



Early-Career Teachers' Self-Reported Challenges in Implementing Content and Language Integrated Learning in Indonesian Elementary Schools

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ABSTRACT

Content and Language Integrated Learning (CLIL) is a pedagogical approach that aims to increase students' subject knowledge and English proficiency simultaneously through meaningful classroom interaction. However, despite its increasing popularity in Indonesia, early-career teachers frequently encounter linguistic and pedagogical challenges that affect the quality of CLIL teaching. This study explored the self-reported experiences of 19 early-career teachers in applying CLIL in Indonesian elementary schools. All participants had completed a Medium of Instruction (EMI) elementary teacher education program at a private university in Indonesia, which provides a unique context to study how prior English exposure influences classroom practices. Data were collected using an open-ended questionnaire and were analyzed thematically with a descriptive qualitative approach. The findings suggest that although participants had adequate general English language skills and were confident in daily communication, they still struggled to use subject-specific academic vocabulary and to cope with English-language classroom instructional discourse. The teachers also found it difficult to deal with students with varying levels of English proficiency. Therefore, they used adaptive strategies, such as repetition, reformulation, and first-language (L1) use, to maintain classroom interaction and students' understanding. These findings suggest that successful CLIL implementation depends not only on general English proficiency but also on teachers' ability to use disciplinary teaching discourse and to flexibly adapt their language to meet students' needs. The study concludes that pre-service teacher education should go beyond developing general English fluency and provide explicit preparation in CLIL-oriented classroom discourse, subject-specific academic language, and adaptive pedagogical strategies. These findings illuminate the linguistic and pedagogical preparation that is needed by early-career teachers in CLIL classrooms and have implications for the design of teacher education programs in similar EMI and bilingual contexts.

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■ INTRODUCTION

Content and Language Integrated Learning (CLIL) gains significant growth as a bilingual pedagogical approach that promotes both subject-matter learning and language development through meaningful classroom interaction (Coyle et al., 2010). At the elementary level, this dual focus is particularly beneficial, as it helps young learners develop academic knowledge while strengthening their English communication skills. Teaching CLIL effectively, however, is challenging. Teachers need to integrate subject content and language

instruction while continually adapting to students' diverse linguistic backgrounds. This makes CLIL distinct from traditional English teaching, as teachers are expected not only to deliver disciplinary content but also to guide classroom dialogue and provide adequate language support, without sacrificing either content or language learning (Dalton-Puffer, 2007; Lo, 2019).

An increasing body of research highlights the substantial linguistic and pedagogical challenges that CLIL presents for teachers, particularly those just starting their careers. In

particular, novice teachers are often required to negotiate subject delivery and language scaffolding simultaneously, while still developing their own teaching confidence and professional skills (Jalal & Nawab, 2022; Kim & Graham, 2022). Further studies show that these teachers often have problems with subject-specific vocabulary, with expressing academic concepts in English, and with maintaining productive classroom talk (Dalton-Puffer, 2007; McDougald, 2015). Significantly, these difficulties are not necessarily caused by poor general English language skills but rather by insufficient preparation for using English as a medium of instruction in specific content areas (Isnaini et al., 2020). This suggests that teacher education programs are expected to prepare future teachers not only to develop general English proficiency, but also to acquire disciplinary language and classroom discourse skills needed in CLIL contexts.

In CLIL classrooms, students' English skills are important, not only teachers' language competence. Elementary classrooms often comprise students with a wide range of English language proficiency levels, and teachers must continually adjust their language use and instructional approaches. To address students' limited language proficiency, teachers frequently adapt their explanations, restate key points, use visual aids, or employ translanguaging and code-switching to support understanding (Dalton-Puffer, 2011; McDougald, 2015). These adaptive strategies allow teachers to balance language development with conceptual clarity while responding to learners' immediate needs.

Although many studies have focused on the challenges faced by inexperienced CLIL teachers, some studies have identified factors that can help increase teacher confidence. For example, teachers with prior exposure to English-medium or bilingual settings tend to find it easier to use English to teach and manage classroom communication (Lo, 2019). Teachers with such profiles are often more comfortable in explaining content and communicating with students in English. Nevertheless, such prior experience does not eliminate the linguistic and pedagogical pressures of CLIL, especially when teachers move from their training programs into real classroom contexts.

These findings suggest that teacher education programs need to move beyond English proficiency alone. To prepare future CLIL teachers, they should be explicitly trained to use disciplinary language, facilitate classroom discourse, and apply adaptive strategies suited to learners with different

language levels (Banegas & del Poso Beamud, 2022; Hüttner, 2025). In addition, collaborative mentoring and reflective practice are considered important in supporting early-career teachers as they navigate the complexities of CLIL (Farrell, 2020; Kutsyuruba & Godden, 2019; Zeichner & Liston, 2013). However, relatively few studies have examined how early-career elementary teachers in Indonesia experience and make sense of these linguistic and pedagogical challenges as they transition from university training to classroom practice.

The present study addresses this gap by examining how early-career elementary school teachers in Indonesia describe their own experiences implementing CLIL. Drawing on the existing CLIL literature, a thematic analysis was conducted of teachers' self-reported experiences to identify common patterns in the challenges they faced, their prior exposure to English, and the instructional strategies they employed. By foregrounding teachers' own accounts, this study seeks to shed light on the kind of support required to better prepare future elementary teachers to implement CLIL in the Indonesian context.

Guided by these aims, this study addresses the following research questions:

1. What challenges did early-career teachers encounter when implementing CLIL in Indonesian elementary schools?
2. What factors contributed to these challenges?

METHOD

Research Design

This study used a descriptive qualitative approach to examine the challenges early-career teachers encountered in teaching content in English in CLIL elementary schools. Qualitative description was chosen because it provided participants' accounts in everyday language, offering a rich overview of events and experiences (Sandelowski, 2000). In this context, a specific group of early-career teachers who graduated from the same elementary teacher education program at a private university were currently teaching at several CLIL elementary schools. A descriptive qualitative approach enables researchers to capture participants' views, interpretations, and lived experiences in detail, thereby examining complex educational phenomena within their real-life contexts (Merriam, 2009; Yin, 2018).

Research Context and Participants

The study was conducted at a private English-as-a-Medium-of-Instruction (EMI) university in Indonesia that offers an elementary teacher education program designed

to prepare pre-service teachers to teach, particularly in bilingual or CLIL-oriented classrooms. The participants had graduated from the same program and had either recently completed their studies or been teaching in CLIL settings for one to two years. Initially, 20 teachers agreed to participate in the study, but only 19 participants were eligible, as one was not teaching in CLIL contexts. The participants consisted of 17 females and two males and had taught in bilingual or English-medium schools where English was used to deliver content.

Sampling Procedure

The study employed purposive sampling to select participants who could provide rich, relevant data aligned with the research objectives (Patton, 2015). The sampling strategy was suitable for this study because it sought insights from elementary teachers who met specific requirements, such as being

graduates of an EMI teacher education program and currently working in CLIL contexts. Purposive sampling ensured that the participants had firsthand knowledge of the application of CLIL at the elementary level. In addition, criterion-based selection was also used within purposive sampling, where participants were selected according to specific criteria (Miles, Huberman, & Saldaña, 2014): (1) Attended the same elementary teacher training program. (2) Currently teaching as an elementary teacher in an English-medium or CLIL setting. (3) Has no more than two years of teaching experience.

The study did not set exclusive criteria, such as CLIL teaching load, because it aimed to explore early-career teachers' experiences in CLIL elementary classrooms. However, all teachers were employed in English-medium or CLIL schools and were responsible for using CLIL as part of their teaching obligations. The

Table 1. Participants' demographic profile (n=19)

ID	Age	Gender	Grade Level	Subjects Taught
P1	25	Male	Grade 2	Arts, Mathematics, Indonesian
P2	22	Female	Grade 2	Science, Social Studies, Arts, Music, Mathematics
P3	22	Female	Grade 6	All subjects
P4	22	Female	Grade 2	Social Studies, Mathematics, English
P5	23	Female	Grade 1	Indonesian
P6	24	Female	Grade 3	Mathematics, English
P7	23	Female	Grade 1	Mathematics
P8	22	Female	Grade 5	Science, Mathematics
P9	22	Female	Grade 2	Science, Social Studies, Mathematics
P10	24	Female	Grade 4	Science, Social Studies
P11	22	Female	Grade 4	Science, Social Studies, Arts, Music, Mathematics
P12	22	Female	Grades 3 & 5	Arts, Mathematics
P13	22	Female	Grade 3	Science, Social Studies, Arts, Music, English, Indonesian
P14	23	Female	Grade 1	Science, Social Studies, Arts, Music, Mathematics
P15	24	Male	Grade 1	Music
P16	22	Female	Grades 3 & 5	Science, English
P17	21	Female	Grade 4	Mathematics, Indonesian
P18	21	Female	Grade 5	Science, Social Studies, Arts, Music, Mathematics
P19	21	Female	Grade 3	Science, Mathematics, English

homogeneous sample helped to provide an in-depth understanding of the challenges faced by early-career teachers with similar educational and professional backgrounds.

Data Collection and Analysis

Data were collected via an online open-ended questionnaire designed to explore the experiences of early-career teachers implementing CLIL in elementary classrooms. The questionnaire consisted of three sections: 1) participants' background information (such as gender, age, and length of teaching) and current teaching school, 2) their experiences using English while teaching content subjects, and 3) challenges faced while using English as the medium of instruction. These sections were designed to elicit rich descriptions of participants' experiences and the challenges of teaching content in CLIL contexts, directly addressing the research question. The open-ended format was chosen to allow participants to express their views freely, consistent with the qualitative emphasis on participants' voices (Cohen, Manion, & Morrison, 2018). Two experts in CLIL and language instruction were invited to evaluate the questionnaire to ensure content validity before dissemination. Participants were free to respond in either English or Indonesian. Responses originally written in Indonesian were translated into English by the researchers for reporting purposes, and responses written in English were retained in their original language. All quotations were lightly edited for grammar, spelling, and punctuation to improve readability without changing the participants' intended meaning. Responses were collected over a month and analyzed using Braun and Clarke's (2006) thematic analysis framework. The first stage was to read the responses repeatedly to develop familiarity with the data. Once relevant excerpts related to teachers' experiences and challenges were identified, preliminary open codes that formed main ideas were summarized. For instance, participants' responses describing their difficulties with subject-specific vocabulary, explaining concepts in English, students' diverse linguistic proficiency, and balancing content and language were assigned different codes. Similar codes were then grouped into broader categories, which were later compared across participants and combined into themes that represented common patterns in the data. Finally, the themes were reviewed against the original responses to ensure that they accurately represented participants' experiences and directly addressed the research question.

Trustworthiness and Ethical Considerations

To improve the credibility of the findings, peer debriefing and iterative data verification were incorporated throughout the analysis. An experienced qualitative researcher reviewed the coding process and critically examined emerging interpretations to ensure consistency and reduce potential researcher bias. Any differences in interpretation were discussed until agreement was reached, resulting in refinement of the themes. The researchers also compared responses across participants to identify recurring patterns while continually referring back to the original dataset to ensure that the themes reflected participants' shared experiences rather than isolated responses. Ethical approval was obtained from the university's research ethics committee before data collection. A digitally informed consent form was provided on the first page of the online questionnaire. The form explained the study objectives, voluntary participation, anonymity, confidentiality, and participants' right to withdraw from the study at any time without penalties. They could access the questionnaire only after providing electronic consent.

■ RESULTS AND DISCUSSION

The thematic analysis revealed three interrelated themes describing the major challenges encountered by the teachers and one facilitating factor that influenced how they coped with these challenges. The first theme was the teachers' obstacles in using academic and specialized vocabulary, especially when explaining content concepts in English. Second, participants had difficulties in using instructional language effectively, including simplifying explanations, giving clear instructions, and sustaining full English interaction. Third, teachers reported that students' diverse levels of English proficiency significantly affected their teaching practices and often required them to use scaffolding strategies. The fourth theme showed that prior exposure to English could ease the linguistic challenges teachers encountered in CLIL classrooms. The following image (Figure 1) presents the relationships among the four themes.

Theme 1: Difficulties with Academic and Subject-Specific Vocabulary

As illustrated in Table 2, limited content-specific vocabulary was the most frequently reported main challenge when teaching in CLIL classrooms (13 participants), followed by difficulties explaining subject concepts in

English (11 participants) and the pronunciation of academic terminology (8 participants).

These findings reveal that early-career teachers experienced much difficulty when using subject-specific vocabulary. One participant (P5) stated,

As a teacher who had never taught geography or physics in English before, I found it challenging because of the extensive specialized vocabulary I was unfamiliar with. (P5)

The participant's remark shows that mastery of disciplinary language is one of the linguistic requirements of CLIL, in addition to general English competence. The difficulty expressed by the participant resulted from a lack of familiarity with the specialist vocabulary required to teach content successfully. This finding implies that effective CLIL instruction requires teachers to possess content-specific academic language proficiency.

In addition to mastering disciplinary vocabulary and terminology, several participants reported challenges in explaining subject concepts in English. One teacher (P9) mentioned, "The difficulty I had was explaining abstract concepts." Likewise, another teacher (P4) stated,

The main problem I frequently encounter when teaching content in English is ensuring that students can understand the material, especially when their English is not good. This happens when I explain difficult concepts or technical terms. (P4)

These findings suggest that teachers must be able to communicate concepts in ways that are understandable to their students' language

abilities. Similarly, another participant (P7) reported,

I found the first and third months more difficult because I was still adapting to the correct pronunciation of certain terms. (P7)

According to the participant, teaching in CLIL classrooms necessitates them to become proficient in both the meaning and pronunciation of disciplinary terms. She understood that her responsibilities extended not only to being a subject teacher but also to serving as a linguistic model for her students. Thus, gaining confidence in the oral production of subject-specific academic language is significant to preparing teachers for CLIL classrooms.

Several participants further mentioned the need to constantly expand their academic vocabulary to support effective teaching. One teacher (P13) reflected, "The first month was pretty difficult because I had to learn vocabulary related to what I was teaching." Likewise, another participant (P15) expressed the reasons for the vocabulary improvement, as follows:

I think I need to practice more and add some English words to my vocabulary. Sometimes I have a hard time getting some words out because I don't know what the meaning is. So that's why I tend to speak a mix of languages. (P15)

These remarks show that expanding their academic vocabulary was viewed as an ongoing process of professional learning. Limited familiarity with specific vocabulary sometimes led to mixed-language classroom instruction, such as code-switching, which appeared to serve as a practical strategy when teachers

Table 2. Distribution of initial codes within theme 1

Initial code	Description	Participants (n = 19)	Participant IDs
Limited content-specific vocabulary	Difficulty using subject-specific terminology in English	13	P1, P3, P4, P5, P7, P8, P10, P11, P12, P14, P16, P18, P19
Difficulty explaining concepts	Difficulty explaining disciplinary concepts in English	11	P2, P3, P5, P6, P8, P10, P11, P13, P15, P17, P19
Pronunciation of academic terms	Uncertainty about pronouncing technical vocabulary	8	P1, P5, P7, P9, P11, P14, P16, P18

encountered lexical uncertainty.

Overall, the teachers' responses generally suggest that academic and disciplinary vocabulary caused significant challenges for many early-career teachers in CLIL classrooms. The difficulties were most evident in the first months of teaching and were closely related to subject-specific vocabulary rather than everyday conversational English.

Theme 2: Student English Proficiency as a Mediating Constraint

The second theme reveals that students' varying levels of English proficiency significantly influenced teachers' classroom experiences in CLIL classrooms. The participants taught in regular CLIL classrooms at private elementary schools, where students had varying levels of English proficiency. As shown in Table 3, the most frequently reported challenges were students' varying levels of English proficiency (5 participants) and limited student vocabulary and comprehension (5 participants). Teachers also reported students' reliance on Indonesian to understand lesson content (3 participants) and limited basic English knowledge (3 participants).

These findings suggest that students' linguistic abilities mediated the implementation of CLIL and shaped teachers' instructional decisions. One teacher (P2) reported:

The main challenge in teaching using English is addressing students with varying levels of English proficiency. (P2)

The statement reflects teachers' awareness that providing uniform instruction through English is difficult because students enter the classroom with different language abilities. Therefore, the findings suggest that teachers need to continuously adapt their teaching to accommodate students with different levels of language abilities.

In addition to differences in proficiency, teachers reported that many students still struggled with English vocabulary and comprehension. One participant (P9) explained:

Sometimes, some students struggle to understand and process English words. As a result, they tend to give up and ask the teacher to explain the material in Indonesian. (P9)

Similarly, teacher P11 stated:

Teaching through English can present unique challenges because students have diverse levels of English language

proficiency and comprehension. As a result, some students require additional Indonesian explanations to better understand the content. (P11)

These responses highlight that English-medium instruction cannot be fully implemented, particularly when students have limited vocabulary and comprehension. As a result, many students relied on their first language to access lesson materials, suggesting that English alone was not always enough to support meaningful learning in CLIL settings.

Participants also reported that students lacked the basic English proficiency needed to actively engage in CLIL classrooms. Teacher P14 also reported, "Some students keep complaining that they can't speak English," and teacher P2 agreed that some students still encountered difficulties with basic English. The teachers' responses suggest that English-mediated learning should also incorporate fundamental language skills alongside subject-specific vocabulary.

Overall, the findings show that students' varying levels of English proficiency, limited vocabulary and comprehension, reliance on L1, and insufficient basic English language significantly shaped classroom discourse in CLIL settings. Therefore, these learner-related challenges highlight that the success of CLIL implementation depends not only on teachers' linguistic competence, but also on students' readiness to learn academic content through English.

Theme 3: Perceived Ease Due to Prior English Exposure

While many participants reported linguistic challenges in using CLIL, a small number of teachers described prior experience with English as a factor that enhanced their confidence in teaching content through English.

As shown in Table 4, two participants linked their perceived ease in CLIL teaching to prior experiences of learning and using English in English-medium environments before entering the teaching career. One participant (P3) noted:

I don't find it difficult to teach content in English. During my studies at an EMI University, we were given many opportunities to use English and to practice teaching in English. (P3)

This response indicates that prior experience with English helps the teacher become familiar with the linguistic demands of CLIL before entering the classroom. She was

Table 3. Distribution of initial codes within theme 2

Initial code	Description	Participants (n = 19)	Participant IDs
Varying levels of students' English proficiency	Teachers experienced difficulty because students had different levels of English proficiency, requiring differentiated instruction.	5	P6, P9, P11, P18, P19
Limited student vocabulary and comprehension	Students struggled to understand English vocabulary or subject-specific terms, making it difficult to follow lessons.	5	P7, P10, P11, P14, P18
Students' reliance on Indonesian	Students frequently requested explanations in Indonesian when they could not understand English instruction.	3	P9, P11, P18
Limited foundational English literacy	Students' inability to read or write English hindered content learning.	2	P2, P14

aware that her prior experience with English-medium education was an important asset in preparing her for a professional career as a teacher and enhancing her ability to teach content through English.

Besides studying at an EMI university, another participant (P18) added that her experience in both English-medium high schools and university was connected to her confidence in teaching in CLIL classrooms.

So far, I have not experienced significant difficulties because I have enjoyed using English since I was young. Furthermore, during my university studies, I was increasingly encouraged to use English in various academic and daily activities. As a result, I have become more familiar and confident in communicating in English. (P18)

Unlike many participants who encountered significant language challenges during their early months of teaching, this

participant found that long-term exposure to English across different educational contexts enhanced both language proficiency and confidence. These experiences seemed to minimize the perceived linguistic difficulties of applying CLIL and enabled the participant to approach English-medium instruction with greater confidence.

Overall, despite the small number of participants who reported this experience, the findings suggest that prior exposure to English served as a mediating factor in the implementation of CLIL. Sustained opportunities with English before the teaching career appeared to boost teachers' confidence and reduce the language difficulties associated with teaching content through English.

Theme 4: Teachers' Instructional Adaptation Strategies

Table 5 illustrates the teachers' adaptation of teaching strategies when teaching through English. Demonstrations and visual support were the most frequently reported (3

Table 4. Distribution of initial codes within theme 3

Initial code	Description	Participants (n = 19)	Participant IDs
Prior English exposure enhanced confidence for CLIL teaching	Previous English-medium educational experiences and sustained exposure to English increased teachers' confidence and reduced perceived linguistic difficulties when teaching through English.	2	P3, P18

participants), along with simplifying explanations (3 participants) and using bilingual instruction (3 participants). Giving understandable instructions (2 participants) and checking students' understanding (2 participants) were less reported but still evident.

This theme suggests that to make their explanations comprehensible to students, early-career teachers continually adjust their instructional strategies. To make her explanations more understandable to her students, one teacher used a strategy to simplify her language. One participant (P9) stated:

Sometimes I find it difficult to teach mathematics in English because students' English proficiency levels vary, so I have to explain the material in different ways to help them understand. (P9)

In a similar vein, another participant (P3) explained that one of her biggest challenges was "finding simple words that students can understand." This finding suggests that effective CLIL instruction demands not only content knowledge and general English proficiency but also teachers' ability to assess students' understanding and adjust classroom language accordingly. For early-career teachers, such demands may increase the challenges of teaching content in English. Thus, the ability to modify instructional language appears to be an important aspect of teacher readiness in CLIL classrooms.

The importance of using demonstrations and visual support to improve students'

understanding was also reported by several participants. For instance, one participant (P4) mentioned that she often used images, diagrams, videos, and repeated explanations in different ways to help students understand the materials. Similarly, another participant (P19) reported utilizing demonstrations and visual teaching aids when introducing new content. These findings suggest that teachers used visual demonstrations to reduce linguistic demands and to allow students to construct meaning through multiple tools rather than language alone.

Another challenge was that teachers were confused about when to use English and when to use Indonesian as students' first language. One participant (P18) mentioned that it was "difficult not to be bilingual with some students," while another participant (P6) stated she often alternated English and Indonesian to facilitate students' understanding. Rather than focusing on students' insufficient English competence, the teachers used bilingual instruction as a pedagogical tool to ensure students' understanding and maintain students' engagement.

Furthermore, teachers also had difficulty giving clear classroom instructions. For instance, one teacher (P17) expressed:

I sometimes find it difficult to understand certain words in instructions because they can have different meanings, which affects my ability to teach effectively. (P7)

Participant (P5) also shared similar difficulties in "giving instructions in English which are easy for students to understand."

Table 5. Distribution of initial codes within theme 4

Initial code	Description	Participants (n = 19)	Participant IDs
Using demonstrations and visual support	Using visual resources or demonstrations to facilitate comprehension	3	P4, P12, P19
Simplifying explanations	Adjusting or simplifying language to make explanations easier to understand	3	P3, P4, P13
Using bilingual instruction	Alternating between English and Indonesian to support learning	3	P6, P7, P18
Giving understandable instructions	Providing classroom instructions that are clear and comprehensible	2	P5, P17
Checking students' understanding	Monitoring students' comprehension before continuing instruction	2	P4, P13

These findings suggest that instructional language is as important as content explanation. In teaching, teachers not only need to deliver content but also use clear instructional language to organize classroom activities and direct students' learning. Finally, several teachers reported monitoring students' comprehension before moving on to the next stage of instruction. For example, a teacher (P4) explained that she repeatedly presented information in several ways to check her students' understanding. Similarly, another teacher (P13) needed to select language appropriate to her students' language level to minimize misunderstandings during classroom interactions. The teachers' strategies indicate that instructional language is used as a tool to monitor students' understanding and adjust their language accordingly.

Although the four themes are broken down individually to clarify the analysis, participants' responses showed that these themes tended to intersect rather than emerge independently. Table 6 illustrates how the themes were distributed among participants, indicating that many teachers experienced multiple linguistic and pedagogical issues simultaneously.

Table 6 shows that teachers' challenges in using English often coincided with concerns about students' limited English proficiency, indicating an association between the two challenges. Many participants also reported their teaching strategies for addressing these combined challenges, such as simplifying language, using translanguaging strategies, and providing additional scaffolding. In addition, a smaller group of teachers reported that their prior exposure to English made them more confident in implementing CLIL.

Overall, the results suggest that instructional language competence is more important than general English proficiency. Early-career teachers need to be able to simplify explanations, incorporate visual support, use bilingual instruction, provide appropriate classroom instruction, and monitor students' comprehension. Taken together, possessing good instructional language will enable teachers to make lessons more

understandable and maintain content learning through English simultaneously.

This study revealed the challenges encountered by early-career teachers and strategies for addressing them when implementing CLIL in Indonesian elementary schools. The findings of this study show that while some participants reported confidence due to prior exposure to English-medium environments, others indicated the challenges operating across three different, yet interconnected domains: 1) academic and disciplinary vocabulary challenges, 2) teachers' linguistic challenges, and 3) students' limited English proficiency challenges. These findings extend previous studies on CLIL implementation, particularly within Asian and Indonesian contexts (Gilanyi et al., 2023; Hu & Hasyim, 2025; Nguyen et al., 2024).

The first finding underscores challenges related to the use of academic and subject-specific vocabulary in classroom discourse. The teachers reported that during the early months of teaching, they struggled to explain concepts, such as scientific and mathematical terminology, in English. This supports arguments in CLIL scholarship that general English proficiency is inadequate for effective content instruction (Coyle et al., 2010; Dalton-Puffer, Lo, 2019; Hu & Hasyim, 2025). As discussed in the literature review, CLIL requires integrating content and communication, with subject knowledge articulated through appropriate academic language. Dalton-Puffer (2011) stresses that CLIL classrooms are characterized by dense disciplinary discourse, which includes technical terminology and subject-specific registers. This means that the participants' reported difficulty in using scientific and mathematical terminology suggests that early-career teachers had limited experience in using English to teach, and thus may not yet possess full command of this disciplinary discourse. One possible explanation is that EMI programs do not automatically prepare student teachers with the pedagogical discourse required for CLIL teaching. In the Indonesian context, where English in teaching preparation programs is taught as a separate subject rather than integrated with content pedagogy, early-career teachers may enter CLIL classrooms with sufficient general English but limited disciplinary instructional language.

Moreover, the findings suggest that early-career teachers may not struggle with general communicative competence (BICS) but may be unfamiliar with content-specific lexical resources (CALP). In her 4Cs framework, Coyle (2007) identifies "Communication" as a

Table 6. Distribution of themes across participants

	Theme 1	Theme 2	Theme 3	Theme 4
Theme 1	19	13	5	15
Theme 2	13	15	2	12
Theme 3	5	2	7	5
Theme 4	15	12	5	19

key foundation of CLIL. Communication in CLIL contexts involves the ability to construct meaning within academic settings, not only in everyday interaction. The teachers in this study seemed to demonstrate inadequate content-specific lexical competence, requiring facilitation of both content delivery and student engagement (Coyle et al., 2010; Lo, 2019; Nikula et al., 2016). This study clarifies previous studies by distinguishing between general proficiency and academic language competence. In contrast to previous studies on CLIL, which frequently emphasize general language difficulties (Lo, 2019; Pun et al., 2023), this study shows that the level of disciplinary academic discourse in English is the main challenge rather than basic communication skills. The finding contrasts with Jalal and Nawab (2022), who reported that teachers' general English proficiency was the main challenge in applying CLIL. In contrast, the participants in this study had attended an EMI teacher education program and thus entered classes with relatively strong general English proficiency. Their problems emerged when they had to explain content using subject-specific academic language. This insight contributes to a better understanding of teacher preparedness in CLIL contexts, where subject-specific English training is critical for pre-service teacher preparation (Lo, 2019; Nguyen et al., 2024).

Secondly, the study found that students' English proficiency levels determined how teachers managed classrooms in CLIL settings. The students' varying English abilities posed challenges for teachers, especially when delivering content. For example, the teachers reported they often repeated their explanations, provided more information, and used students' L1 to simplify complex concepts. This situation underscores the importance of students' linguistic readiness in CLIL classrooms for effective CLIL teaching (Coyle et al., 2010; Kurniawati & Atmojo, 2025; Pun et al., 2023). Based on Coyle's CLIL framework, the interdependence between cognition and communication is explained, meaning that students' cognitive ability may be reduced when linguistic demands exceed their linguistic ability. Since teachers in this study taught students with different linguistic abilities, they had to adapt their language to match students' language competence. This study has shown that novice CLIL teachers rely on repetition, reformulation, and the strategic use of the L1 to maintain classroom interaction and support student comprehension when faced with linguistic barriers. Although the proportion of L1 use in this study was not quantified,

participants consistently described L1 as a temporary strategy for explaining complex concepts. This strategy aligns with translanguaging perspectives that see the use of students' L1 as a scaffolding tool (García & Wei, 2014; Ruiz de Zarobe & Querol-Julián, 2024). However, excessive use of L1 can reduce opportunities for meaningful English interaction (Coyle et al., 2010). Therefore, early-career teachers must be able to use translanguaging selectively to balance content learning and language development. These findings suggest that language challenges in CLIL classrooms emerge not only from teachers' language competence but also from the dynamic interaction between teacher discourse and student language proficiency (Dalton-Puffer, 2011; Ruiz de Zarobe & Querol-Julián, 2024).

Furthermore, this study found that several participants did not experience major difficulties with CLIL instruction due to their extensive prior exposure to English. The participants reported that they gained confidence due to their prior educational background or intensive exposure to English from a young age. The anecdotes were aligned with previous studies (Nguyen et al., 2024; Lo, 2019), which suggest a long-term relationship with English can decrease teachers' perceived linguistic struggles in CLIL settings. Despite their extensive experience with English, the teachers acknowledged challenges in teaching content in English, particularly when explaining complex concepts and managing students with varying proficiency levels. These challenges suggest that teachers' professional confidence is shaped not only by their English proficiency alone but also by the interaction of several classroom factors. In this present study, teachers had to deal with limited subject-specific vocabulary, students with different English proficiency levels, and the need to adjust teaching strategies. For example, when students find it difficult to understand content delivered in English, teachers will simplify explanations, switch to L1, or rely on visual support, illustrating how language and content demands continuously influence one another. These multiple subsystems interact simultaneously during classroom instruction, requiring teachers to make continuous adjustments to their teaching (Sulis et al., 2021). Thus, CLIL classrooms require teachers who are not only proficient in English but also possess specific skills, such as academic language, instructional discourse skills, and classroom strategies.

The last findings suggest that instructional language poses a major challenge

for teachers, particularly with simplifying explanations, giving instructions, and maintaining English throughout the lesson. While previous CLIL studies have focused on teachers' concerns about their English competence generally (Dearden, 2015; Pun et al., 2023), the present findings provide further depth by differentiating teachers' concerns between the mastery of subject-specific vocabulary (academic discourse) and instructional discourse. Instructional language entails the ability to simplify complex ideas, scaffold explanations, provide clear instructions, and monitor students' understanding. The teachers' strategies of using simpler words and visual aids to adapt explanations suggest that instructional language ability plays an important role in CLIL classrooms, enabling teachers to adjust their language to match students' cognitive and linguistic readiness. However, the participants' accounts indicate that this ability has not yet fully developed among teachers in their early years of teaching. The finding suggests that teachers in a CLIL context should be equipped with both communicative and pedagogical language, as this will help them manage interactional flow (Dalton-Puffer, 2011).

Based on the findings and discussions explained above, the study has several implications for teacher preparation programs. While previous studies have only focused on teachers' general linguistic competence, this study highlights the need to improve CLIL teachers' linguistic flexibility in using English when teaching content. Teacher preparation programs should consider incorporating courses that address CLIL-specific skills, such as explaining and managing classroom skills, as well as other related skills that might help future CLIL teachers teach in CLIL classrooms. In addition, future programs should consider mentoring and guided reflection that would benefit early-career teachers' CLIL professional development. Training provided by the government or schools may vary, affecting how CLIL teachers can implement strategies or solutions to address classroom challenges. Therefore, mentoring and reflection can support teachers' future careers and self-efficacy, thereby fostering positive attitudes toward CLIL instruction (Kutsyuruba & Godden, 2019).

Overall, this research has contributed to the growing body of research on CLIL implementation in Asian contexts by emphasizing early-career teachers' lived teaching experiences in CLIL classrooms. While earlier research has underscored teachers' struggles, particularly with language-

related obstacles (Dalton-Puffer, 2007; Lo, 2019; Pun et al., 2023), the present study illuminates the specific linguistic domains in which these tensions emerge. By differentiating between academic vocabulary challenges, instructional discourse management, and student proficiency mediation, the findings shed light on teacher linguistic readiness in Indonesian CLIL classrooms. In sum, an effective CLIL teacher in Indonesian elementary contexts must be competent in subject-specific vocabulary, instructional discourse, and flexible classroom communication. Providing these linguistic supports within teacher education programs can improve early-career teachers' readiness to address the complex linguistic demands of CLIL classrooms.

■ CONCLUSION

This study offers additional insights into the challenges faced by early-career elementary teachers in implementing CLIL. The findings suggest that CLIL teachers in this study possess sufficient general English proficiency, yet still encounter challenges when using academic English terminology or when conducting instruction entirely in English. In addition, teachers reported that varying levels of students' English proficiency required them to adjust their instructional strategies through repetition, additional explanation, and code-switching. These main findings imply that teacher readiness in CLIL contexts should be understood as a complex form of language competence, rather than a single measure of English competence. Therefore, teacher preparation programs should provide more targeted support for the specific language demands of CLIL instruction.

There are some limitations to this study despite its contributions. One limitation is that this study used a self-reported questionnaire, which may not provide classroom practices or real-time interactions in detail. Follow-up or stimulated recall interviews or classroom observations should be considered in future studies to explore instructional language in greater detail. Second, the participants in this study graduated from a single teacher preparation program, which limits the generalizability of the findings to other contexts. Thus, future research can conduct comparative studies across different institutional settings to better understand contextual influences on CLIL implementation. Alternatively, longitudinal research can follow teachers' journeys from pre-service to their early years of teaching and examine the development of their language competence

over time. Third, the study was limited to exploring early-career teachers' perspectives rather than examining students' learning outcomes. Future research can incorporate pre- and post-tests to assess the impact of teachers' challenges on students' academic achievement.

In conclusion, this study has highlighted the importance of teachers' competence in disciplinary language, classroom discourse, and adaptive classroom communication, as well as general English fluency, for effective CLIL instruction. In the future, teacher preparation programs and schools implementing CLIL should pay greater attention to the linguistic challenges identified in this study. By addressing these challenges systematically, teachers may feel better prepared to teach in CLIL classrooms, thereby contributing to the sustainability of CLIL implementation in Indonesian elementary schools.

■ DECLARATION OF AI

In preparing this manuscript, the authors employed Qwen to assist with grammar checking, structuring ideas, and organizing the literature. The authors reviewed and revised all AI-assisted content and took full responsibility for the accuracy, originality, and integrity of the manuscript. AI tools were not used to generate research data, analyze results, or replace the authors' scholarly judgment.

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