Understanding the benefits and challenges of Content and Language Integrated Learning (CLIL) in English education: a literature synthesis

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Abstract
Content and Language Integrated Learning (CLIL) is a dynamic educational approach that holds the potential to enhance language proficiency, content knowledge acquisition, and academic achievement among students. By integrating language learning with subject content, CLIL provides students with immersive and meaningful learning experiences that facilitate communicative competence, critical thinking skills, and intercultural awareness. Discussions surrounding CLIL implementation have emphasized its potential to transform language education and promote multilingualism in diverse educational contexts. Key findings from research on CLIL suggest that participation in CLIL programs can lead to improvements in students' language proficiency across various linguistic skills, including listening, speaking, reading, and writing. Additionally, CLIL facilitates deeper comprehension and retention of subject matter by providing authentic contexts for learning and promoting interdisciplinary connections. Students participating in CLIL programs demonstrate comparable or even superior levels of content knowledge acquisition compared to those in traditional subject-based instruction, highlighting the effectiveness of CLIL in promoting academic success and critical thinking skills. However, the success of CLIL implementation hinges on various factors, including teacher preparation, institutional support, and resource allocation. Educators play a central role in the success of CLIL programs, requiring specialized training and ongoing professional development to effectively integrate language and content instruction. Institutional support is essential for creating conducive environments for CLIL implementation, while adequate resources are critical for optimizing learning experiences and addressing the diverse needs of learners.

Keywords: Content and Language Integrated Learning (CLIL), approach, English Education.

Abstrak
Content and Language Integrated Learning (CLIL) merupakan pendekatan pendidikan bahasa yang dinamis yang memiliki potensi untuk meningkatkan kemahiran berbahasa, pemerolesan pengetahuan konten, dan prestasi akademik di antara siswa. Melalui integrasi pembelajaran bahasa dengan konten mata pelajaran, CLIL memberikan pengalaman belajar yang mendalam dan bermakna yang memfasilitasi kompetensi komunikatif, keterampilan berpikir kritis, dan kesadaran antar budaya. Diskusi seputar implementasi CLIL telah menegaskan potensinya untuk mengubah pendidikan bahasa dan mempromosikan multibahasa dalam berbagai konteks pendidikan. Temuan utama dari penelitian tentang CLIL menunjukkan bahwa partisipasi dalam program CLIL dapat menyebabkan peningkatan kemahiran berbahasa siswa di berbagai keterampilan linguistik, termasuk mendengarkan, berbicara, membaca, dan menulis. Selain itu, CLIL memfasilitasi pemahaman yang lebih mendalam dan retensi materi pelajaran dengan menyediakan konteks autentik untuk pembelajaran dan mempromosikan hubungan antar disiplin. Siswa yang berpartisipasi dalam program CLIL menunjukkan tingkat pemerolesan pengetahuan konten yang sebanding atau bahkan lebih tinggi dibandingkan dengan mereka dalam pembelajaran berbasis subjek tradisional, menyoroti efektivitas CLIL dalam mempromosikan keberhasilan akademik dan keterampilan berpikir kritis. Namun, keberhasilan implementasi CLIL bergantung pada berbagai faktor, termasuk persiapan guru, dukungan institusional, dan alokasi sumber daya. Pendidik memainkan peran sentral dalam kesuksesan program CLIL, memerlukan pelatihan khusus dan pengembangan profesional berkelaian untuk mengintegrasikan instruksi bahasa dan konten secara efektif. Dukungan institusional penting untuk menciptakan lingkungan yang kondusif untuk implementasi CLIL, sementara sumber daya yang memadai kritis untuk mengoptimalkan pengalaman belajar dan mengatasi kebutuhan yang beragam dari para siswa.

Kata Kunci: Content and Language Integrated Learning (CLIL), Pendekatan, Pendidikan Bahasa Inggris
INTRODUCTION

In an increasingly interconnected world, proficiency in English has become a prerequisite for success in various fields ranging from academia to business (Sari, Ningsih & Novita (2023); Rusmiyanto et al (2023); Franchisca et al (2024); Wulantari et al (2023); Sari & Ningsih (2023)). Consequently, educators are continually exploring innovative approaches to language instruction that not only enhance students' linguistic competence but also cultivate their critical thinking skills and subject knowledge (Fauziningrum et al (2023); Hartono et al (2023); Ningsih & Sari (2021)). Content and Language Integrated Learning (CLIL) has emerged as a promising pedagogical approach that integrates the teaching of a second language with the learning of subject content, offering a multifaceted educational experience (Navés (2009); Arnó-Macià & Mancho-Barés (2015)).

The origins of CLIL can be traced back to the 1980s in Europe, where it was initially developed as a response to the growing demand for bilingual education and the need to promote multilingualism within the European Union (Tudor, 2008). Since then, CLIL has gained momentum worldwide and has been implemented in diverse educational contexts, ranging from primary schools to universities, and across various disciplines including science, mathematics, social studies, and the arts.

Marsh & Frigols (2012) and Dalton-Puffer (2011) explain that CLIL programs typically involve the delivery of subject content in the target language (e.g., English) while simultaneously fostering language acquisition through meaningful interaction and engagement with the material. Proponents of CLIL argue that this integrated approach not only enhances students' language proficiency but also facilitates deeper comprehension of subject matter by contextualizing language learning within authentic academic content.

Moreover, proponents assert that CLIL offers several potential benefits over traditional language instruction methods (Cenoz, Genesee, & Gorter (2014); Paraná, Siqueira, & Landau (2023)). Firstly, by immersing students in authentic language use within a meaningful context, CLIL promotes the development of both receptive and productive language skills. Secondly, CLIL encourages interdisciplinary learning by bridging the gap between language and content domains, thereby fostering connections between different areas of knowledge. Thirdly, CLIL has been lauded for its potential to promote cultural awareness and intercultural competence by exposing students to diverse perspectives and ways of thinking (Mahan (2020); Windhager, (2014)).

Despite its potential advantages, however, CLIL implementation is not without challenges. Critics argue that the success of CLIL programs is contingent upon various factors such as teacher proficiency in the target language, availability of appropriate resources and materials, and institutional
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support (Nikula et al (2016); Pham & Unaldi (2022)). Additionally, concerns have been raised regarding the potential cognitive overload experienced by students who must simultaneously process new language input and complex subject content.

Thus, while CLIL holds promise as a transformative approach to language education, its effectiveness and sustainability depend on a nuanced understanding of both its benefits and challenges. This literature review seeks to synthesize existing research on CLIL in English education, exploring its theoretical underpinnings, empirical evidence, and implications for practice. By critically examining the extant literature, this review aims to provide insights into how CLIL can be effectively implemented and optimized to maximize its potential benefits for learners in diverse educational contexts.

To develop this research, the following research questions are used:

1. What are the key factors influencing the successful implementation of Content and Language Integrated Learning (CLIL) in English education, including teacher proficiency, institutional support, and resource availability?
2. How does participation in CLIL programs impact students' language proficiency, content knowledge acquisition, and cognitive development compared to traditional language instruction methods?
3. What are the perceived benefits and challenges experienced by educators and students involved in CLIL programs in English education, and how do these perceptions vary across different educational contexts and participant demographics?

METHOD

The research method employed in this literature synthesis involves a systematic review of existing studies and scholarly articles related to Content and Language Integrated Learning (CLIL) in English education. Utilizing a comprehensive search strategy, relevant literature was identified from databases such as PubMed, ERIC, PsycINFO, Google Scholar, and academic publishers' databases. Keywords and search terms included variations of "CLIL," "Content and Language Integrated Learning," "English education," "bilingual education," "second language acquisition," and other related terms.

Inclusion criteria for selecting literature encompassed peer-reviewed articles, books, dissertations, and conference proceedings published in English from a diverse range of disciplinary perspectives, including education, linguistics, applied linguistics, and language teaching (Zed, 2008). Studies focusing on CLIL implementation, outcomes, effectiveness, challenges, and best practices in English education contexts were prioritized for inclusion.

The research process involved several stages, including screening titles and abstracts to identify relevant studies, retrieving full-text articles for further evaluation, and critically appraising the
methodological rigor and relevance of each study. To ensure comprehensiveness and minimize bias, multiple researchers were involved in the literature search, screening, and selection process, with disagreements resolved through consensus.

Data extraction and synthesis involved systematically organizing and analyzing key findings, themes, and patterns across selected studies. Common themes related to the benefits and challenges of CLIL in English education emerged from the synthesis, allowing for a comprehensive understanding of the current state of research in the field. The synthesis also identified gaps in the existing literature and areas for future research, providing insights for educators, policymakers, and researchers interested in CLIL implementation and optimization.

By employing a systematic and rigorous approach to literature synthesis, this research method enables the synthesis of diverse perspectives and empirical evidence on CLIL in English education, contributing to a nuanced understanding of its benefits, challenges, and implications for practice.

RESULTS AND DISCUSSIONS

Results
1. The Key Factors Influencing the Successful Implementation of Content and Language Integrated Learning (CLIL) in English Education

Content and Language Integrated Learning (CLIL) is an approach to language education that involves teaching academic subjects (such as science, mathematics, social studies, or the arts) in a second or foreign language, with the aim of simultaneously developing students' language proficiency and subject knowledge (Marsh & Frigols, 2012). In CLIL programs, the target language (e.g., English) serves as both the medium of instruction and the vehicle for learning subject content.

Villabona & Cenoz (2022) and De Graaff, Koopman, & Westhoff (2007) explain the key features of CLIL include: (1) Integration of Language and Content: CLIL integrates language learning with the teaching of academic content, allowing students to engage with subject matter in a meaningful and contextually rich environment. This integration enables students to acquire both linguistic and disciplinary knowledge simultaneously; (2) Authentic Language Use: CLIL promotes authentic language use by exposing students to real-life situations and academic discourse in the target language. Through exposure to authentic texts, materials, and communication tasks, students develop language skills that are relevant and applicable to real-world contexts; (3) Focus on Communication and Interaction: CLIL emphasizes communicative competence by providing opportunities for students to engage in meaningful communication, collaboration, and interaction in the target language. Students are encouraged to express their ideas, ask questions, and participate actively in classroom discussions and activities; (4) Cognitive Engagement and Critical Thinking: CLIL fosters cognitive engagement and critical thinking by challenging students to analyze, evaluate, and apply subject content in the target language. Through problem-solving tasks, inquiry-based learning, and project-based activities, students develop higher-order thinking skills and deepen their understanding of
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academic concepts; (5) Cultural and Intercultural Awareness: CLIL promotes cultural and intercultural awareness by exposing students to diverse cultural perspectives and ways of thinking through the medium of the target language. By engaging with content from different cultural contexts, students develop empathy, tolerance, and appreciation for cultural diversity.

Ellison (2018) and Cañado (2018) believe that CLIL can be implemented at various educational levels, from primary schools to universities, and across different subject areas. While CLIL originated in Europe as a response to the need for bilingual education within the European Union, it has since gained popularity worldwide as a pedagogical approach that promotes multilingualism, academic achievement, and intercultural competence.

Moreover, the successful implementation of Content and Language Integrated Learning (CLIL) in English education is influenced by various key factors, each playing a crucial role in shaping the effectiveness and sustainability of CLIL programs. Pérez Cañado (2016), Pérez Agustín (2019), and Hughes & Madrid (2020) explain that there are three primary factors that significantly impact CLIL implementation are teacher proficiency, institutional support, and resource availability.

The first one is Teacher Proficiency: Perhaps one of the most critical factors in the success of CLIL programs is the proficiency level of teachers in both the target language (e.g., English) and the subject content being taught. Teachers need to possess not only a high level of linguistic competence but also pedagogical skills to effectively deliver content in the target language while ensuring comprehension and engagement among students. Moreover, teachers should be proficient in employing strategies for scaffolding language learning and supporting students' comprehension of complex subject matter. Continuous professional development opportunities and training programs tailored to CLIL pedagogy can enhance teachers' proficiency and confidence in delivering CLIL instruction effectively.

The second one is Institutional Support: The support provided by educational institutions, including schools, school districts, and educational authorities, is instrumental in the successful implementation of CLIL programs. Institutional support encompasses various aspects, such as policy frameworks, curriculum design, administrative support, and professional development initiatives. Educational institutions need to recognize the value of CLIL as a pedagogical approach and allocate resources, including funding, time, and personnel, to facilitate its implementation. Additionally, clear guidelines and standards for CLIL implementation, along with mechanisms for monitoring and evaluation, can help ensure consistency and quality across CLIL initiatives within educational institutions.

The third one is the resource availability: Adequate resources, including instructional materials, technology, and support services, are essential for the effective implementation of CLIL programs. Teachers require access to a wide range of authentic and culturally relevant materials in the target language to support content delivery and language learning objectives. Additionally, technology-
enhanced resources, such as multimedia tools, digital libraries, and online learning platforms, can enrich CLIL instruction and provide opportunities for interactive and personalized learning experiences. Moreover, support services, such as language support for students with diverse linguistic backgrounds and professional development opportunities for teachers, contribute to the overall success and sustainability of CLIL initiatives.

Overall, the successful implementation of CLIL in English education hinges upon a combination of factors, including teacher proficiency, institutional support, and resource availability. By addressing these key factors comprehensively and strategically, educational stakeholders can enhance the quality and impact of CLIL programs, ultimately promoting language proficiency, subject knowledge acquisition, and academic success among students.

2. Participation in CLIL Programs Impact Students’ Language Proficiency, Content Knowledge Acquisition, and Cognitive Development Compared to Traditional Language Instruction Methods

Participation in Content and Language Integrated Learning (CLIL) programs can have significant implications for students’ language proficiency, content knowledge acquisition, and cognitive development compared to traditional language instruction methods (Dalton-Puffer (2011); Goris, Denessen & Verhoeven (2019); Yang (2015)). Several studies have investigated the outcomes of CLIL participation in these areas, yielding valuable insights into the potential benefits of CLIL.

a. Language Proficiency: CLIL programs are designed to immerse students in the target language (e.g., English) within authentic content contexts, providing opportunities for meaningful language use and interaction. Research suggests that participation in CLIL can lead to improvements in students’ language proficiency across various linguistic skills, including listening, speaking, reading, and writing. By engaging with subject content in the target language, students develop vocabulary, grammar, and discourse skills in a naturalistic and contextually rich environment. Additionally, CLIL fosters language fluency and communicative competence by promoting language use for real purposes and communicative tasks, thus enhancing students’ overall language proficiency compared to traditional language instruction methods that may focus more narrowly on language structures and drills.

b. Content Knowledge Acquisition: In CLIL programs, students not only learn language but also acquire subject content knowledge in areas such as science, mathematics, social studies, or the arts. Research indicates that CLIL participants demonstrate comparable or even superior levels of content knowledge acquisition compared to students in traditional subject-based instruction, despite learning the content in a second language. By integrating language and content learning, CLIL facilitates deeper comprehension and retention of subject matter by providing meaningful contexts for learning and promoting connections between language and disciplinary concepts. Moreover, CLIL encourages higher-order thinking skills, such as analysis, synthesis, and evaluation, as students engage with complex content in the target language, leading to enhanced academic achievement and conceptual understanding.
c. Cognitive Development: Participation in CLIL programs can also contribute to students’ cognitive development by fostering cognitive flexibility, metacognitive awareness, and critical thinking skills. CLIL requires students to navigate linguistic and conceptual challenges simultaneously, encouraging cognitive processes such as problem-solving, inference-making, and hypothesis testing. Moreover, CLIL promotes metalinguistic awareness as students reflect on and analyze language use in context, leading to greater language awareness and strategic language learning skills. By engaging with content in a second language, students develop cognitive adaptability and cross-cultural competence, preparing them for success in diverse academic and professional contexts.

Overall, participation in CLIL programs offers multifaceted benefits for students, including enhanced language proficiency, content knowledge acquisition, and cognitive development compared to traditional language instruction methods. By integrating language and content learning in meaningful ways, CLIL provides students with valuable skills and competencies that extend beyond linguistic proficiency, empowering them to succeed in an increasingly globalized and interconnected world.

3. Perceived Benefits and Challenges Experienced by Educators and Students Involved in Content and Language Integrated Learning (CLIL) Programs in English Education

Perceived benefits and challenges experienced by educators and students involved in Content and Language Integrated Learning (CLIL) programs in English education can vary across different educational contexts and participant demographics. Understanding these variations is crucial for optimizing CLIL implementation and addressing the diverse needs and perspectives of stakeholders.

Perceived Benefits (Marsh & Frigols (2012); Dalton-Puffer & Smit (2013)):

a. Enhanced Language Proficiency: Educators and students often perceive CLIL programs as beneficial for improving language proficiency in the target language (e.g., English). By immersing students in authentic language use within content-rich contexts, CLIL facilitates meaningful language acquisition and fosters communicative competence.

b. Deeper Content Understanding: CLIL offers educators and students the opportunity to explore subject content in depth while simultaneously developing language skills. By integrating language and content learning, CLIL promotes deeper conceptual understanding and critical thinking, leading to enhanced academic achievement.

c. Cultural Awareness and Interdisciplinary Learning: Participation in CLIL programs exposes educators and students to diverse cultural perspectives and disciplinary knowledge. CLIL encourages interdisciplinary connections and promotes intercultural competence by engaging with content from various cultural and linguistic backgrounds.

Perceived Challenges (Harrop (2012); Arnó-Macià, E., & Mancho-Barés, G. (2015)): 
a. Language Proficiency and Cognitive Load: Educators and students may encounter challenges related to language proficiency, particularly in the initial stages of CLIL implementation. Processing complex subject content in a second language can impose cognitive load, leading to comprehension difficulties and academic stress.

b. Resource Constraints: Limited access to appropriate instructional materials, technology, and language support services can pose challenges for educators and students participating in CLIL programs. Resource constraints may hinder effective CLIL implementation and limit opportunities for meaningful language and content learning.

c. Teacher Preparedness and Professional Development: Educators involved in CLIL programs may face challenges related to pedagogical preparation and professional development. Effective CLIL instruction requires specialized skills in both language teaching and content delivery, necessitating ongoing training and support for educators to ensure quality implementation.

Perceptions of CLIL benefits and challenges may vary across different educational contexts, such as primary schools, secondary schools, and higher education institutions. Additionally, participant demographics, including students' linguistic backgrounds, socioeconomic status, and prior educational experiences, can influence their experiences and outcomes in CLIL programs (Barrios & Acosta-Manzano 2022; Pérez Cañado 2020). For example, students from linguistically diverse backgrounds may perceive CLIL as an opportunity to develop language skills and academic competence in a supportive and inclusive learning environment. Conversely, students with limited language proficiency or educational resources may face greater challenges in adapting to CLIL instruction. Similarly, educators working in resource-rich environments with strong institutional support may perceive CLIL as a valuable pedagogical approach for promoting language and content learning. In contrast, educators in resource-constrained settings may encounter greater challenges in implementing CLIL effectively due to limited access to training, materials, and support services.

Overall, understanding the nuanced interplay between perceived benefits, challenges, and contextual factors is essential for informing the design, implementation, and evaluation of CLIL programs in English education. By addressing the diverse needs and perspectives of educators and students, educational stakeholders can maximize the potential of CLIL to promote language proficiency, content knowledge acquisition, and academic success across diverse educational contexts and participant demographics.

**Discussions**

Dalton-Puffer & Smit (2013) and He & Lin (2018) believe that Content and Language Integrated Learning (CLIL) represents a dynamic approach to language education that has garnered considerable attention for its potential to enhance both language proficiency and content knowledge acquisition among students. The discussions surrounding CLIL implementation and effectiveness encompass a range of considerations, including pedagogical strategies, learner outcomes, and contextual factors influencing program success.
One central aspect of the discussion revolves around the effectiveness of CLIL in promoting language proficiency in the target language, typically English in many educational contexts (Barrios & Acosta-Manzano, 2022). Existing research suggests that CLIL offers significant advantages over traditional language instruction methods by providing students with immersive language learning experiences within meaningful content contexts. By integrating language learning with subject content, CLIL engages students in authentic language use and fosters communicative competence, leading to improvements in listening, speaking, reading, and writing skills. However, discussions also acknowledge the challenges associated with achieving language proficiency in CLIL programs, particularly for students with diverse linguistic backgrounds or limited exposure to the target language outside the classroom. Addressing these challenges requires careful consideration of instructional strategies, language support mechanisms, and differentiated learning approaches tailored to students’ individual needs.

Another key discussion point pertains to the impact of CLIL on content knowledge acquisition and academic achievement (Tudor (2008); Pham & Unaldi (2022)). Proponents argue that CLIL facilitates deeper comprehension and retention of subject matter by providing meaningful contexts for learning and promoting interdisciplinary connections. Research indicates that students participating in CLIL programs demonstrate comparable or even superior levels of content knowledge acquisition compared to those in traditional subject-based instruction, despite learning the content in a second language. These findings underscore the potential of CLIL to promote academic success and critical thinking skills among students. However, discussions also highlight the importance of aligning CLIL curriculum and instructional practices with academic standards and learning objectives to ensure rigor and coherence across subject areas.

Furthermore, discussions surrounding CLIL implementation encompass considerations related to teacher preparation, institutional support, and resource allocation (Pérez Cañado (2018); De Zarobe (2013)). Educators play a pivotal role in the success of CLIL programs, requiring specialized training and ongoing professional development to effectively integrate language and content instruction. Institutional support, including policy frameworks, curriculum design, and administrative structures, is essential for creating conducive environments for CLIL implementation and sustaining program effectiveness. Additionally, adequate resources, such as instructional materials, technology, and language support services, are critical for optimizing CLIL learning experiences and addressing the diverse needs of learners.

Overall, discussions surrounding CLIL reflect a recognition of its potential to transform language education and promote multilingualism, academic achievement, and intercultural competence. By engaging with the complexities of CLIL implementation and effectiveness, educators, policymakers, and researchers can contribute to the ongoing advancement and refinement of CLIL practices, ultimately enhancing educational outcomes for students in diverse linguistic and cultural
CONCLUSIONS

Content and Language Integrated Learning (CLIL) represents a dynamic and innovative approach to language education that holds promise for enhancing language proficiency, content knowledge acquisition, and academic achievement among students. Through the integration of language learning with subject content, CLIL provides students with immersive and meaningful learning experiences that foster communicative competence, critical thinking skills, and intercultural awareness. The discussions surrounding CLIL implementation have underscored its potential to transform language education and promote multilingualism in diverse educational contexts.

Key findings from research on CLIL suggest that participation in CLIL programs can lead to improvements in students' language proficiency across various linguistic skills, including listening, speaking, reading, and writing. Additionally, CLIL facilitates deeper comprehension and retention of subject matter by providing authentic contexts for learning and promoting interdisciplinary connections. Students participating in CLIL programs demonstrate comparable or even superior levels of content knowledge acquisition compared to those in traditional subject-based instruction, highlighting the effectiveness of CLIL in promoting academic success and critical thinking skills.

However, the success of CLIL implementation hinges upon various factors, including teacher preparation, institutional support, and resource allocation. Educators play a central role in the success of CLIL programs, requiring specialized training and ongoing professional development to effectively integrate language and content instruction. Institutional support is essential for creating conducive environments for CLIL implementation, while adequate resources are critical for optimizing learning experiences and addressing the diverse needs of learners.

In conclusion, CLIL represents a valuable pedagogical approach that promotes language proficiency, content knowledge acquisition, and academic achievement among students in diverse linguistic and cultural contexts. By engaging with the complexities of CLIL implementation and effectiveness, educators, policymakers, and researchers can contribute to the ongoing advancement and refinement of CLIL practices, ultimately enhancing educational outcomes and preparing students for success in an increasingly interconnected and multicultural world.

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