

The impact of CLIL implementation on elementary EFL learners: a literature review

El Impacto de la Implementación de AICLE en estudiantes de primaria de inglés como lengua extranjera: una revisión de la literatura

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Abstract

Determining teachers' perceptions of Content and Language Integrated Learning (CLIL) in elementary classrooms is crucial for enhancing its effectiveness, overcoming practical challenges, and ensuring sustainable integration in diverse educational settings. Therefore, this literature review aims to analyze and synthesize the existing literature regarding CLIL usage by EFL teachers at the elementary level in Spain, Indonesia, Croatia, the Republic of Poland, Austria, Greece, Taiwan, Ireland, Kazakhstan, and Ecuador, focusing on both the benefits and obstacles they encounter. Using a qualitative bibliographic approach, the study analyzes, categorizes, and synthesizes relevant data from selected peer-reviewed articles. Findings are categorized into two main areas: (1) Teachers' limitations, including lack of training, teacher workload, lack of content expertise, and collaboration between CLIL and non-CLIL educators; and (2) benefits, focusing on students' and teachers' roles, content and language knowledge improvement, authentic language use, and enhancement of students' motivation and engagement. These findings provide educators with a comprehensive understanding of CLIL implementation, enabling them to make informed decisions about its potential benefits for their student's learning process.

Keywords: CLIL; teachers' perceptions; EFL classes; training teaching; learning.

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Resumen

Determinar las percepciones de los docentes sobre el Aprendizaje Integrado de Contenidos y Lenguas Extranjeras (AICLE) en las aulas de educación primaria es fundamental para mejorar su eficacia, superar desafíos prácticos y garantizar una integración sostenible en diversos entornos educativos. Por lo tanto, esta revisión de literatura tiene como objetivo analizar y sintetizar la investigación existente sobre el uso de AICLE por parte de docentes de inglés como lengua extranjera en el nivel primario en España, Indonesia, Croacia, Polonia, Austria, Grecia, Taiwán, Irlanda, Kazajistán y Ecuador, centrándose tanto en los beneficios como en los desafíos que enfrentan. Mediante un enfoque bibliográfico cualitativo, el estudio analiza, categoriza y sintetiza datos relevantes de artículos revisados por pares. Los hallazgos se agrupan en dos áreas principales: (1) limitaciones de los docentes, que incluyen la falta de formación, la carga laboral, la falta de conocimientos sobre el contenido y la colaboración entre educadores de AICLE y no AICLE; y (2) beneficios, enfocados en los roles de estudiantes y docentes, la mejora del conocimiento del contenido y la lengua, el uso auténtico del idioma y el aumento de la motivación y el compromiso de los estudiantes. Estos hallazgos proporcionan a los educadores una comprensión integral de la implementación de AICLE, permitiéndoles tomar decisiones informadas sobre sus posibles beneficios en el aprendizaje de los estudiantes.

Palabras clave: AICLE; percepciones de los docentes; clases de inglés como lengua extranjera; capacitación; enseñanza, aprendizaje.

Introduction

According to Argudo et al. (2018), interest in Content and Language Integrated Learning (CLIL) has been growing in Ecuador, leading to its usage in both public and private educational institutions. Anggraini et al. (2023), have asserted that over the past 20 years, CLIL has become more well-known in Europe and has been used in educational settings since the 1990s, and nowadays it is used globally. CLIL is interpreted as “any activity in which foreign language is used as a tool in the learning of a non-language subject in which both language and subject have a joint role” (Çekrezi, 2011, as cited in Marsh, 1994, p. 3822). In the same vein, CLIL aims to achieve dual-focused learning based on four interrelated components: cognition, culture, communication, and content, each with its corresponding characteristic. Cognition is rooted in Bloom’s Taxonomy; culture fosters multilingualism and intercultural competence; communication enhances authentic language usage; and content integrates cross-curricular activities (Đorđević, 2023). This approach is gaining attention due to its potential to motivate learners and improve their English skills and subskills (Campillo et al., 2019). As a result, educators are investigating various strategies to enhance the effective implementation of CLIL and foster engaging learning environments that support both linguistic proficiency and content understanding (Argudo et al., 2018). This approach transforms traditional learning into “social-constructivist, interactive, and student-led learning where teachers pull back from being donors of knowledge to become facilitators” (Pérez, 2016, p. 2). Furthermore, CLIL fosters collaborative learning, enhances problem-solving skills, and promotes knowledge acquisition, cognitive development, and critical thinking (Vázquez & Ellison, 2018).

However, previous studies of CLIL have noted that despite its potential benefits, CLIL also presents certain challenges. As noted by Argudo et al. (2018), one notable limitation is the lack of foreign language proficiency either on the part of students or instructors, which hinders teachers from integrating CLIL into their classrooms. Additionally, Badurina (2016), claimed that limited educator training on CLIL restricts elementary educators' ability to gain a comprehensive understanding of its implementation in these educational contexts. Notwithstanding these limitations, CLIL has been incorporated into the curriculum of educational institutions in numerous nations, including the Republic of Poland, Austria, Greece, Ecuador, Spain, Indonesia, and Croatia, among others (Anggraini et al., 2023; Argudo et al., 2018; Badurina, 2016; Campillo et al., 2019). This expansion is attributed to CLIL's ability to add value acquisition of knowledge, even in contexts with limited resources. Nonetheless, Zafiri and Zouganeli (2017), stated that most instructors still focus their English classes on having students memorize content or bear only on learning grammatical points rather than encouraging students to use English in authentic contexts.

Even though CLIL has given teachers rewarding experiences, including improving content and language knowledge, the use of authentic language, improving learners' motivation and engagement, and changing the students' and teachers' roles (Castillo & Fernández, 2022; Otwinowska & Foryś, 2017; Zafiri & Zouganeli, 2017), various factors must be considered when evaluating its effectiveness. Educators' perceptions regarding teacher workload, training, teamwork among CLIL and non-CLIL instructors, and lack of content expertise serve an essential function in CLIL's successful implementation (Anggraini et al., 2023; Badurina, 2016; Czura & Anklewicz, 2018; De Diezmas, 2016; Waloyo et al., 2021). With this information, EFL teachers will have a deeper understanding of how CLIL influences the EFL teaching and learning process.

This qualitative bibliographic literature research will help identify horizontal inequalities between Ecuador and other Latin American or European countries. This review is necessary due to the limited research on CLIL usage in primary schooling, particularly within the Latin American context, as most existing studies have focused on the perceptions and experiences of high school or university educators rather than elementary instructors. A significant gap exists in how Ecuadorian teachers implement CLIL compared to their counterparts in other countries. This inequality is also evident within Ecuador itself, as the country is divided into four regions, each displaying differences in the availability of materials and resources in educational institutions (Guijarro-Garvi et al., 2022).

This literature review analyzed and synthesized the existing literature regarding the implementation of CLIL by EFL teachers at the elementary level, focusing on determining the reported challenges and benefits of CLIL implementation in EFL primary contexts. Peer-reviewed articles were analyzed to better understand the instructors' situation regarding the use of CLIL. A classification procedure was carried out to categorize the articles based on themes that emerged during the analysis. The process followed a thematic analysis approach where patterns were identified to

collect and code data relevant to the research questions. The results were later displayed in tables along with their corresponding descriptions. Additionally, the articles were compared and contrasted based on factors such as methodology, key findings, context, and year of publication.

Research Question/ Objectives

General question: What does the existing literature reveal about how CLIL is implemented by EFL teachers at the elementary level?

General objective: To analyze and synthesize the existing literature regarding the implementation of CLIL by EFL teachers at the elementary level.

Research questions:

1. What are the reported challenges of CLIL implementation for EFL teachers at the elementary level?
2. What are the reported benefits of CLIL implementation for EFL teachers at the elementary level?

Specific Objectives:

1. To identify the reported challenges of CLIL implementation for EFL teachers at the elementary level.
2. To describe the reported benefits of CLIL implementation for EFL teachers at the elementary level.

Methodology

Search strategy and sample selection

This literature review adopted a qualitative bibliographic approach to gather relevant information on primary educators' subjective experiences with implementing CLIL. The collected information was carefully synthesized and analyzed using structured search patterns to address the research questions and ensure clarity and effectiveness. The search terms used included CLIL,

educators' perspectives, EFL classes, training, teaching, and apprenticeship. To refine the search, combined Boolean operators such as AND, NOT, and OR, along with the use of quotation marks, were employed. These operators were essential in narrowing the search, filtering results by publication year, and excluding irrelevant or unrelated topics. Furthermore, the articles were sourced from relevant databases including Taylor & Francis Online, Emerald Insight, Google Scholar, Eric, and ResearchGate. The selection of these keywords and databases was based on their relevance and reliability, ensuring a significant contribution to this research.

Certain aspects of the exclusion criteria were considered when selecting data. First, the empirical articles were required to be written in English since using them in their original form helped avoid errors or biases that might result from translation. Second, the studies ought to entail research conducted in primary classes to explore diverse educators' perspectives on using CLIL in EFL education. Third, the articles had to have been published since 2015 so that an insight into recent applications of CLIL in EFL elementary classes could be developed, particularly regarding aspects such as instructional materials, teacher training, and CLIL-related research. This specific timeframe was chosen because, despite some advances in CLIL usage in Ecuador, there remained a lack of studies documenting its usage at the primary educational level within the national context. Therefore, restricting the publication years to this range helped address the scarcity of information on this topic. Finally, these peer-reviewed articles could be qualitative, quantitative, or mixed methods studies; no restrictions concerning the approach were incorporated.

Areas of interest/themes

This literature review focused on two primary clusters of research. First, it examined teachers' constraints while using CLIL at primary levels, including training, teacher workload, collaboration between CLIL and non-CLIL educators, and lack of content expertise. Second, it also analyzed teachers perceived benefits while implementing CLIL in classes, including content and language knowledge improvement, language proficiency enhancement, authentic language use, improvement of students' motivation and engagement, and changes in students' and teachers' roles. This clustering of topics provided educators with different perspectives to determine whether or not the implementation of CLIL was beneficial to learners.

Procedure and Analysis

This research followed four phases, based on Snyder's (2019), framework. These phases were:

1. **Definition of Parameters:** this initial phase involved establishing key research elements, including objectives, purpose, research questions, the number of articles to be analyzed, the target audience, the methodological approach, and the search strategy.
2. **Refinement of Search Strategy:** this phase focused on piloting the keywords and search criteria to optimize the search process and fine-tune the inclusion and exclusion criteria.
3. **Categorization of Articles:** the selected studies were classified according to the emerging themes identified in the literature review.
4. **Analysis and Synthesis:** the final phase involved structuring the literature review through the analysis and synthesis of data extracted from the selected articles.

Additionally, a classification of the articles into various emerging categories was carried out through the analysis procedure. The analytic process followed a thematic analysis, identifying patterns for gathering and coding the data relevant to the research questions, grouped and reviewed the themes identified in the coding process, and reported the findings with the existing literature for each of the established themes. In total, 20 articles that fulfilled the inclusion criteria were incorporated into the review. Later, the data results were Displayed in tables along with their respective descriptions. Different articles were contrasted and compared by considering aspects including the methodology employed, key findings, context, and year of publication.

Development

This section analyzes the 20 selected articles, originating from Spain, Indonesia, Croatia, the Republic of Poland, Austria, Greece, Taiwan, Ireland, and Kazakhstan, which were systematically stored and categorized by database for this review. Table 1 shows the benefits elementary educators experience when using CLIL. Table 2 portrays the challenges primary teachers deal with while implementing CLIL. To be included in the review, articles had to meet the following criteria: (a) report empirical research findings, (b) involve human participants, (c) examine an intervention conducted in an elementary school setting, and (d) discuss the advantages and challenges teachers face in integrating CLIL.

Table 1. Data Analysis.

Review: Benefits of CLIL for Elementary EFL Teachers.

Author, Year, & Country	Results Benefits
Anggraini et al. (2023). Indonesia	The educator has a deeper knowledge of CLIL's characteristics and is well-prepared to teach various subjects in English. Students improve their comprehension and engagement. Students' enthusiasm for learning subjects in English is enhanced, particularly among those with lower proficiency.
Badurina (2016). Croatia	Enhances students' engagement and motivation. Students achieve better language proficiency and communicative skills. Language learning occurs more naturally through practical usage, focusing less on grammar.
Barrios and Acosta (2022). Spain	Supported by strong parental involvement at home, students' motivation is higher. Family members who use English at home significantly influence children's language practice, enhancing their confidence and perceptions of language barriers
Campillo et al. (2019). Spain	Working with language assistants improves teachers' oral and written communication skills, promotes multicultural awareness, and increases students' motivation. Teachers show satisfaction in applying methodological criteria that support ICT use, interculturality, and the activation of prior knowledge. CLIL teachers working together and exchanging best practices is necessary.
Carrasco and Retamar (2023). Spain	CLIL enhances teachers' and students' empathy and satisfaction. Teachers and students experience a sense of adequacy and competence in their roles. Engagement with students promotes emotional connections CLIL fosters collaboration among teachers. The flexibility of CLIL allows for a diverse emotional experience in teaching practices.
Castillo and Fernández (2022). Spain	Students gain cognitive academic language competency and interpersonal communication skills CLIL encourages kids to communicate naturally with one another by developing critical social skills CLIL helps students succeed academically by fostering their self-confidence Students are more likely to be motivated and engaged while working cooperatively
Custodio-Espinar and Gómez-Cortés (2021). Spain	Students' motivation and interaction in L2 among students was higher. Self-evaluation techniques aid in overcoming routine, uniformity of school administration initiatives, and the lack of innovation and autonomy among CLIL teachers.
Czura and Anklewicz (2018). Poland	Teachers and students view CLIL as an enjoyable and effective teaching approach. Students' language proficiency is increased, particularly in vocabulary and communication skills. Learners' motivation and engagement are enhanced. Group projects positively impact students' attitudes toward learning.
De Diezmas (2016). Spain	Oral communication skills are improved. Specific writing and listening abilities are enhanced. Language learning and subject matter were better integrated.
Gučec (2019). Austria and Croatia	CLIL classes are more dynamic and interesting. Students are highly motivated and engaged throughout these sessions, especially in Croatia. Students acquire foreign language content meaningfully. Students demonstrate the ability to use language in a contextualized way.
Gupta (2020). Taiwan	Enhanced students' critical awareness of social issues. Fostered engagement and curiosity in lessons. Students explore topics from multiple perspectives. Supported the development of collaborative skills among learners and educators. Promoted a deeper understanding of content integrated with language.

Author, Year, & Country	Results Benefits
Karabassova and San Isidro (2023). Kazakhstan	Students' engagement and motivation is increased. Students' cognitive skills through inquiry-based learning are enhanced. CLIL encourages effective scaffolding, aiding comprehension of complex subjects in a second language. An in-depth comprehension of the subject is developed. Linguistic competence and content mastery among students are improved.
Llinares and Nashaat-Sobhy (2021). Spain	Specifying features of definitions is increased. Spoken definitions are increased in L1 and L2. Students demonstrate their proficiency in handling academic language across languages.
Milla and Casas (2018). Spain	CLIL promoted better language development. The integration of language and topic learning was higher.
Ó Ceallaigh et al. (2017). Ireland	Students' motivation and engagement increase. Confidence and competence are enhanced. Positive attitudes towards physical education were maintained. Teachers' satisfaction was higher. The student's willingness to use the EF language improves. Teachers gained new ideas for structuring PE lessons. Development of cooperative skills during games.
Otwinowska and Foryś (2017). Republic of Poland	46% of 4th-grade and 25% of 5th-grade students value the usage of CLIL in their classes. Children found CLIL topics interesting and enjoyable. Students prefer games and interactive lessons mostly. Students' enjoyment and interest in the CLIL methodology was evident.
Pérez (2016). Republic of Poland	CLIL positively impacts methodological innovation and teacher reflection. Instructors have positive feelings about CLIL integration. The teaching and subject teachers' knowledge improves. Enthusiasm and commitment increase.
Pladevall-Ballester (2015). Spain	Learning new concepts and English is esteemed by students. Students' experiences using CLIL are positive. CLIL increased students' motivation and oral comprehension. Parents believed CLIL improved their children's English and prepared them for future studies. Cognitive and cultural benefits are noted. Real and meaningful use of English is improved.
Waloyo et al. (2021). Indonesia	English language development and subject knowledge improve. Students' motivation increases. CLIL enhanced students' vocabulary, listening, and speaking skills. Cognitive development and problem-solving skills are higher.
Zafiri and Zouganeli (2017). Greece	Improvement of language learning and knowledge acquisition in subject areas. Enhancement of content knowledge in school subjects. Students' motivation increases. Students engaged in different learning styles and multiple intelligences. Promoted cultural awareness and intercultural understanding. Improved vocabulary, academic discourse, and oral fluency. Enhanced metacognitive skills and learning strategies.

Source: own elaboration.

Note. The data presented in this table were compiled from the following 20 articles: [List of full references of the 20 articles].

Study Implications

Previous research on the CLIL implementation in EFL classrooms has highlighted both educators' perceptions and experiences among teachers. This study qualitatively analyzed the benefits and constraints primary educators faced while using CLIL in their classes and devised a plan to

revise and expand the collected data. When uncertainties arose in the proposed plan compared to findings from other researchers, the progress of CLIL implementation was closely monitored over time, and adjustments were made as needed. After completing the study, the final results were reanalyzed to minimize potential errors.

This study not only examined the benefits and constraints of using CLIL but also focused specifically on a distinct group: elementary school educators. Previous research had not addressed teachers' limitations and advantages in implementing CLIL in elementary classrooms, a gap that this study aimed to fill. As previous scholars in the field of EFL suggested, elementary school teachers often have significant insights to offer regarding CLIL integration into the EFL context. By exploring both the positive and negative educators' perceptions of using CLIL and the pedagogical activities they employed, this study aimed to provide meaningful perspectives that could inform decisions about implementing CLIL in primary EFL settings.

Results

Table 1 presents 20 articles that examined educators' favorable views of integrating CLIL primary EFL contexts. The findings of the literature review indicated that many instructors hold a favorable view of using CLIL strategies in EFL classrooms. For example, Zafiri and Zouganeli (2017), Pladevall-Ballester (2015); Pérez (2016) and Ó Ceallaigh et al. (2017), asserted that CLIL helps students become more motivated and engaged while learning subjects in English. Similarly, nine of the 20 articles analyzed concluded that students' comprehension of content improved as they switched between languages, leading to increased academic language competence.

Pladevall-Ballester (2015), found that most instructors recognize CLIL's benefits in EFL elementary contexts, particularly in defining teachers' and students' roles and enhancing language and content learning. Furthermore, Castillo and Fernández (2022); Campillo et al. (2019); Badurina (2016) and Anggraini et al. (2023), established that the main benefit of CLIL in EFL primary settings is that students improve their language proficiency, particularly in listening and oral communication. Likewise, Gućec (2019), asserted that CLIL sessions in Croatia and Austria were livelier and more engaging, significantly improving students' enthusiasm and commitment while positively impacting their metacognitive, cognitive, and social skills.

Table 2. Data Analysis.

Review: Challenges of CLIL for Elementary EFL Teachers.

Author, Year, & Country	Results Challenges
Anggraini et al. (2023). Indonesia	Students rely on their mother tongue due to their lower English proficiency. Students struggle to understand lessons in English Teachers face an extensive work-load While CLIL enhances student motivation, it requires well-planned EFL strategies and adaptations for different proficiency levels
Badurina (2016). Croatia	Teachers' training is necessary. Teacher workload is higher, specifically in finding and adapting suitable materials. Educators face difficulties coordinating and collaborating with content and CLIL teachers, especially in assessing knowledge, language skills, and content. Students' participation is lower because they feel anxiety or skepticism when learning a foreign language.
Barrios and Acosta (2022). Spain	20% of students with limited English proficiency struggle to fully engage in lessons. Socioeconomic factors significantly influence students' perceptions of CLIL, affecting their academic performance and decision to continue in secondary CLIL programs.
Campillo et al. (2019). Spain	Teachers' training is required. The frequency with which methodological guidelines are applied varies significantly between state and private school teachers. Increased support from public administration is needed, especially for resources, training, and coordination. A more standardized approach across all school types is required, as some instructors effectively implement CLIL strategies, while others may not fully utilize the range of available methodologies.
Carrasco and Retamar (2023). Spain	CLIL is time-consuming for preparing lesson planning and material. Teachers expressed feelings of frustration due to high demands. Negative emotions often arise from perceived inadequacies in language proficiency. Confusion about roles as language versus content teachers impacts professional identity. Lack of practical teaching experience contributes to anxiety and self-doubt.
Castillo and Fernández (2022). Spain	Most students favor speaking in their native tongue over the target language. Encouraging student participation in cooperative learning remains a challenge. Instructors express concern about the lack of time to develop and prepare appropriate group projects and resources. Maintaining classroom discipline and managing noise levels remain challenging.
Custodio-Espinar and Gómez-Cortés (2021). Spain	Lessons focused more on linguistic content rather than cognitive engagement. The teacher's L1 was minimally used, potentially hindering understanding and engagement. The implementation of more cognitively demanding tasks was necessary for better student interaction. It is difficult to assess students' performance in class tasks. The teacher had received prior CLIL training, but self-and peer assessments identified areas for further development in core CLIL principles.
Czura and Anklewicz (2018). Poland	Teachers' training was required. It is time-consuming for educators to find and prepare suitable teaching and learning materials. Teachers' workload increases while finding the appropriate materials. Educational authorities' support is necessary.
De Diezmas (2016). Spain	Additional English exposure may not considerably enhance young learners' overall language skills. Students' ability to acquire the language effectively is limited due to their age. Language domains, including writing, reading, and listening, demonstrated less significant progress.

Gučec (2019). Austria and Croatia	The lack of qualified teachers to integrate language and content barriers to CLIL usage. Limitations include student understanding of this teaching strategy and teacher readiness.
Gupta (2020). Taiwan	Limited resources Difficulty in selecting appropriate materials. Challenges in integrating social issues into regular lesson plans. Initial student hesitance in expressing ideas freely. The role of EFL in schooling is questioned. Need for further teacher training and curriculum development.
Karabassova and San Isidro (2023). Kazakhstan	Adapting their teaching styles to accommodate diverse language proficiency levels among students is difficult. There is a lack of adequate teacher training. Some educators struggled with managing content delivery while ensuring language acquisition. High expectations for language fluency created stress and anxiety for users. Insufficient CLIL resources and EFL tools.
Llinares and Nashaat-Sobhy (2021). Spain	Students find it difficult to come up with scientific definitions. Only a few students can correctly construct the canonical structures associated with effective definitions. The conflict between the necessity of conceptual synthesis and specificity is noticeable. Learners find it difficult to maintain the scholarly accuracy needed for scientific discourse.
Milla and Casas (2018). Spain	There was a discrepancy in the use of ICT while working with CLIL. Retention over time remained an issue while using CLIL. Teachers' training and educational authorities' support is needed.
Ó Ceallaigh et al. (2017). Ireland	Balancing content and language instruction was complex for teachers. Teachers struggled with integrating language learning with PE content. Teachers felt challenged by insufficient workshop training. Reduced cognitive demands on PE content due to language barriers. Difficulty in designing effective tasks for linguistic output.
Otwinowska and Forys (2017). Republic of Poland	A significant number of pupils expressed negative feelings about CLIL classes. Many 4th-grade pupils felt cognitively overloaded and struggled with understanding English terms. Students indicate difficulty in speaking and constructing sentences in English. Problems with English were noted frequently in CLIL Maths and Science classes.
Pérez (2016). Republic of Poland	Teacher's workload is higher. Collaboration with content and language colleagues is necessary but challenging. Teachers' limited target language proficiency is a significant issue. Educators' training and educational authorities' support is needed. Lack of teaching of CLIL and EFL resources.
Pladevall-Ballester (2015). Spain	Challenging topics lead to frustration among low achievers. Teaching resources are insufficient. It is time-consuming to prepare the lesson plans and materials. Parents worried that low achievers might not learn effectively in CLIL classes. Students' poor level of English found CLIL classes difficult and struggled with understanding.
Waloyo et al. (2021). Indonesia	English language development and subject knowledge improve. Students' motivation increases. CLIL enhanced students' vocabulary, listening, and speaking skills. Cognitive development and problem-solving skills are higher.
Zafiri and Zouganeli (2017). Greece	Balancing content and language instruction is challenging. Teachers' lack of confidence in subject knowledge is evident. It is time-consuming to prepare the lesson plans and materials. There is a lack of collaboration among teachers. Teachers' training is required.

Source: own elaboration.

Note. The data presented in this table were compiled from the following 20 articles: [List of full references of the 20 articles].

According to the results, the biggest obstacles in teaching CLIL include excessive workloads, a lack of content expertise, collaboration between CLIL and non-CLIL educators, and a lack of training. For instance, the participants in the research conducted by Anggraini et al. (2023); Badurina (2016) and Czura and Anklewicz (2018), concluded that teachers' workloads when integrating CLIL were a common constraint across several investigations. A lack of content expertise was strongly linked to this difficulty, particularly in spending excessive time learning new terminology, practicing pronunciations, and familiarizing themselves with the subject matter they were expected to teach. However, the lack of adequate preparation for teachers made it difficult to overcome these challenges. Additionally, educators in studies by Anggraini et al. (2023); Badurina (2016); Barrios and Acosta (2022) and Custodio-Espinar and Gómez-Cortés (2021), argued that another challenge for educators is collaborating with CLIL and content teachers, particularly when it comes to evaluating subject matter, language proficiency, and expertise

Discussion

The purpose of this literature review was to analyze the reported challenges and advantages of CLIL implementation for EFL educators at the elementary level to have an overview of how educators can become practitioners in expanding the students' knowledge in elementary education levels, as well as evaluating the viability of CLIL within its unique teaching environments, enabling educators to make informed decisions regarding its integration to support the student's development.

Therefore, based on the analysis of the 20 empirical articles, the participants of these studies mentioned that the majority of teachers perceived the integration of CLIL strategies into EFL instruction positively. For instance, Karabassova and San Isidro (2023); Ó Ceallaigh et al. (2017); Pérez (2016); Pladevall-Ballester (2015) and Zafri and Zouganeli (2017), asserted that CLIL enhances students' motivation and cognitive abilities within the English- language learning environment, especially as they work collaboratively with their pairs.

Pladevall-Ballester (2015), noted that many teachers acknowledge the advantages of implementing CLIL in elementary contexts, particularly concerning teachers' and students' roles. In this regard, Carrasco and Retamar (2023), stated that through CLIL, teachers become facilitators of learning, guiding students in improving their self-confidence. Similarly, students assume a more independent role by actively participating in knowledge acquisition. Additionally, nine of the 20 analyzed articles concluded that foreign language skills improvement and content knowledge were other visible benefits for CLIL users. According to Anggraini et al. (2023); Badurina (2016); Campillo et al. (2019) and Castillo and Fernández (2022), in students involved in CLIL classes improve their language proficiency and content knowledge as they alternate between languages, especially in oral communication and listening. The findings of this literature review also revealed that CLIL

contributes to more productive and authentic learning environments, ultimately strengthening students' overall engagement (Pladevall-Ballester, 2015).

Examining the challenges faced by educators when implementing CLIL, the findings show that the most predominant challenges include excessive workloads, target language proficiency issues, lack of content knowledge, collaboration between non-CLIL and CLIL educators, and lack of training. For instance, participants in studies by Czura and Anklewicz (2018); Badurina (2016); Otwinowska and Foryś (2017) and Anggraini et al. (2023), identified teachers' workload as a significant constraint in the integration of CLIL. They reported that teachers experienced excessive workloads, as they were required to prepare lesson plans and didactic materials in advance, with a particular focus on designing activities that enhance student engagement. This challenge is closely linked to educators' limited proficiency in the content subject. It was found that interviewed educators invest considerable time in training themselves, not only in unfamiliar subject content but also in refining pronunciation and acquiring new vocabulary for instruction (Ó Ceallaigh et al., 2017; Pladevall-Ballester, 2015; Waloyo et al., 2021). Furthermore, Pérez (2016), claimed that collaboration between language and subject teachers is another constraint for educators, particularly due to difficulties in aligning assessment, instructional materials, language proficiency, and subject expertise. Another critical challenge reported by educators is the lack of adequate teacher training. Many instructors emphasized that implementing CLIL is particularly difficult due to their limited familiarity with the approach. Gućec (2019), noted that this difficulty arises from the challenge educators face in maintaining a clear balance between language and content instruction.

Additionally, while primary students' elementary-level perceptions were not part of the objectives of this literature review, it was found in that students with lower skill levels experienced cognitive overload because they struggled to understand English concepts used in CLIL sessions (Anggraini et al., 2023; Badurina, 2016; Barrios & Acosta, 2022; Custodio-Espinar & Gómez-Cortés, 2021). Even though students were capable of creating formal definitions, very few could accurately construct the correct grammatical structures typically associated with effective definitions, regardless of the language used. As a result, they frequently relied primarily on their mother tongue to understand the subject content as (Anggraini et al., 2023). For this reason, these challenges could be addressed with the support of educational authorities, who must adopt administrative measures (Pérez, 2016).

Conclusion

In conclusion, the results indicate that while introducing CLIL into primary schools greatly enhances students' language skills and engagement, there are considerable challenges related to teacher preparation, training, and resource availability. To successfully integrate CLIL in the classroom, these issues must be addressed through institutional support, professional development opportunities, and collaboration between language and subject instructors.

Limitations and opportunities for further research

There are a few suggestions for additional studies on how primary school EFL teachers use CLIL. Although many peer-reviewed papers were analyzed to answer the research questions, none of the articles under consideration were conducted in Ecuador. Therefore, future research on the use of CLIL in elementary contexts should be prioritized in Ecuador. This type of data could assist Ecuadorian instructors and students in understanding the realities that primary instructors deal with daily throughout the entire educational process. Besides, teachers should also establish an active learning environment to engage students in collaborative projects and contribute to their education. Finally, the last recommendation is for parents to continuously encourage their kids to practice the material learned at home. Due to the progressive improvement in their English ability brought about by this extra practice, students may participate and collaborate more in class activities.

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