of the TPACK framework on pedagogical practices involving technology integration. Studies have shown that TPACK supports teachers in selecting appropriate technology-based educational activities and enhances classroom management (Lestari & Asari, 2022). Increasing attention has been given to its application in English language classrooms. For instance, Alamri and Awjah (2023) investigated Saudi EFL teachers' perceptions of TPACK in vocabulary instruction, revealing that it helps learners identify synonyms and antonyms, categorize vocabulary by parts of speech, understand meanings, and increase motivation in virtual environments. Their study found that teachers viewed TPACK positively for improving vocabulary learning. With ongoing advancements in ICT within the Saudi education system, EFL teachers are increasingly adopting TPACK-based approaches to engage students in language learning. As technology continues to evolve, future research is needed to explore the effective implementation of new pedagogical approaches across diverse learning contexts.

### 3.2 Corpus-Based Approach in Learning and Teaching Vocabulary

A corpus—a large, principled collection of authentic written or spoken language stored electronically for linguistic analysis (Flowerdew, 2012)—plays a vital role in language education by providing realistic examples of language use in various contexts (McEnery & Xiao, 2011). It also raises learners' awareness of target lexical items and accelerates vocabulary acquisition (Chapelle, 2003; Schmidt, 2001). One of the primary tools associated with corpus analysis is concordance, which serves as a key function for examining corpora. According to Gavioli (2005, p. 11), "A concordance is a list of occurrences (all or selected number) of a word or phrase in a corpus." Concordance lines display multiple instances of a searched word or phrase, allowing users to observe its usage in context. This display, often referred to as "Key Word in Context" (KWIC), enables learners to explore how a target word functions across different contexts (Cobb, 1999). The concordance function is capable of searching through extensive text collections and compiling all occurrences of specific words, phrases, or structures (Cobb, 1999).

Early research established the pedagogical value of concordance tools in language learning, particularly for vocabulary acquisition, collocation, grammar, and writing (Chapelle, 2003; Schmidt, 2001; Cobb, 1999). These tools enable learners to explore authentic language use through searchable corpora, enhancing lexical awareness and retention via contextualized input and wildcard search functions. Subsequent studies reinforced these findings. Boonyarattanasoontorn et al. (2020) and Sinturat et al. (2022) demonstrated improvements in collocational knowledge and writing skills, respectively, while Daskalovska (2015) confirmed the effectiveness of corpus tools in developing verb-noun and verb-adverb lexical patterns. More recently, Siddiq et al. (2021) and Nontasee (2020) extended this line of inquiry to EFL contexts, showing that corpus-based instruction supports gradual vocabulary development and real-life usage. Notably, Nontasee emphasized the importance of incremental word knowledge, aligning with earlier cognitive models of vocabulary acquisition.

At the secondary education level, several studies have explored learners' attitudes toward corpus-based instruction. Jantarabang and Tachom (2021) reported that high school students responded positively toward corpus use and concordance lines, which supported their understanding of word meanings, spelling, and common phrases. These findings have led to recommendations for integrating corpus technology into core curricula to enhance vocabulary acquisition among English language learners. Additionally, the importance of contextual vocabulary learning is crucial for language learning. This perspective is supported by Siddiq et al. (2021), who assert that corpus-based vocabulary learning fosters deeper lexical understanding and is more engaging than traditional methods.

Despite these promising findings, several gaps remain. Much of the existing research has focused on higher education or advanced learners (Li et al., 2025), with limited exploration of how corpus-based approach can be adapted for younger or lower-proficiency students. Furthermore, although the TPACK framework offers a valuable model for integrating technology into pedagogy, more research is needed to understand how teachers can

be effectively trained to use corpus tools in diverse classroom settings. There is also a need for further investigation into how corpus tools can be tailored to meet the needs of varied learner populations, including younger students, those with lower English proficiency, and learners in different instructional and cultural contexts.

## 4. Research Methodology

### 4.1 Research Design

This study adopts a survey research design to explore whether Thai EFL teachers incorporate corpus-based approach into vocabulary instruction. As part of a larger mixed-methods project, this article specifically aims to examine the degree of implementation and identify the pedagogical practices through which the corpus-based approach is applied in classroom settings.

### 4.2 Participants and Research Context

This survey study involved 138 Thai EFL teachers from five secondary school zones in Narathiwat Province, Thailand. The sample size was determined using Cochran's (1977) formula, applying a 90% confidence level suitable for exploratory studies in educational contexts. Stratified random sampling was employed to ensure proportional representation of individuals with specific characteristics, thereby enhancing the accuracy and generalizability of the findings. This technique ensures that the sample reflects the broader population by including participants based on relevant demographic or professional traits (Creswell, 2009).

### 4.3 Instruments and Data Collection

As part of the larger project, this study employed a five-point Likert scale questionnaire to measure the extent to which Thai EFL teachers integrate the corpus-based approach into vocabulary instruction at the secondary education level. The Likert scale allowed participants to express their level of agreement or disagreement, ranging from "strongly disagree" to "strongly agree." To gain deeper insights into teachers' perceptions and experiences, an additional option—"0"—was included, enabling respondents to indicate lack of experience with corpus-based instruction. This design provided a more nuanced understanding of teachers' familiarity with and application of corpus tools in vocabulary teaching.

### 4.4 Data Analysis

To address the research questions, the quantitative data were analyzed using descriptive statistics, including percentages, means, and standard deviations. In alignment with the TPACK framework, the results were reported based on its seven core knowledge domains: Technological Knowledge (TK), Content Knowledge (CK), Pedagogical Knowledge (PK), Pedagogical Content Knowledge (PCK), Technological Content Knowledge (TCK), Technological Pedagogical Knowledge (TPK), and Technological Pedagogical and Content Knowledge (TPACK). In this study, the TPACK framework is applied to examine the interaction among concordance features (technology), corpus-based instruction (pedagogy), and vocabulary knowledge (content), providing a comprehensive lens through which to interpret teachers' integration of corpus tools in the targeted EFL classrooms.

### 4.5 Ethical Considerations

This study adhered to established ethical standards and received approval from the Center for Social and Behavioral Science Instructional Review Board, Prince of Songkla University (IRB No. 2024-St-Libarts-025). The research was guided by main ethical principles, namely respect for individuals, beneficence, and justice. These principles were applied during data collection process through various measures such as obtaining informed and voluntary consent, safeguarding participants' right, and ensuring the privacy and confidentiality of all participant-related information.

## 5. Research Results

This study aims to investigate the integration of corpus-based approach in vocabulary instruction by Thai EFL teachers and to explore how these approaches are implemented in their teaching practices. To address the research questions, quantitative data were analyzed, and the TPACK framework was employed to examine the interaction among concordance features (technology), the corpus-based approach (pedagogy), and vocabulary teaching (content).

Based on Research Question 1—"Did Thai EFL teachers integrate the corpus-based approach in vocabulary instruction?"—the results indicated that although the majority of participants (73%) were aware of the approach, they lacked sufficient knowledge to implement it effectively in their teaching practices ($M = 2.58$, $SD = 1.10$). Approximately one-third of the teachers (27%) reported that they neither knew about nor used the corpus-based approach in vocabulary instruction, particularly through concordance features, as illustrated in Figure 1. These findings suggested that the corpus-based approach was relatively underrecognized and underutilized among Thai

EFL teachers.

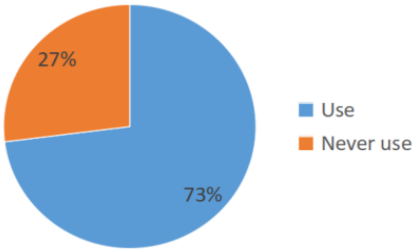


**Figure 1.** *Corpus awareness among Thai EFL teachers in vocabulary instruction*

To further explore the integration of corpus-based approach, Research Question 2 aimed to investigate the extent to which teachers implemented these approaches in vocabulary instruction within classroom practice. While the majority of teachers in this study were aware of corpus-based instruction, they demonstrated limited knowledge and experience in applying it effectively in school contexts. The following section presents the quantitative results based on the seven components of the TPACK framework.

**Technological Knowledge (TK) – Concordance Function**

Based on the quantitative data, the results showed a generally negative perception among respondents regarding their ability to use the concordance function. As presented in Table 1, the teachers expressed uncertainty about their ability to use concordance features to search for specific words, including using keywords or wildcard characters to specify variations (M = 2.53, SD = 1.13). The data also indicated that they disagreed with statements suggesting they could use concordance features to display vocabulary in various formats—such as showing keywords in context (Key Word in Context) or presenting word collocations (M = 2.49, SD = 1.24). Furthermore, they rarely guided students on how to use the concordance function (M = 2.49, SD = 1.13).

**Table 1.** *Teachers' Integration of Corpus-Based Approach in Vocabulary Instruction – Technological Knowledge*

| Technological Knowledge | n | M | SD | Interpretation |
|---|---|---|---|---|
| I know how to use a concordance function to search for desired words, such as searching with a keyword or using a wildcard to specify special characters | 137 | 2.53 | 1.13 | Neutral |
| I can use concordance lines to display vocabulary in various ways, such as showing keywords with context (KWIC) or displaying word collocations | 138 | 2.49 | 1.24 | Disagree |
| I can guide students on how to use a concordance function | 138 | 2.49 | 1.13 | Disagree |

**Content Knowledge (CK) - Vocabulary**

Among the elements of the TPACK framework, content knowledge—specifically vocabulary knowledge—was ranked highest in terms of teachers' self-perception. As shown in Table 2, the data indicated that teachers reported having comprehensive vocabulary knowledge, particularly in the areas of form and meaning, though less so in usage. They agreed that they possessed sufficient knowledge to teach students the meaning of vocabulary items and their meanings within sentences (M = 3.82, SD = 0.83). Additionally, they agreed that they had adequate knowledge to teach vocabulary form, including pronunciation, spelling, and morphological components such as roots, prefixes, and suffixes (M = 3.59, SD = 0.88). However, they expressed uncertainty regarding their ability to teach vocabulary usage in context, especially in relation to grammatical functions and common word collocations (M = 3.48, SD = 0.91).

**Table 2.** *Teachers' Integration of Corpus-Based Approach in Vocabulary Instruction – Content Knowledge*

| Content Knowledge | n | M | SD | Interpretation |
|---|---|---|---|---|
| I have sufficient knowledge to teach students to understand the meaning of vocabulary and the meaning of words in sentences | 138 | 3.82 | 0.83 | Agree |
| I have sufficient knowledge of teaching English vocabulary in terms of form, such as pronunciation, spelling, and morphemes (root, prefixes, suffixes) | 138 | 3.59 | 0.88 | Agree |
| I have knowledge of teaching vocabulary usage in contexts related to the grammatical functions of words or | 138 | 3.48 | 0.91 | Neutral |

phrases, as well as common word collocation

**Pedagogical Knowledge (PK) - Corpus-based approach**

According to the data presented in Table 3, the teachers expressed uncertainty regarding their pedagogical knowledge in adapting instruction to align with students' current understanding using a corpus-based approach (M = 2.96, SD = 1.01). They also reported uncertainty about how to effectively teach vocabulary through corpus-based methods (M = 2.82, SD = 0.97).

**Table 3.** *Teachers' Integration of Corpus-Based Approach in Vocabulary Instruction – Pedagogical Knowledge*

| Pedagogical Knowledge | n | M | SD | Interpretation |
|---|---|---|---|---|
| I can adapt my teaching to align with students' current understanding by using a corpus-based approach | 138 | 2.96 | 1.01 | Neutral |
| I know how to teach using a corpus-based approach | 138 | 2.82 | 0.97 | Neutral |

When examining the combination of two elements within the TPACK framework, the teachers reported a lack of experience in implementing the corpus-based approach in vocabulary instruction and in using concordance outputs effectively. The data are presented as follows.

**Pedagogical Content Knowledge (PCK)**

As shown in Table 4, when it came to the integration of corpus-based approach with vocabulary instruction, the data revealed that teachers expressed uncertainty and lacked sufficient knowledge in applying these methods. Specifically, they were unsure about how to use the corpus-based approach to help students learn vocabulary form (M = 2.89, SD = 0.93), understand word meanings (M = 2.88, SD = 0.95), prepare activities to enhance vocabulary knowledge (M = 2.87, SD = 0.98), and guide students in using vocabulary correctly in sentences to convey meaning accurately (M = 2.85, SD = 0.96).

**Table 4.** *Teachers' Integration of Corpus-Based Approach in Vocabulary Instruction – Pedagogical Content Knowledge*

| Pedagogical Content Knowledge | n | M | SD | Interpretation |
|---|---|---|---|---|
| I can apply a corpus-based approach to help students learn about form. | 138 | 2.89 | 0.93 | Neutral |
| I can apply a corpus-based approach to help students learn the meaning of vocabulary | 138 | 2.88 | 0.95 | Neutral |
| I can prepare activities using a corpus-based approach to enhance vocabulary knowledge | 138 | 2.87 | 0.98 | Neutral |
| I can apply a corpus-based approach to help students learn how to use vocabulary correctly in sentences and convey meaning accurately | 138 | 2.85 | 0.96 | Neutral |

**Technological Content Knowledge (TCK)**

With regard to the use of the concordance function in vocabulary instruction, the teachers demonstrated limited knowledge and experience in this area. As shown in Table 5, the findings revealed that teachers occasionally employed concordance-based activities to illustrate vocabulary usage across various contexts (M = 2.68, SD = 1.21). Furthermore, they expressed uncertainty about implementing instructional activities focused on word forms, including pronunciation, spelling, and morphological components such as roots, prefixes, and suffixes (M = 2.67, SD = 1.17). This uncertainty extended to teaching strategies aimed at helping students comprehend word meanings both at the lexical level and within sentence contexts (M = 2.63, SD = 1.13), as well as enhancing vocabulary instruction in diverse communicative settings (M = 2.61, SD = 1.06).

**Table 5.** *Teachers' Integration of Corpus-Based Approach in Vocabulary Instruction – Technological Content Knowledge*

| Technological Content Knowledge | n | M | SD | Interpretation |
|---|---|---|---|---|
| I can use the concordance function with activities to teach the usage of vocabulary in different contexts | 138 | 2.68 | 1.21 | Neutral |
| I can use the concordance function with vocabulary teaching activities focused on form, such as pronunciation, spelling, and morphemes (root, prefixes, suffixes) | 138 | 2.67 | 1.17 | Neutral |
| I can use the concordance function with vocabulary teaching activities to help students understand the | 138 | 2.63 | 1.13 | Neutral |

| | | | | |
|---|---|---|---|---|
| meaning of words, both at the word level and when they appear in sentences | | | | |
| I can use the concordance function to enhance the teaching and learning of English vocabulary in different contexts | 137 | 2.61 | 1.06 | Neutral |

**Technological Pedagogical Knowledge (TPK)**

Table 6 illustrates that the teachers exhibited uncertainty regarding their knowledge and experience in applying the corpus-based approach through the concordance function. They reported occasionally encouraging students to utilize the concordance function and corpus-based methods to support English language learning (M = 2.80, SD = 1.22), and to promote accurate language use (M = 2.74, SD = 1.13). These findings suggest a general unfamiliarity with the implementation of corpus-based instructional strategies.

**Table 6.** *Teachers' Integration of Corpus-Based Approach in Vocabulary Instruction – Technological Pedagogical Knowledge*

| Technological Pedagogical Knowledge | n | M | SD | Interpretation |
|---|---|---|---|---|
| I encourage students to use the concordance function and a corpus-based approach to learn English. | 138 | 2.80 | 1.22 | Neutral |
| I can use the concordance function and a corpus-based approach to help students use language correctly | 138 | 2.74 | 1.13 | Neutral |

## 6. Discussion

This study investigated Thai EFL teachers' integration of the corpus-based approach into vocabulary instruction at the secondary education level in a southern province of Thailand, using the TPACK framework as an analytical lens. The overall findings revealed that the teachers were generally uncertain about their knowledge and ability to effectively incorporate corpus-based methods into classroom vocabulary teaching, particularly with the concordance feature. While they expressed positive perceptions regarding teaching word forms and meanings, they demonstrated less confidence in guiding low-level students on how to apply vocabulary in real-life communicative contexts.

The results indicated that Thai EFL teachers' uncertainty in integrating corpus-based vocabulary instruction was largely due to limited corpus literacy and a lack of pedagogical integration skills. This mirrors international research (Leńko-Szymańska, 2015; Oktavianti et al., 2022), which identifies unfamiliarity and technical constraints as common barriers. Eslek-Onur and Tosun (2023) similarly report low corpus proficiency among EFL teachers, with no correlation to teaching experience—suggesting that access alone does not ensure pedagogical use.

Despite awareness of corpus tools, Thai EFL teachers in this study had not incorporated them into vocabulary instruction, suggesting a gap in Technological Pedagogical Knowledge (TPK) as framed by the TPACK model. This highlights the need for targeted teacher training that goes beyond technical access to focus on pedagogically meaningful integration of corpus tools. Without such support, teachers may resist or lack confidence in adopting corpus-based approaches, limiting opportunities for contextualized and learner-centered vocabulary learning.

The limited adoption of corpus-based instruction in the studied context reflects both pedagogical and technical constraints, including insufficient professional development and restricted access to corpus tools. This reliance on traditional vocabulary teaching methods inhibits innovation and deprives learners of exposure to authentic, contextualized language use, as emphasized by Klungthong and Wasanasomsithi (2024). From a TPACK perspective, the gap lies in teachers' underdeveloped Technological Pedagogical Knowledge—the ability to integrate technology (TK) meaningfully into vocabulary instruction (PK). Without targeted training that bridges content, pedagogy, and technology, educators are unlikely to explore concordance tools or corpus-informed strategies that enhance vocabulary acquisition and communicative competence (Schmitt & Schmitt, 2020). To address this, teacher education programs must prioritize TPACK-aligned professional development, equipping Thai EFL teachers with the skills to leverage corpus tools as part of a broader shift toward data-driven, context-rich language teaching.

The results of the present study indicated that Content Knowledge (CK) was rated highest among the three TPACK domains, surpassing both Technological Knowledge (TK) and Pedagogical Knowledge (PK). This suggests that while Thai EFL teachers possess strong foundational knowledge of vocabulary content, they exhibit lower proficiency in integrating technological tools—such as concordance features within corpus tools or the broader corpus-based approach—into their instructional practices. Quantitative data further indicate that teachers are more confident in their understanding of vocabulary, particularly in relation to word forms and meanings. They

demonstrated adequate knowledge in teaching vocabulary forms, including pronunciation, spelling, and morphological components such as roots, prefixes, and suffixes. Moreover, they expressed confidence in guiding students to comprehend word meanings and their contextual usage within sentences.

These results are consistent with Pookcharoen (2007), who reported that Thai EFL teachers continue to rely on traditional vocabulary teaching methods, such as the grammar-translation approach. Instruction in Thai school contexts remains largely decontextualized, with vocabulary often taught in isolation rather than through strategies that promote contextual understanding. This presents challenges in supporting EFL learners to acquire vocabulary in rich and meaningful contexts, as emphasized by several scholars (Celce-Murcia, 2001).

The negative perception surrounding the implementation of the corpus-based approach in vocabulary instruction—particularly through the use of the concordance feature—may reflect limited exposure to this technology, insufficient training opportunities supported by educational institutions or national policy, and the perceived complexity of integrating such tools into classroom practice, as noted by Li et al (2025). These factors suggest that teachers may either undervalue the potential benefits of the corpus-based approach or encounter significant challenges in its application. This interpretation warrants further investigation to better understand the underlying causes and contributing factors behind these negative perceptions.

## 7. Conclusion

This study found that Thai EFL teachers hold a neutral stance toward understanding and applying corpus-based vocabulary instruction, highlighting key pedagogical challenges. The results underscore the need for targeted professional development to build teachers' skills and confidence in using corpus tools—especially concordancers—in school-based vocabulary teaching.

To contextualize these findings, the study situates the challenges within Thai secondary schools, where corpus-based instruction is still rare. Unlike higher education settings abroad, Thai teachers work within a traditionally structured curriculum with limited exposure to digital tools. This gap reflects a lack of Technological Pedagogical Knowledge (TPK), as outlined in the TPACK framework, emphasizing the need for localized training that supports meaningful integration of corpus-based methods.

However, the scope of this study was limited to secondary school English teachers in Narathiwat province, Thailand. To gain a more comprehensive understanding of the integration of corpus-based instruction, future research should consider expanding the sample to include a wider range of educational settings and participant groups. Such expansion would provide deeper insights into the broader applicability and impact of corpus-based approach in diverse EFL contexts. Although this study is limited to a specific area within Narathiwat province, its findings may be relevant to other regions with comparable cultural, socioeconomic, and educational contexts. However, due to significant regional differences across Thailand, the results may not be fully generalizable. This underscores the need for further research to examine how these findings can be adapted to diverse educational settings nationwide or a longitudinal study to see how the findings might change over time or across different policy environments. Such efforts would strengthen the validity of the conclusions and offer more comprehensive insights into policymaking and educational practice at both regional and national levels.

The implications of this study highlight that by meditating corpus tools as emerging technology to support professional development for EFL teachers, it is essential to conceptualize the use of technology through the mediation of cognition, the expansion of learning design opportunities within appropriate educational contexts, and the stimulation of reflective practice regarding its implementation (Jou et al., 2025). A key policy priority for Thai school directors and the Ministry of Education should be to improve access to corpus resources and provide targeted teacher training. Professional development programs should revise their curricula to align with 21st-century skills by incorporating corpus literacy training. This would support the effective integration of technology, pedagogy, and content knowledge, moving beyond mere access toward meaningful pedagogical application. This current study contributes to the body of knowledge in technology-enhanced language learning through the TPACK framework that the use of corpus-based approach calls for making use of the context of authentic language learning in the classroom, especially for young EFL learners.

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