PASAA Journal
Volume 72, January – June 2026, 110–132

Are They Ready to Speak English with Students? A CLIL Adaptation to Thai EFL Classrooms

Wipada Sutthiroj[a], and Phanatdao Chantarasiri[b]*

[a] Rajamangala University of Technology Krungthep, Bangkok, Thailand
[b] Suratthani Rajabhat University, Surat Thani, Thailand
**Corresponding author: phanatdao.cha@sru.ac.th*

Article information	
Abstract	This mixed-methods study investigated the implementation of Content and Language Integrated Learning (CLIL) by 53 fourth-year student teachers in Thai government schools. Quantitative data from structured questionnaires and qualitative insights from semi-structured interviews served as the basis for the analysis. Findings revealed complex challenges that spanned language-related issues, including varied student proficiency levels. Contextual barriers, including insufficient institutional support and resource constraints, were also apparent. Despite these challenges, student teachers adapted by employing scaffolding techniques and multimodal communication, while also relying on peer support systems and engaging in reflective practice. Participants were mostly positive about CLIL as a teaching practice (M = 4.39/5.00). They recognised its benefits for both teacher development and student learning, and unanimously supported the continuation of CLIL requirements. Engaging in practical experience appears to have validated CLIL's theoretical benefits for the participants. Findings suggest that successful CLIL implementation in Thai EFL contexts requires not only institutional support but also reformed teacher education that emphasises classroom language. Furthermore, successful implementation depends on collaborative efforts and context-specific resource development.
Keywords	CLIL, student teachers, Thai EFL classrooms, mixed-methods, teacher education
APA citation:	Sutthiroj, W. & Chantarasiri, P. (2026). Are they ready to speak English with students? A CLIL adaptation to Thai EFL classrooms. *PASAA*, *72*, 110–132.

1. Introduction

The teaching of English as a foreign language (EFL) continues to receive global attention due to its crucial role in international communication. The Thai government has prioritised English language instruction as part of its ongoing education reform. Significant initiatives, such as the 1999 National Education Act, underscored the importance of English language proficiency for international engagement. Thailand later adopted the Common European Framework of Reference for Language (CEFR) in 2014 to align national language education standards with its descriptors (Ministry of Education, 2014). However, significant

challenges remain on the path to improving Thai students' English proficiency. One international indicator, the 2024 Education First English Proficiency Index (EF EPI), which is based on voluntary online test participation, places Thailand 106th out of 116 non-native English-speaking countries and categorises the country as having "very low proficiency" (EF Education First, 2024). This ranking that has frequently been cited in public discourse to highlight ongoing challenges in English language education and stimulate discussion on pedagogical reform.

However, the implementation of English Language Teaching (ELT) has encountered practical difficulties within the Thai educational context. Student teachers, defined as fourth-year pre-service teachers undertaking their teaching practicum, particularly those in a public teacher education university in southern Thailand, are required to teach English despite Thai being the dominant language in education. As non-native English speakers, these student teachers face particular challenges when teaching, especially to young students who may have limited grasp of English. The challenges are not just linguistic; they also include pedagogical adjustments and cultural barriers. For example, many Thai teachers in the EFL context have struggled to adapt the principles of Communicative Language Teaching (CLT) effectively. They often report reliance on more teacher-centred instructional approaches, a pattern that has been associated with limited English exposure and restricted professional development opportunities in EFL contexts (Suwannoppharat & Chinokul, 2015). Educational norms that give priority to teacher authority and examination-oriented instruction may shape classroom interaction patterns in contexts where communication approaches are less familiar.

In response to ongoing efforts to integrate language development with meaningful classroom engagement, Content and Language Integrated Learning (CLIL) has gained prominence as one educational approach within EFL contexts (Coyle, Hood, & Marsh, 2010; Dalton-Puffer, 2011). CLIL employs a dual-focused methodology in which language and content objectives are intentionally integrated within classroom instruction (Coyle, Hood, & Marsh, 2010). In the Thai EFL context, this integration commonly occurs within English language classrooms, where selected subject-related themes are embedded into language lessons rather than delivered as full subject immersion (Charunsri, 2019; Suwannoppharat & Chinokul, 2015). This study adopts this language-led adaptation of CLIL as its operational definition. In the Thai educational context, CLIL addresses the need for higher English proficiency by contextualising language learning within academic content, leading to deeper engagement and improve outcomes in both the target language and subject matter (Charunsri, 2019; Suwannoppharat & Chinokul, 2015).

The pedagogical foundation of this study draws on two interrelated CLIL frameworks: the 4Cs Framework (Coyle, 2007) and the Language Triptych (Coyle, Hood, & Marsh, 2010). The 4Cs provide a macro-level planning structure, while the Language Triptych offers a detailed perspective for analysing classroom language needs. These models were selected as the analytical backbone of this research because they operationalise the complex dual focus of CLIL into practical planning components. This allows for a detailed analysis of student teachers' pedagogical design. Together, these frameworks provide a structured lens for investigating how student teachers understand and implement CLIL, address linguistic-cognitive demands, and reflect on pedagogical effectiveness. However, translating these theoretical principles into classroom practice often presents practical and contextual challenges.

Despite its potential, the implementation of CLIL in Thailand presents pedagogical and contextual challenges, particularly for teachers who must integrate both content and language objectives within existing institutional constraints. While CLIL has been increasingly examined in Thai educational contexts, existing studies have primarily focused on policy initiatives, in-service teachers, or tertiary-level implementation (Charunsri (2019); Suwannoppharat & Chinokul (2015); Tachaiyaphum et al. (2023). Less attention has been given to how non-native English-speaking student teachers operationalise CLIL during their practicum in English language classrooms. In particular, there remains limited empirical evidence on how theoretical frameworks such as the 4Cs and the Language Triptych are translated into classroom-level pedagogical decisions in resource-constrained government schools. This study addresses this gap by investigating the challenges, strategies, and perceptions of fourth-year English major student teachers implementing a language-led CLIL adaptation in Thai EFL classrooms.

This study investigates how non-native English-speaking student teachers in Thailand implement CLIL in primary and lower secondary English language classrooms. Focusing on the practical realities of EFL instruction, this study aims to understand how these student teachers manage pedagogical demands and navigate linguistic challenges. Importantly, these two theoretical models serve as complementary analytical lenses. The Language Triptych is utilised to interpret the specific linguistic challenges and strategies identified in Research Questions 1 and 2, while the 4Cs Framework underpins the analysis of student teachers' broader perceptions of CLIL components examined in Research Question 3. The significance of this research lies in its potential to inform teacher education programmes and policy decisions regarding CLIL implementation in similar EFL contexts. This study addresses the following research questions:

1) What are the challenges faced by student teachers who use CLIL in EFL classrooms?
2) What strategies are employed by student teachers to implement CLIL?
3) What are the perceptions of student teachers about the use of CLIL in EFL classrooms?

2. Literature Review

This section reviews key areas relevant to the study of student teachers' experiences with CLIL in the context of Thai education. It begins by establishing the theoretical framework of the study, specifically the 4Cs, the Language Triptych, and the Soft CLIL model. Next, it explores issues related to teacher preparation, particularly the challenges faced by student teachers in implementing CLIL. The review then highlights common obstacles in CLIL practice, including language proficiency, content integration, and time management. It also presents a range of instructional strategies that support the implementation of CLIL, such as scaffolding, visual aids, and task-based learning. Finally, the section examines the perceptions of CLIL, with attention to student teachers' attitudes, motivation, and readiness to use this approach in real classroom settings.

2.1 CLIL in Thai Classrooms

Content and Language Integrated Learning is defined as a dual-focused educational approach conceptually underpinned by the 4Cs Framework: Content (subject matter),

Communication (language interaction), Cognition (thinking skills), and Culture (intercultural awareness) (Coyle, 2007). In this study, the 4Cs serve as the structural basis for analysing how student teachers design holistic lessons. However, successful integration of these components relies heavily on how teachers manage linguistic demands, which is operationalised through the Language Triptych (Coyle, Hood, & Marsh, 2010). The Triptych distinguishes between the Language of Learning (subject-specific vocabulary), Language for Learning (instructional language needed to manage tasks), and Language through Learning (emergent language developed during cognitive engagement). This framework provides the necessary analytical lens to identify specific pedagogical barriers.

Recent empirical studies in the Thai context further demonstrate that while teachers generally express positive attitudes toward CLIL, concerns regarding pedagogical readiness and classroom language competence remain persistent (Charunsri & Sripicharn, 2023; Tachaiyaphum et al., 2023). In addition, contextual investigations have shown that implementation is often shaped by institutional constraints, curriculum structure, and varying levels of collaborative support within schools (Prabjandee & Kewara, 2023). Charunsri and Sripicharn (2023) point out that this challenge specifically involves the instructional scaffolding required to make content accessible to young learners. Similarly, Htay and Ngonkum (2024) emphasise that without specific training in these dual-focused strategies, teachers often revert to traditional methods due to time constraints. Furthermore, Tseng (2025) argues that in non-native settings, the Communication element of the 4Cs requires extensive visual scaffolding to bridge the gap between abstract concepts and limited English proficiency. To address these challenges within the Thai context, this study focuses on Soft CLIL, a language-led model where English teachers incorporate subject content to create meaningful contexts, rather than teaching the subject for its own sake (Bentley, 2010). Unlike Hard CLIL (subject-led), Soft CLIL allows student teachers to prioritise the Language Triptych, ensuring that the Language for Learning is established before increasing content complexity. Charunsri (2019) notes that this model is particularly viable in Thailand as it aligns with national English proficiency goals while respecting local proficiency limitations. Additionally, Lukáčová (2020) suggests that Soft CLIL serves as a critical bridge for student teachers, enabling them to experiment with content integration and scaffolding strategies without the overwhelming cognitive load of full subject immersion.

2.2 Preparation and Training for CLIL

Effective CLIL instruction requires that teachers possess the pedagogical agility to scaffold both content and language simultaneously. However, a significant gap remains between theoretical preparation and practical application in Thai teacher education. Recent studies indicate that while pre-service programmes introduce CLIL concepts, they often lack the hands-on training required to manage the complex cognitive load of dual-focused lessons (Charunsri & Sripicharn, 2023; Tachaiyaphum & Sukying, 2017). Consequently, student teachers frequently feel underprepared to design materials or manage classroom interaction in English, leading to linguistic insecurity, where the fear of making errors inhibits effective delivery.

To address these deficiencies, researchers argue that traditional lecture-based training is insufficient. Meesuk et al. (2021) advocate for the integration of Professional Learning Communities (PLCs) and mentorship programmes, which allow student teachers to observe

and practice specific CLIL strategies such as input modification and checking for understanding in supportive environments. Furthermore, strengthening the link between theory and practice requires curriculum adjustments that prioritise classroom language proficiency (the ability to give clear instructions) over general academic English. Without these targeted interventions, student teachers are likely to struggle with the practical realities of integrating content and language in diverse EFL classrooms.

2.3 Challenges Experienced by Student Teachers in CLIL Contexts

From the perspective of classroom practitioners, CLIL-related challenges are experienced as pedagogical, linguistic, and contextual demands that influence instructional decision-making. Implementing CLIL in Thai classrooms presents complex challenges. According to Charunsri and Sripicharn (2023), a primary obstacle is the lack of Language for Learning, or the instructional vocabulary needed to explain concepts and manage behaviour, which significantly undermines student teachers' confidence. This insecurity often results in a cycle of oversimplification where teachers reduce linguistic input, inadvertently limiting students' exposure to the rich language necessary for development (Suwannoppharat & Chinokul, 2015; Tarasenkova et al., 2020). Furthermore, the studies also reveal that managing the cognitive load of students with mixed abilities often overwhelms student teachers who are still developing basic classroom management skills.

Beyond linguistic proficiency, the fundamental pedagogical challenge lies in balancing content and language objectives. Designing lessons that seamlessly integrate subject matter with accessible linguistic input requires a level of expertise often beyond the reach of student teachers, who struggle to determine exactly how much language support is necessary for specific content concepts. This balance act is significantly complicated by logistical constraints. Htay and Ngonkum (2024) identify time pressure and the scarcity of ready-made resources as primary obstacles, forcing teachers to construct their own dual-focused materials from scratch. This burden is further compounded by the need for cultural adaptation; Keeratisuntorn and Sukavatee (2023) argue that effective CLIL materials in Thailand should be both linguistically appropriate and culturally contextualised, a requirement that adds a substantial layer of complexity to an already demanding planning process.

2.4 Instructional Strategies in CLIL

To respond to the dual linguistic and cognitive demands of CLIL, teachers apply instructional strategies that make lessons comprehensible and engaging. One widely recommended strategy is scaffolding, which includes techniques such as modelling, sentence frames, and guided practice to help students gradually develop understanding (Charunsri & Sripicharn, 2023). This is particularly crucial in EFL contexts where students cannot rely on extensive prior English knowledge. To reduce cognitive load, visual scaffolding such as images, diagrams, and charts is essential. Tseng (2025) highlights that when students link meaning to visual cues, they can process both subject matter and language simultaneously. Such strategies are often adopted to mitigate the instructional complexity inherent in CLIL classrooms.

Task-based learning (TBL) also plays a central role in CLIL implementation. TBL involves students working on meaningful activities, such as mini-projects or problem-solving tasks, which encourage authentic language use while engaging with content (Richards &

Rodgers, 2014). This approach aligns well with collaborative learning strategies, such as pair and group work, which create opportunities for students to interact in English and support each other in grasping concepts. These practices promote communication and peer assistance, which are essential for the success of CLIL in large classes.

Lastly, effective CLIL instruction requires structured assessment mechanisms. Regular review and formative assessment allow teachers to identify and address both content and language gaps before they become barriers to learning (Lukáčová, 2020). By integrating frequent comprehension checks and reinforcing key vocabulary, teachers can maintain student progress and adjust their support strategies to meet diverse learner needs. However, much of the existing research on CLIL instructional strategies has focused on in-service teachers or established programmes (Charunsri, 2019; Suwannoppharat & Chinokul, 2015; Tachaiyaphum et al., 2023), leaving limited insight into how student teachers adapt such strategies during practicum.

2.5 Perceptions of CLIL

Student teachers in Thailand generally hold positive views of CLIL, recognising its potential to enhance language learning, support content understanding, and increase motivation (Taylor, 2022; Tachaiyaphum & Sukying, 2017). They value its promotion of meaningful language use in context and its alignment with broader goals of global competence. However, Thai student teachers often perceive Soft CLIL as more feasible because it allows for the flexible integration of content without requiring extensive curricular changes or full immersion, which can be overwhelming for novice educators (Charunsri & Sripicharn, 2023; Lukáčová, 2020).

The preference for Soft CLIL is largely pragmatic. It enables teachers to adjust the balance between content and language according to students' proficiency levels and permits the use of L1 support when necessary to reduce cognitive load (Yang, 2016). Nevertheless, concerns regarding preparedness remain prevalent. Despite positive attitudes, student teachers often report linguistic insecurity and feel underprepared to deliver content effectively in English, highlighting a continued need for training that builds both pedagogical skills and linguistic confidence (Charunsri & Sripicharn, 2023; Tachaiyaphum & Sukying, 2017 Suwannoppharat & Chinokul, 2015). While these studies highlight generally positive perceptions of CLIL, fewer investigations have examined how such perceptions develop through practicum experience among student teachers in Thai EFL contexts.

To sum up, the reviewed literature suggests that CLIL implementation should be viewed not only as a policy or curricular innovation but also as a pedagogical process implemented through classroom interaction and instructional design. While the 4Cs Framework and the Language Triptych offer conceptual tools for analysing content–language integration, relatively limited empirical research has examined how student teachers operationalise these constructs during practicum in Thai EFL classrooms. This gap informs the focus and design of the present study.

3. Methodology

This section explained the method used to study student teacher's experiences with CLIL in Thai EFL classrooms.

3.1 Research Design

A mixed-methods design was employed to comprehensively explore students' experiences with CLIL implementation in EFL classrooms. The research used a parallel design, in which quantitative data were collected through structured questionnaires and qualitative insights were obtained from semi-structured interviews. This approach facilitated an inclusive understanding of the challenges encountered, strategies implemented, and perceptions developed by student teachers during their teaching practicum in authentic classroom contexts.

The mixed-method design maximised on the strength of both quantitative and qualitative approaches. Quantitative data provided overall patterns and trends among participants, while qualitative data revealed deeper insights into personal experiences and contextual factors influencing individual adaptations to CLIL. The convergent parallel design enabled simultaneous data collection, ensuring efficient use of the limited time available with participants following practicum completion. This approach also allowed for cross-verification of results, which enhanced the validity and reliability of the findings.

3.2 Setting and Participants

The study was conducted within a public teacher education university in southern Thailand, focusing on student teachers undertaking their practicum placements at local government schools in Surat Thani Province. This research setting provided an authentic educational environment for observing and analysing CLIL implementation within the Thai educational framework. Student teachers were assigned to various government schools throughout Surat Thani, teaching at both primary and lower secondary levels. This arrangement offered diverse contexts for CLIL implementation and enabled examination of the approach across different educational levels within the same provincial system.

The participants included 53 fourth-year student teachers majoring in English who were enrolled in teaching practicum courses during the academic year 2024. These student teachers were at an advanced stage of pedagogical training and demonstrated English proficiency suitable for CLIL implementation. The course included structured preparation which provided the pedagogical and linguistic foundation necessary for participants to attempt CLIL implementation during their practicum.

The participant demographics showed a predominantly female sample (n = 46, 86.8%), reflecting the general gender distribution in Thai teacher education programmes. Participants demonstrated early exposure to English, with most beginning their English studies in Kindergarten (n = 27, 50.9%) or Primary 1 (n = 18, 34.0%) at a mean age of 5.36 years (SD = 2.03). They maintained strong academic performance with a mean GPA of 3.64 (SD = 0.21). Regarding English proficiency, the majority were at B1 level (n = 34, 64.2%) with others at B2 (n = 15, 28.3%), indicating intermediate proficiency appropriate for CLIL implementation.

Before beginning their teaching practicum, all participants received comprehensive preparation at the Faculty of Education. During one term of microteaching at the university, they were specially trained to teach English using CLIL. The preparatory programme included several key components: language teaching methods, which focused on evidence-based approaches to English instruction and the integration of content and language objectives; CLIL-specific instruction on its principles, the 4Cs framework, and theory; practical teaching techniques and strategies for CLIL classrooms, such as scaffolding, input modification, and

output facilitation; classroom management skills for maintaining student engagement when teaching content through a second language.

During the practicum, participants completed two terms of teaching practice, each lasting four months, for a total of eight months of hand-on classroom experience. Departmental policy required student teachers to teach exclusively in English, which was consistent with CLIL principles and created an optimal context for examining their adaptation process. In this study, CLIL refers to the integration of selected subject-related themes within English language lessons rather than full subject immersion. For the qualitative interview component, twelve student teachers were purposively selected from the larger sample to provide in-depth insights. Selection criteria included willingness to participate and diversity in teaching experiences across both primary and lower secondary levels.

3.3 Instruments

The study employed a mixed-methods approach to ensure cross-validation, combining quantitative and qualitative measures to capture both a broad statistical overview and in-depth personal insights.

Questionnaire

A 5-point Likert scale questionnaire, adapted from Tachaiyaphum and Sukying (2017), was employed to collect quantitative data regarding student teachers' perceptions of CLIL implementation. This specific instrument was chosen because its dimensions align with the 4Cs framework (Content, Communication, Cognition, and Culture) and the specific context of EFL teacher training. The questionnaire consisted of 35 items organised into five key dimensions: (1) concepts and principles, (2) perceived benefits and outcomes, (3) implementation requirements and challenges, (4) implementation responsibility, and (5) training and preparation preferences. The instrument was distributed electronically via Google Forms for efficiency in data collection.

Semi-Structured Interviews

Semi-structured interviews were conducted by the researchers to gain qualitative insights into student teachers' personal experiences. The interview protocol consisted of six main questions exploring overall perceptions, implementation challenges, causes of difficulties, coping mechanisms, strategic solutions, and teacher preparation recommendations. These interviews allowed for flexibility and rich contextual information that complemented the questionnaire findings. During this process, the researchers acted as supervision teachers. While classroom visits occurred as part of practicum supervision, observational impressions were not systematically recorded or analysed as research data.

3.4 Validity and Ethical Considerations

Content validity for both instruments was established through Index of Item-Objective Congruence (IOC) analysis conducted by three experts in the field of teacher education. The experts evaluated each item for relevance, clarity, and alignment with research objectives, ensuring that the instruments accurately measured the intended constructs. Items that did not meet the acceptable IOC threshold of 0.67 were revised or removed to enhance validity.

Internal consistency reliability of the questionnaire was assessed using Cronbach's alpha. The overall reliability coefficient was $\alpha = .893$ ($N = 53$; 35 items), indicating high internal consistency.

Regarding ethics, the study underwent a comprehensive consideration process before data collection commenced. Participants were fully informed about the research purpose, procedures, risks, and benefits through information sheets in English and Thai. Written informed consent was obtained, emphasising voluntary participation and the right to withdraw at any time. All data were anonymised and coded by the researchers to protect participant identity and maintain strict confidentiality.

3.5 Data Collection and Analysis

The data collection for this study was systematically conducted in two phases, specifically scheduled following the completion of the participants' two-term teaching practicum. This timeline was strategic, ensuring that all participants could provide reflections and perceptions rooted in substantial, first-hand classroom experience.

In the first phase, which focused on quantitative data, a questionnaire was distributed electronically via Google Forms to all 53 eligible participants who had fulfilled their practicum requirements at government schools across Surat Thani. A one-week response period was established to ensure timely completion following practicum, supported by follow-up reminders to maximise response rate. The second phase involved a qualitative inquiry where twelve participants were purposively selected for semi-structured interviews. This selection process was designed to capture a broad and diverse range of implementation experiences across various educational levels. These sessions, which lasted approximately 30 to 45 minutes each, were conducted using a combination of English and Thai. This bilingual approach was essential in allowing participants to express the complexity of their practicum experiences with clarity and depth.

Regarding the data analysis procedures, the study employed a convergent parallel mixed-methods design. Quantitative and qualitative data were collected and analysed separately, then brought together during interpretation. Both datasets were analysed independently. Questionnaire data identified overall patterns and trends across the cohort, while interview data provided in-depth explanations and contextual elaboration of those patterns. The two sets of results were compared, and any similarities or differences are discussed in the Findings and Discussion section to provide a comprehensive understanding of the research problem.

For the quantitative analysis, data from the closed-ended questionnaire items were processed using Microsoft Excel. The analysis utilised descriptive statistics, including mean scores (M), standard deviations (SD), and frequency distributions, with a primary focus on identifying patterns, trends, and consistency across the five key dimensions of CLIL perception. Simultaneously, the qualitative analysis involved a systematic content analysis of the interview transcripts. This process included both an explicit analysis of stated challenges and a latent analysis of underlying meanings. The data were categorised into meaningful themes related to challenges, coping strategies, and recommendations, which allowed for the identification of clear patterns across the participants' responses. The analysis followed an inductive coding procedure. Transcripts were read multiple times to identify recurring meaning units, which were then assigned initial codes. These codes were reviewed, refined,

and grouped into broader themes aligned with the research questions. Coding decisions were revisited to ensure consistency across transcripts and coherence within thematic categories.

4. Findings and Discussion

4.1 Research Question 1: Challenges Faced by Student Teachers

The questionnaire data revealed significant insights about the challenges faced by student teachers, particularly reflected in the section on *What CLIL requires*, which received the lowest overall mean score (M = 3.79, SD = 0.58) among all perception categories, indicating these areas as the most challenging aspects of CLIL implementation.

Mean scores were interpreted according to the 5-point Likert scale, where 1 = strongly disagree and 5 = strongly agree. Higher mean scores indicate stronger agreement with the stated item.

Table 1

Section 3 - What CLIL requires (Challenges-related items)

Item	*Statement*	*Minimum*	*Maximum*	*M*	*SD*
Q21	CLIL requires more subject knowledge than English teachers possess.	2.00	5.00	3.87	1.02
Q22	CLIL requires more methodology knowledge than English teachers possess.	1.00	5.00	3.60	1.10
Q23	CLIL requires a lot of time to prepare and teaching.	1.00	5.00	3.72	0.99
Q24	CLIL requires new teaching materials.	1.00	5.00	3.55	0.89
Q25	CLIL requires extensive administrative support.	1.00	5.00	3.45	1.10
Q26	CLIL requires the cooperation of the subject teachers.	1.00	5.00	3.74	1.02
Q27	CLIL requires collaboration with subject area specialists and language specialists to design the course.	1.00	5.00	4.09	0.90
Q29	CLIL is only possible only with intermediate students of English.	1.00	5.00	3.28	1.12

N=53

The quantitative findings align closely with existing literature concerning the challenges of CLIL implementation. The participants recognise the significant knowledge burden inherent in the approach. Student teachers demonstrated moderate agreement that CLIL requires a depth of subject knowledge (M = 3.87, SD = 1.02) and a level of methodological expertise (M = 3.60, SD = 1.10) that exceeds the typical requirements for standard English language teaching. These findings directly corroborate the observations of Tachaiyaphum and Sukying (2017), who argued that CLIL demands dual competencies, the ability to master academic content while

simultaneously facilitating language acquisition. The data suggests that student teachers do not view CLIL as a simple pedagogical addition, but rather as a fundamentally different and more demanding mode of instruction. However, unlike prior studies that primarily examined perceptions (Charunsri & Sripicharn, 2023; Tachaiyaphum & Sukying, 2017), the present findings provide classroom-level evidence of how linguistic insecurity manifests during practicum implementation, thereby extending existing research from attitudinal accounts to situated pedagogical realities.

Furthermore, the higher standard deviations observed in these items (SD > 1.00) indicate a substantial variability in confidence levels across the cohort, reflecting the heterogeneous preparation levels identified by Charunsri and Sripicharn (2023). This suggests that while some student teachers felt equipped to handle the dual demands of content and language, a substantial portion remained uncertain. In the Thai context, this variance highlights the need for more standardised, intensive training modules that move beyond general English pedagogy and into the specific, integrated methodologies required for successful CLIL delivery.

The semi-structured interview analysis revealed multiple interconnected challenges that provide empirical evidence for the theoretical barriers often discussed in CLIL literature. These difficulties were not merely linguistic but extended into the psychological and systemic domains, categorised into three primary areas: language-related, student-related, and contextual challenges. To maintain anonymity, participants are referred to by codes ranging from ST1 to ST12, where *"ST"* denotes Student Teacher.

Language-Related Challenges: The Gap Between Theory and Practice

A critical challenge identified by participants was the struggle with vocabulary complexity, which directly illustrates the tension within Coyle's Language Triptych regarding the distinction between Language of Learning and Language for Learning. Student teachers found it difficult to simplify academic concepts for younger learners, often falling into the trap of direct translation from Thai. One participant explained, "The words were too difficult and not simplified. Teachers often translate directly from Thai to English. e.g., the word 'สื่อสาร' (communicate), instead of the simpler word 'talk'" (ST9, Grade 8). This reveals a significant disconnect between the formal academic preparation received at the university level and the practical demands of a primary or secondary classroom. Participants further elaborated on this gap: "At university, we learned formal, complex terms, but in school we had to simplified. Academic English was less useful; simple words were enough" (ST3; ST6, Grade 7).

Beyond academic content, the most consistently reported difficulty was the delivery of procedural language, specifically giving instructions and explaining activities. A participant noted that "The hardest part of teaching in English was giving instructions, since activity vocabulary was not part of students' everyday language, unlike greetings or typical classroom phrases" (ST9, Grade 8). This was compounded by the participants' own perceptions of their limited vocabulary range. Confirming concerns raised by Tarasenkova et al. (2020), one participant admitted that "Teachers' vocabulary was limited, sometimes they could not find the right word" (ST11, Grade 3).

Student-Related Challenges

The implementation of CLIL was further complicated by the diverse realities of the mixed-ability classrooms and student attitudes. Participants struggled to maintain a high percentage of English use when faced with varying proficiency levels. One participant noted, "I used English about 50%, because the students' abilities varied. Often, only a few students understood, and they explained to their friends" (ST3, Grade 7). This reliance on peer translation, while helpful, highlights the difficulty of uniform CLIL implementation in a standard EFL setting.

Moreover, the affective dimension of learning, as emphasised by Dalton-Puffer (2011), emerged as a major barrier. Student teachers frequently encountered negative attitudes where "some refused to engage when they heard it was English class" (ST3, Grade 7). This lack of engagement was often rooted in a lack of confidence and a fear of social judgment. As a participant observed, "Confidence matters too. Some students mocked peers' mistakes or accents, so many held back from speaking" (ST2, Grade 1). These findings suggest that the success of CLIL in Thai classrooms depends heavily on reducing the affective filter and creating a safe psychological space for linguistic experimentation.

Contextual and Systemic Challenges

The study identified significant contextual barriers that isolated the CLIL classroom from the broader school and home environments. One participant highlighted a lack of institutional synergy, stating, "Other teachers in the school did not use English, so my class was isolated" (ST10, Grade 5). This isolation contradicts the holistic vision of CLIL, where language use is meant to be integrated across the curriculum.

The challenge was intense by a disconnect with the students' home environments, where a lack of parental support or even active dismissal of the language's importance occurred. One participant provided a particularly poignant example: "At home, parents could not help with English. Some even dismissed it, which reduced students' confidence" (ST11, Grade 3). These systemic issues were further intensified by resource constraints. Confirming observations by Htay and Ngonkum (2024), several participants reported that "Some schools lacked technology, so teachers had to create all materials by hand" (ST4, Grade 5; ST5, Grade 3; ST6, Grade 7). Together, these contextual factors suggest that for CLIL to be sustainable, it requires an institutional commitment that extends beyond the individual efforts of student teachers.

4.2 Research Question 2: Strategies Employed by Student Teachers

The questionnaire data revealed student teachers' preferences for collaborative strategies and systematic approaches to CLIL implementation, as reflected in several relevant items across different sections.

Table 2

Collaborative Implementation Strategies

Item	*Statement*	*Minimum*	*Maximum*	*M*	*SD*
Q27	CLIL requires collaboration with subject area specialists and language specialists to design the course.	1.00	5.00	4.09	0.90

Item	*Statement*	*Minimum*	*Maximum*	*M*	*SD*
Q28	CLIL can be achieved by a team working collaboratively to choose an appropriate theme and identify key concepts and processes.	3.00	5.00	4.28	0.74
Q31	CLIL should be implemented by subject teachers.	1.00	5.00	3.57	1.12
Q32	CLIL should be implemented by language teachers.	1.00	5.00	3.87	0.98
Q33	CLIL should be implemented by language teachers in collaboration with subject teachers.	3.00	5.00	4.57	0.64

N=53

The study found the highest level of agreement for the collaborative implementation of CLIL between language and subject teachers (M = 4.57, SD = 0.64). This preference was significantly higher than for implementation by subject teachers alone (M = 3.57, SD = 1.12) or language teachers alone (M = 3.87, SD = 0.98).

The preference for a team-based approach arises from the inherent complexity of CLIL, which requires a dual focus on both academic content and linguistic proficiency. Individually, subject teachers may lack the specialised pedagogical knowledge to support language acquisition, while language teachers often face challenges in delivering complex subject-specific content. By collaborating, subject teachers can ensure the accuracy and depth of the content, while language teachers facilitate the scaffolding necessary for students to access that content through a foreign language.

This synergy effectively addresses the knowledge gap often encountered in CLIL classrooms, leading to more balanced and successful integration as outlined in the 4Cs framework. Furthermore, this collaborative model reduces the professional isolation and high workload typically associated with individual CLIL implementation. Such findings strongly support advocacy for PLCs, as proposed by Meesuk et al. (2021), suggesting that sustainable CLIL success depends on institutional support for cross-disciplinary teacher partnerships.

The qualitative data from semi-structured interviews revealed that when student teachers encountered challenges, they developed adaptive strategies to overcome them. This demonstrates both creativity and resilience. These approaches reflect a transition from theoretical knowledge to a grasp of the pragmatics of real classrooms.

Scaffolding Strategies and Comprehension Supports

The most widely adopted strategy was the systematic use of scaffolding, specifically through gradual language introduction. This approach aligns with the scaffolding principles advocated by Charunsri and Sripicharn (2023), as student teachers recognised that a sudden immersion could frighten learners. One participant described this subtle transition: "I spoke slowly, used examples, gestures, making comparisons, and began with Thai before gradually reducing it to mostly English" (ST4, Grade 5). The intentionality behind this strategy shows a deep understanding of the learner's journey, with several participants expressing a clear theoretical foundation: “We began with classroom language, then increased English with

demonstrations. Students adapted over time" (ST1; ST3, Grade 7; ST9, Grade 8; ST10, Grade 5; ST11, Grade 3, ST12, Grade 8).

To further enhance comprehension, student teachers extensively employed multimodal communication, using non-verbal cues to bridge the linguistic gap. This was not merely a fallback, but a considered instructional choice: "If students didn't understand, I slowed down, gave examples or used gestures. This helped them remember vocabulary and content" (ST4, Grade 5). Such strategies indicate that student teachers were integrating the Communication and Cognition components of the 4Cs framework by ensuring that the medium of instruction did not become a barrier to the content itself.

Peer Support Strategies

Another dimension involved leveraging the social dynamics of the classroom through peer support strategies. This shift suggests that student teachers recognised they did not have to be the sole source of knowledge. One participant explained how this empowered both high and low-achieving students: "I used peer support, students who understood helped classmates, which also reinforced their own learning" (ST11, Grade 3). By facilitating peer modelling, student teachers created a more inclusive environment: "I asked students who understand to demonstrate for classmates. Which improved comprehension" (ST12, Grade 8). This strategy is particularly significant in the Thai context, as it reduces the fear of teasing by normalising peer-to-peer interaction in the target language.

Preparation and Practice Strategies

The interviews highlighted that the success of CLIL was not accidental but was built upon extensive preparation and rehearsal. Participants emphasised that "Preparation was essential. We planned both content and English delivery, especially practicing instruction to be fluent" (ST9, Grade 8; ST10, Grade 5; ST12, Grade 8). This focus on instructional fluency shows a high level of professional responsibility. Vocabulary rehearsal was singled out as a critical survival strategy: "I rehearsed key words and instructions, choosing examples from daily life" (ST12, Grade 8). This preparation was further refined through an active reflective practice. Student teachers demonstrated an ability to adjust their teaching in real-time based on student feedback: "If students understood a word, I kept it; if not, I changed it in the next class" (ST9, Grade 8; ST10, Grade 5; ST11, Grade 3). This idea suggests that the teaching practicum served as a powerful site for developing pedagogical judgment, where strategies were constantly tested and refined.

Adaptive Teaching Strategies

Student teachers developed strategies aimed at changing student mindsets toward English. Recognising that the affective filter is often the greatest barrier in Thai EFL classrooms, they used consistent exposure to foster a natural shift: "Using English daily gradually and naturally changed student mindset and boosted confidence" (ST1; ST6, Grade 7). They strategically connected learning to popular culture to lower resistance: "I used student interests, like international songs, to make English feel close and engaging" (ST4, Grade 5).

Furthermore, they handled errors with a gentle correction strategy that modelled the target language without discouraging the learner. One participant explained: "I insisted on speaking English. When students used Thai like saying colours in Thai, I replied in English,

'Yes, Yellow, Green, Pink,' so they learned to switch" (ST5, Grade 3). This technique of recasting shows an understanding of language acquisition, where the teacher maintains the flow of communication while providing the correct linguistic model, ultimately building the student's confidence to engage with CLIL.

4.3 Research Question 3: Perceptions of Student Teachers

The questionnaire data revealed predominantly positive perceptions across all five examined aspects of CLIL implementation, with variations in the degree of agreement providing insights into areas of strength and concern.

Table 3

Overall Perceptions Summary

Section	*Aspect*	*Minimum*	*Maximum*	*M*	*SD*
S1	Perceptions of what CLIL is (Q1-Q5)	2.80	5.00	4.39	0.50
S2	Perceptions of what CLIL provides (Q6-Q20)	3.20	5.00	4.19	0.46
S3	Perceptions of what CLIL requires (Q21-Q30)	2.70	5.00	3.79	0.58
S4	Perceptions of who should implement CLIL (Q31-Q33)	2.33	5.00	4.00	0.65
S5	Perceptions of where CLIL teachers should be trained (Q34-Q35)	2.50	5.00	4.28	0.72

N=53

Section 1, which focuses on the conceptual foundations of CLIL, received the highest overall rating (M = 4.39, SD = 0.50). Participants demonstrated particularly strong agreement with core principles, specifically regarding language as both content and a medium of instruction (M = 4.57, SD = 0.60) and the dual role of language for learning and communication (M = 4.62, SD = 0.63). These results signify a substantial internalization of Coyle's 4Cs Framework (2007). The high scores in these items suggest that student teachers have moved beyond a traditional view of language as an isolated subject, embracing Coyle's notion that cognition and communication must be embedded within a specific content context to foster deep learning. The strong alignment with language for learning and language through learning reflects an understanding of the Language Triptych, where language is not just a target but a functional tool for knowledge construction.

Furthermore, this alignment may serve as an indicator of emerging internationalization in teacher education. By engaging with recognised CLIL frameworks (Coyle et al., 2010; Marsh, 2002), Thai student teachers are beginning to develop a global pedagogical language. This internalization suggests that the local educational context is making efforts to align with international quality standards, such as the CEFR. When student teachers perceive the potential of CLIL as a tool for both linguistic and professional development, it reflects a broader curricular orientation toward preparing educators who can operate within increasingly internationalised academic environments (Dalton-Puffer, 2011). However, while previous

studies have reported generally positive attitudes toward CLIL in Thai contexts (Charunsri & Sripicharn, 2023; Tachaiyaphum & Sukying, 2017), the present study demonstrates how these perceptions evolve through practicum experience, revealing a shift from theoretical optimism to pragmatic awareness.

Section 2, which examines the perceived outcomes of CLIL, showed high overall agreement (M = 4.19, SD = 0.46). The strongest support was found for integrated learning outcomes (M = 4.55, SD = 0.67) and CLIL's role in developing higher-order thinking skills (M = 4.51, SD = 0.58). These perceptions align closely with Dalton-Puffer's (2011) arguments regarding the cognitive benefits of CLIL. This alignment exists because CLIL creates a cognitive challenge that goes beyond mere linguistic imitation. When students are required to process complex subject matter through a foreign language, they are naturally pushed toward Cognitive Discourse Functions (CDFs) such as defining, classifying, and evaluating which Dalton-Puffer identifies as essential for academic success.

The high agreement in this study indicates that student teachers recognise that CLIL does not just add a language layer to content, but actually enhances the quality of thinking by forcing learners to struggle with and internalise concepts more deeply. This meaning-making process requires more intense mental processing than traditional language classes, thereby fostering the development of the Thinking component in the 4Cs framework. Furthermore, the participants' belief in integrated outcomes suggests an understanding that language and content are not competing for cognitive resources but are mutually reinforcing, as argued by Dalton-Puffer's notion that academic language proficiency is best developed through the demands of authentic academic content.

The findings derived from Sections 3, 4, and 5 provide critical insights into the practical implementation of CLIL. One of the most significant themes to emerge is the shift toward a realistic awareness of classroom demands. Section 3 received a lower mean score (M = 3.79, SD = 0.58), indicating a pragmatic rather than idealistic view of CLIL. This shift from theoretical optimism to realistic awareness suggests that the participants' teaching practicum served as a reality check. In the Thai EFL context, student teachers often face barriers such as limited linguistic confidence and the high cognitive load of managing both content and language simultaneously. The data suggests that as student teachers move from theory to practice, they recognise that CLIL requires more than just language proficiency; it demands advanced scaffolding and classroom management skills that are often underestimated in university coursework.

In terms of strategic solutions, the high agreement in Section 4 (M = 4.00, SD = 0.65) regarding implementation responsibility highlights a clear strategic preference for collaboration. The strong favour for collaborative implementation (M = 4.57) over individual efforts, whether by language teachers (M = 3.87) or subject teachers (M = 3.57), reflects a strategic choice to reduce the expertise gap. This preference likely stems from a sense of pedagogical isolation when teachers attempt to master two distinct domains alone. By advocating for a team-based approach, participants are proposing a structural strategy to distribute the cognitive and preparatory burden. While this aligns with the foundational work of Coyle et al. (2010), in the Thai context, it specifically suggests that the strategy of PLCs is seen as a survival mechanism for new teachers navigating complex curricular changes.

Furthermore, the perceptions revealed in Section 5 strongly support the necessity for formal and continuous teacher preparation (M = 4.28, SD = 0.72). Participants felt that neither

university training (M = 4.34) nor ministry-led workshops (M = 4.23) alone are sufficient to meet the demands of the field. This indicates that student teachers view CLIL competence not as a skill acquired during pre-service years, but as a developing professional identity. In the Thai context, where educational policies often change rapidly, student teachers speculate that ongoing, ministry-supported training is essential to ensure that the internationalization of the curriculum is sustainable. Their perception reflects an understanding that successful CLIL implementation is an institutional journey rather than an individual task, supporting the call for continuous professional learning. Overall, these findings suggest that for CLIL to be effectively implemented in Thai EFL contexts, teacher education programmes may need to place greater emphasis on facilitating collaborative practice alongside theoretical instruction on the 4Cs framework. The participants' perceptions reflect not only existing literature but also contextually grounded responses to the practical challenges encountered in Thai classrooms.

The qualitative data from semi-structured interviews provide a deep exploration of the lived experiences of student teachers, offering critical insights into the complexity between their theoretical training and the practical realities of the classroom.

Comfort Zone and the Reality of Classroom Challenges

Despite a generally positive outlook, the interviews revealed significant ground-level challenges. Participants noted that English-only instruction pushes them out of their comfort zone, transitioning the challenge from purely linguistic task to a struggle for professional confidence. "Our goal is to teach English for practical use. As Thai teachers, English-only teaching pushes us out of our comfort zone. We must ask ourselves, 'How would I phrase this in English?' which helps us build vocabulary instead of reverting to Thai. It's a learning process for us too" (ST3, Grade 7; ST7, Grade 9). This cognitive load was often perceived as linguistic burden of the practicum; however, participants observed a practical benefit, noting that "Preparing to teach in English refreshed forgotten vocabulary and improved accuracy" (ST9, Grade 8; ST10, Grade 5).

Furthermore, the contextual reality of Thai government schools where student teachers often face a fear of teasing (ST2, Grade 1; ST6, Grade 7) or lack of authentic environments – lessen their initial enthusiasm with a sense of reality. While a participant viewed 100% English use as an excellent goal, stating that "Teachers must practice first to build confidence in future generation" (ST1, Grade 7), others argued for more realistic implementation. They advocated for a balanced approach, noting that "Using English 100% daily may not be possible, but one 'English Day' or 50% use is more realistic" (ST6, Grade 7; ST7, Grade 9).

Strategic adaptation through Scaffolding and Reciprocal Growth

Participants developed specific strategies to cope these challenges, focusing on preparation and scaffolding. By moving away from traditional translation toward natural absorption, student teachers found that learners were able to internalise content and vocabulary more effectively. Participants recognised these pedagogical benefits, observing that "Students absorbed content and vocabulary naturally through classroom English, even without translation" (ST9, Grade 8; ST10, Grade 5). This shift was supported by intensive self-training; participants emphasised the strategic importance of developing specific linguistic preparation: "We need more vocabulary training. Instructors could provide sets of commands and instructions for practicum use" (ST10, Grade 5; ST11, Grade 3; ST12, Grade 8).

These strategies also addressed the affective domain of learning. Participants recognised that using English was a reciprocal process: "Using English increased confidence for both teachers and the students, reducing fear of teasing" (ST2, Grade 1; ST6, Grade 7). Another participant further advocated this mutual benefit, stating, "Using English develops both teacher and student skills. I became more fluent, and students understood me better" (ST3, Grade 7). This strategic shift suggests a move toward experiential learning, where participants suggested that training should "invite actual teachers from elementary and secondary levels to share their real classroom experiences with English teaching" (ST9; ST12, Grade 8).

Perceptions of Curriculum Reform and Professional Development

The perceptions of these student teachers reflect a mature professional judgment that acknowledges both the strengths of their current preparation and the urgent need for structural modification. There was a unanimous pedagogical conviction among all participants (ST1–ST12) that the department must continue its English-only requirement: "The department should continue to require student teachers to use English in their teaching practicum. I think learners perceived and learned English better than learning English through Thai" (ST1-ST12).

To contribute to the field's development, participants offered comprehensive recommendations for strengthening the pre-service curriculum. By proposing the addition of a second English Language Teaching course and the rotation of instructors, they sought exposure to more diverse pedagogical perspectives. Participants called to "add foreign teachers so we can practice with native speakers, and lecturers should use more English to prepare us for teaching" (ST9, Grade 8; ST11, Grade 3), reflecting a strategic request for authentic communication practice to enhance linguistic confidence.

While participants acknowledged that the existing curriculum prepares them with training to teach in English prior to the practicum, supporting their confidence and readiness for classroom instruction, they concluded that true CLIL competence requires a systematic and gradual transition. This would include more hands-on practicum opportunities and deeper immersion in varied pronunciation and teaching models to significantly strengthen their preparedness for the complex demands of CLIL pedagogy.

5. Implications

The findings of this study carry significant implications for multiple stakeholders involved in English language education in Thailand and similar EFL contexts.

5.1 Implications for Teacher Education Programmes

Teacher education institutions may need to reconsider aspects of their preparation for CLIL implementation. The identified disconnect between academic language preparation and practical classroom demands suggests the value of strengthening curriculum components that prioritise functional classroom language alongside academic proficiency.

Programmes should incorporate extensive practice in classroom language development through specific modules focusing on instruction delivery, activity explanation, and classroom management language. Student teachers need repeated practice in simplifying complex concepts and providing clear, age-appropriate instructions. The current one-term microteaching experience should be extended and intensified, with multiple opportunities to practice CLIL implementation with peer feedback and expert guidance.

Programmes should model the scaffolding strategies that student teachers will need to employ, gradually increasing English-medium instruction throughout their education to build comfort and competence. Rather than focusing solely on academic vocabulary, programmes should develop student teachers' repertoire of classroom language, including multiple ways to express common instructions, explanations, and feedback.

5.2 Implications for School Administration

School administrators play crucial roles in creating environments conducive to CLIL success. Schools should establish mentoring programmes pairing experienced teachers with CLIL implementers, creating professional learning communities focused on CLIL development.

Rather than mandating 100% English use, schools might adopt graduated implementation models, starting with designated English periods and gradually expanding as capacity builds. Regular workshops, peer observation opportunities, and access to CLIL resources should be provided to support ongoing teacher development. Schools should implement peer tutoring programmes and confidence-building initiatives to address the affective challenges identified in this study.

5.3 Implications for Classroom Practice

The strategies developed by student teachers offer valuable guidance for practicing teachers implementing CLIL. Teachers should plan systematic scaffolding progressions for each unit, gradually reducing L1 support as students develop comfort with English-medium instruction.

Visual aids, gestures, demonstrations, and technology should be integrated as standard components of CLIL lessons, not supplementary additions. Structured peer support should be built into lesson designs, leveraging stronger students as learning resources while reinforcing their own understanding. Teachers should actively incorporate student interests, popular culture, and local contexts to make English feel accessible and relevant.

6. Limitations and Future Research

6.1 Limitations

While this study provides valuable insights into CLIL implementation by student teachers in Thai EFL contexts, several limitations should be acknowledged. The study focused exclusively on fourth-year student teachers from a single university in Surat Thani, which may limit generalizability to other regions of Thailand or different teacher preparation programmes.

The reliance on self-reported data through questionnaires and interviews may be subject to social desirability bias, particularly given the departmental requirement for English-only instruction. Direct classroom observations would have provided additional validation of reported strategies and challenges.

The study captured student teachers' experiences at a specific point in their development, immediately following their practicum. Longitudinal data tracking their evolution as they transition to full-time teaching positions would provide deeper insights. The participants' relatively homogeneous background may not capture the full diversity of perspectives on CLIL implementation.

6.2 Future Research Directions

Future research should include longitudinal studies tracking student teachers from pre-service preparation through their first years of full-time teaching, illuminating how CLIL implementation strategies and perceptions evolve with experience. Comparative studies across different Thai contexts (urban/rural, different regions, various school types) would help identify context-specific factors and develop differentiated implementation models.

Empirical studies measuring the impact of CLIL on student language proficiency, content knowledge, and cognitive development in Thai contexts are needed. Research should examine both immediate and long-term effects, considering factors such as starting age, intensity of exposure, and implementation quality.

Studies investigating effective strategies for building parent and community support for CLIL would address the home environment challenges identified in this research. Research exploring how technology can address resource limitations and support CLIL implementation in under-resourced contexts would be valuable. Future research may also explore how CLIL implementation aligns with broader teacher knowledge frameworks such as TPACK, particularly in contexts where digital tools support content-language integration.

Research comparing different CLIL implementation models (Soft CLIL, Hard CLIL, partial immersion) in Thai contexts would help identify optimal approaches. Studies examining gradual implementation strategies, such as the English Day concept suggested by participants, could provide evidence for sustainable adoption models.

7. Conclusion

This mixed-methods investigation reveals that while Thai EFL student teachers recognise pedagogical value in CLIL despite facing substantial linguistic and contextual barriers. The practical classroom reality acts as a driver for professional growth; the challenges encountered do not diminish support for CLIL but instead foster advanced pedagogical creativity. Student teachers moved beyond theoretical frameworks to develop pragmatic scaffolding and peer-support strategies, proving that first-hand experience with CLIL's complexity strengthens rather than weakens their commitment to its implementation.

The findings suggest that CLIL adoption in the Thai context may require systemic institutional support alongside individual teacher effort. The findings highlight a significant gap between academic preparation and classroom realities, suggesting that successful CLIL adaptation requires a gradual and systematic transition rather than a sudden shift. This involves building institutional capacity through collaborative teacher networks and sustained professional development. In conclusion, the participants' positive perceptions of CLIL suggest that, when supported by reflective practice and appropriate institutional conditions, CLIL may hold potential for teacher education in Thailand and similar EFL contexts.

8. About the Authors

Wipada Sutthiroj is an English lecturer in the Department of Foreign Languages, Faculty of Liberal Arts, Rajamangala University of Technology Krungthep, Bangkok, Thailand. She received her Ph.D. in English as an International Language from Chulalongkorn University, Bangkok, Thailand. Her current research focuses on English for specific purposes, technology-enhanced language learning (TELL), with particular interests in gamification, artificial intelligence in language education, and teacher training.

Phanatdao Chantarasiri is an English lecturer in the Department of English, Faculty of Education, Suratthani Rajabhat University, Surat Thani, Thailand, and currently serves as Assistant to the President for International Affairs at the same university. She holds a Ph.D. in Education from the School of Education, Durham University, England. Her research interests include teacher education, teacher training, English language teaching methodology, and cooperative learning.

9. Declaration of AI Use

The authors used Consensus to assist with literature search and synthesis during the preparation of this manuscript. Transkriptor was used to transcribe interview data. The text was further reviewed using Grammarly to improve grammatical accuracy and clarity. All content was carefully checked and revised by the authors to ensure accuracy, coherence, and alignment with the intended academic purpose. The authors take full responsibility for the final version of the manuscript.

10. References

Bentley, K. (2010). *The TKT course CLIL module*. Cambridge University Press. https://doi.org/10.1017/9781009024792

Charunsri, K. (2019). The challenges of implementing content language integrated learning in tertiary education in Thailand: A review and implication of materials. *Advances in Language and Literary Studies, 10*(4), 125–129. https://journals.aiac.org.au/index.php/alls/article/view/5733

Charunsri, K., & Sripicharn, P. (2023). Effects of the content and language integrated learning (CLIL) training programme on Thai pre-service teachers' knowledge of CLIL approach, CLIL material design, and CLIL teaching. *International Journal of Education and Literacy Studies, 11*(4), 3–12. https://doi.org/10.7575/aiac.ijels.v.11n.4p.3

Coyle, D. (2007). Content and language integrated learning: Towards a connected research agenda for CLIL pedagogies. *International Journal of Bilingual Education and Bilingualism, 10*(5), 543–562. https://doi.org/10.2167/beb459.0

Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and language integrated learning*. Cambridge University Press.

Dalton-Puffer, C. (2011). Content-and-language integrated learning: From practice to principles? *Annual Review of Applied Linguistics, 31*, 182–204. https://doi.org/10.1017/S0267190511000092

EF Education First. (2024). *EF English proficiency index 2024*. https://www.ef.com/assetscdn/WIBIwq6RdJvcD9bc8RMd/cefcom-epi-site/reports/2024/ef-epi-2024-english.pdf

Htay, S., & Ngonkum, S. (2024). Exploring the effects of customized CLIL training on teacher competency: Insights from upper-secondary Biology teachers in Myanmar. *LEARN Journal: Language Education and Acquisition Research Network, 17*(2), 766–792. https://doi.org/10.70730/GVOX1384

Keeratisuntorn, S., & Sukavatee, P. (2023). The development of multicultural reading materials based on content and language integrated learning for Thai secondary school students. *An Online Journal of Education, 18*(2), 1–15. https://doi.org/10.14456/ojed.2023.16

Lukáčová, Z. (2020). Experience with and perception of CLIL by student teachers. *Society. Integration. Education. Proceedings of the International Scientific Conference, 5*, 482–493. https://doi.org/10.17770/sie2020vol5.4924

Marsh, D. (2002). *Content and language integrated learning: The European dimension-actions, trends and foresight potential*. European Centre for Modern Languages. https://www.ecml.at/Portals/1/resources/Articles%20and%20publications%20on%20the%20ECML/CLIL_EMILE.pdf

Meesuk, P., Wongrugsa, A., & Wangkaewhiran, T. (2021). Sustainable teacher professional development through professional learning community: PLC. *Journal of Teacher Education for Sustainability, 23*(2), 30–44. https://doi.org/10.2478/jtes-2021-0015

Ministry of Education. (2014). *The guidelines on English language teaching and learning reforming policy*. Bangkok: Chamjureeproducts Ltd.

Prabjandee, D., & Kewara, P. (2023). Trajectories of learning to become CLIL teachers: Lived experiences and professional growth. *LEARN Journal: Language Education and Acquisition Research Network, 16*(2), 770–783. https://files.eric.ed.gov/fulltext/EJ1401080.pdf

Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching* (3rd ed.). Cambridge University Press. https://doi.org/10.1017/9781009024532

Suwannoppharat, K., & Chinokul, S. (2015). Applying CLIL to English language teaching in Thailand: Issues and challenges. *Latin American Journal of Content and Language Integrated Learning, 8*(2), 237–254. https://doi.org/10.5294/laclil.2015.8.2.8

Tachaiyaphum, N., Gurney, L., & Daly, N. (2023). 'Definitions did not effectively help my students': Pre-service teachers' language modification strategies in Thai language-driven CLIL classrooms. *Language Teaching Research*. https://doi.org/10.1177/13621688231201804

Tachaiyaphum, N., & Sukying, A. (2017). EFL pre-service teachers' perceptions of CLIL. *Asian Education Studies, 2*(4), 44–51. https://doi.org/10.20849/aes.v2i4.283

Tarasenkova, N., Akulenko, I., Kulish, I., & Nekoz, I. (2020). Preconditions and preparatory steps of implementing CLIL for future mathematics teachers. *Universal Journal of Educational Research, 8*(3), 971–982. https://doi.org/10.13189/ujer.2020.080332

Taylor, P. (2022). Perceptions of in-service teachers towards CLIL and CLIL teachers' target language and intercultural competences: The context of English-medium instruction schools in Thailand. *LEARN Journal: Language Education and Acquisition Research Network, 15*(1), 565–587. https://so04.tci-thaijo.org/index.php/LEARN/article/view/256738

Tseng, J.-J. (2025). Using visual scaffolding to enhance the comprehensibility of English materials in science education: A genre-based approach. Journal of English for Academic Purposes, *75*. https://doi.org/10.1016/j.jeap.2025.101500

Yang, W. (2016). An investigation of learning efficacy, management difficulties and improvements in tertiary CLIL (content and language integrated learning) programmes in Taiwan: A survey of stakeholder perspectives. *Latin American Journal of Content & Language Integrated Learning, 9*(1), 64–109. https://doi.org/10.5294/laclil.2016.9.1.4