

TEACHERS' READINESS FOR CLIL IMPLEMENTATION IN EFL HIGHER EDUCATION: LINGUISTIC, PEDAGOGICAL, AND INSTITUTIONAL PERSPECTIVES

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Abstract

The growing internationalization of higher education has increased the demand for educational approaches that promote both disciplinary expertise and foreign language proficiency. Content and Language Integrated Learning (CLIL) has emerged as an influential pedagogical framework capable of addressing these dual objectives by integrating subject content and language learning within a unified instructional environment. Despite its increasing adoption across universities worldwide, the effectiveness of CLIL largely depends on teachers' readiness to implement it successfully. Teacher readiness encompasses multiple dimensions, including linguistic competence, pedagogical preparedness, and institutional support. However, limited research has explored the interaction of these factors in English as a Foreign Language (EFL) higher education contexts. The findings indicate that teachers generally recognize the educational benefits of CLIL and demonstrate positive attitudes toward its implementation. Nevertheless, significant differences in readiness levels were observed across linguistic, pedagogical, and institutional dimensions. The results reveal that linguistic competence strongly influences teachers' confidence and instructional flexibility. Pedagogical preparedness is associated with previous CLIL training and experience with learner-centered methodologies. Institutional support, including professional development opportunities, access to resources, and administrative commitment, emerged as a critical factor influencing successful implementation. The study concludes that effective CLIL integration requires a

comprehensive strategy combining teacher development initiatives, curriculum alignment, and institutional policy support.

Keywords: CLIL, teacher readiness, EFL higher education, linguistic competence, pedagogical preparedness, institutional support, bilingual education, higher education.

Introduction

The twenty-first century has witnessed unprecedented levels of globalization, technological advancement, and international cooperation. These developments have significantly transformed higher education systems worldwide, creating new demands for graduates who possess not only specialized disciplinary knowledge but also strong communication skills in international languages, particularly English. As English continues to function as the dominant language of global academia, science, business, and technology, universities increasingly face the challenge of preparing students to operate effectively in multilingual and multicultural environments.

In response to these challenges, educational institutions have adopted a variety of innovative pedagogical approaches aimed at integrating language learning with academic content instruction. Among these approaches, Content and Language Integrated Learning (CLIL) has gained considerable attention from educators, researchers, and policymakers. CLIL refers to educational settings in which a foreign language is used as the medium of instruction for teaching non-language subjects, enabling learners to acquire both subject-specific knowledge and language competence simultaneously (Marsh, 2002). The growing popularity of CLIL can be attributed to its dual-focused nature. Unlike traditional foreign language teaching approaches that often separate language learning from content learning, CLIL creates authentic contexts in which language is used as a tool for communication, knowledge construction, and academic engagement. Through exposure to meaningful content, students develop linguistic competence while simultaneously enhancing their disciplinary understanding. This integrated approach has been associated with numerous educational benefits, including improved language proficiency, enhanced cognitive development, increased

learner motivation, and greater intercultural awareness (Coyle, Hood, & Marsh, 2010). Over the past two decades, CLIL has expanded beyond its European origins and has become increasingly common in higher education institutions across Asia, Latin America, and other regions where English is taught as a foreign language. Universities have introduced CLIL programs as part of broader internationalization strategies designed to improve graduate employability, support academic mobility, and enhance institutional competitiveness in the global educational market. As a result, CLIL is no longer viewed solely as a language-learning methodology but rather as a comprehensive educational framework supporting multilingual education and international academic engagement. Despite the potential benefits associated with CLIL, its successful implementation remains a complex and demanding process. One of the most frequently identified determinants of CLIL success is teacher readiness. Effective CLIL instruction requires educators to integrate content and language objectives, design appropriate learning activities, provide linguistic scaffolding, facilitate classroom interaction, and assess both content knowledge and language development. Consequently, teachers play a central role in determining whether CLIL achieves its intended educational outcomes. Teacher readiness for CLIL extends beyond content expertise and language proficiency. Contemporary research conceptualizes readiness as a multidimensional construct encompassing linguistic competence, pedagogical preparedness, professional confidence, and institutional support. Linguistic competence enables teachers to communicate subject matter effectively through the target language and respond flexibly to classroom interactions. Pedagogical preparedness involves understanding CLIL principles, lesson planning strategies, assessment techniques, and learner-centered instructional practices. Institutional support includes access to resources, professional development opportunities, administrative encouragement, and collaborative structures that facilitate implementation. In English as a Foreign Language (EFL) contexts, the challenges associated with CLIL implementation are particularly significant. Unlike bilingual environments where the target language is frequently used in daily communication, EFL settings often provide limited opportunities for authentic language exposure outside the classroom. Consequently, many teachers experience uncertainty regarding their language proficiency and their ability to deliver content effectively through English. These

concerns may affect instructional quality, teacher confidence, and long-term sustainability of CLIL programs. Furthermore, higher education presents unique challenges compared to primary and secondary educational contexts. University instructors are typically recruited based on disciplinary expertise rather than language teaching qualifications. While many possess advanced subject knowledge, they may have limited experience integrating language objectives into content instruction. Similarly, institutional policies often emphasize internationalization goals without providing sufficient professional development, resources, or structural support necessary for successful implementation. Previous research has highlighted the importance of teacher readiness in CLIL contexts. Studies conducted in Spain, Finland, Italy, and other European countries suggest that teachers' perceptions of their linguistic and pedagogical competence significantly influence classroom practices and student outcomes. However, much of the existing literature focuses on primary and secondary education, leaving higher education relatively underexplored. Moreover, relatively few studies have examined teacher readiness through an integrated framework encompassing linguistic, pedagogical, and institutional dimensions simultaneously. This gap is particularly evident in Central Asian and post-Soviet educational contexts, where universities have increasingly adopted English-medium and CLIL-oriented educational policies as part of modernization and internationalization initiatives. Despite growing interest in bilingual education, empirical evidence regarding university teachers' readiness remains limited. Understanding the factors that influence readiness is therefore essential for developing effective teacher education programs, institutional policies, and sustainable CLIL practices. The present study seeks to contribute to this emerging body of research by examining teachers' readiness for CLIL implementation in EFL higher education through three interconnected dimensions: linguistic competence, pedagogical preparedness, and institutional support. By employing a mixed-methods approach that combines quantitative survey data with qualitative interview findings, the study aims to provide a comprehensive understanding of the opportunities and challenges associated with CLIL implementation.

Specifically, the study addresses the following research questions:

1. To what extent are university teachers linguistically prepared to implement CLIL in EFL higher education contexts?
2. How do teachers perceive their pedagogical readiness for CLIL-based instruction?
3. What role does institutional support play in shaping teachers' readiness and implementation practices?
4. How do linguistic, pedagogical, and institutional factors interact to influence successful CLIL implementation?

The findings are expected to contribute to both theory and practice by advancing understanding of teacher readiness in CLIL contexts and providing evidence-based recommendations for higher education institutions seeking to strengthen multilingual education initiatives. Ultimately, the study seeks to support the development of sustainable CLIL practices capable of preparing students for participation in increasingly globalized academic and professional communities.

Literature Review

Content and Language Integrated Learning (CLIL) emerged in Europe during the 1990s as a response to increasing multilingualism, globalization, and the growing need for foreign language competence among citizens of European countries. Unlike traditional language instruction, CLIL simultaneously promotes content mastery and language development, creating opportunities for meaningful communication within authentic academic contexts. The expansion of CLIL has been closely linked to educational policies promoting multilingualism and internationalization. Initially implemented in primary and secondary schools, CLIL has gradually expanded into higher education institutions seeking to enhance students' linguistic competence and global competitiveness. Researchers argue that CLIL represents more than a teaching methodology; it constitutes a comprehensive educational philosophy that integrates language, cognition, culture, and disciplinary knowledge within a unified learning framework (Coyle, Hood, & Marsh, 2010). One of the primary reasons for the popularity of CLIL is its potential to create authentic language-learning environments. Traditional language instruction often emphasizes grammatical accuracy and isolated language skills, whereas CLIL provides learners with opportunities to use

language for meaningful academic purposes. This integration of language and content reflects contemporary views of language learning as a socially situated and cognitively complex process. Consequently, CLIL has become increasingly attractive to policymakers and educators seeking to improve both language outcomes and academic achievement. Recent studies indicate that CLIL implementation has expanded beyond Europe to Asia, Latin America, and the Middle East. In many countries, universities have adopted CLIL-based programs to support internationalization strategies, improve graduate employability, and strengthen participation in global academic networks. As a result, understanding the factors influencing successful CLIL implementation has become an important area of educational research. The theoretical foundation of CLIL draws upon several influential educational theories, including sociocultural theory, constructivism, cognitive learning theory, and communicative language teaching. These theoretical perspectives collectively explain how learners acquire both disciplinary knowledge and language competence through integrated instruction. Vygotsky's (1978) sociocultural theory provides one of the most significant foundations for CLIL. According to this perspective, learning occurs through social interaction and collaboration within a learner's Zone of Proximal Development (ZPD). Teachers support learning through scaffolding, gradually transferring responsibility to learners as competence develops. In CLIL classrooms, scaffolding plays a critical role in helping students understand complex content while simultaneously developing language skills. Constructivist learning theory further supports CLIL by emphasizing active knowledge construction. Rather than receiving information passively, learners actively engage with content, solve problems, participate in discussions, and construct meaning through interaction. This aligns closely with CLIL principles, which encourage student-centered learning and meaningful communication. Another influential framework is Coyle's (2007) 4Cs Model, which consists of Content, Communication, Cognition, and Culture. Content refers to subject-specific knowledge and skills; Communication emphasizes language development and interaction; Cognition focuses on thinking processes and higher-order skills; and Culture promotes intercultural awareness and global citizenship. The 4Cs Framework remains one of the most widely used conceptual models for CLIL curriculum design and classroom practice. From a cognitive perspective, CLIL

supports deeper learning because students process information through multiple channels simultaneously. Research suggests that integrating language and content promotes cognitive flexibility, critical thinking, and metalinguistic awareness. Consequently, CLIL is often associated with enhanced academic performance and improved language acquisition outcomes. Although CLIL research initially focused on primary and secondary education, interest in higher education has increased substantially over the last decade. Universities worldwide are increasingly implementing CLIL and English-Medium Instruction (EMI) programs as part of broader internationalization agendas. These initiatives aim to prepare students for participation in global academic and professional environments where English serves as the primary language of communication. Higher education presents unique opportunities for CLIL implementation. University students generally possess more advanced cognitive abilities and greater academic maturity than younger learners, enabling them to engage with complex disciplinary content through a foreign language. Furthermore, exposure to discipline-specific language supports the development of academic literacy and professional communication skills. Despite these advantages, higher education CLIL also presents considerable challenges. University instructors are often experts in their academic disciplines but may lack formal training in language pedagogy. Consequently, many teachers experience difficulties balancing content objectives with language-support strategies. The complexity of academic discourse further complicates instruction, requiring teachers to provide extensive linguistic scaffolding without compromising disciplinary rigor. Conversely, teachers who perceive themselves as inadequately prepared may rely on traditional teacher-centered approaches and avoid communicative activities. Recent research highlights the importance of holistic readiness frameworks that integrate linguistic, pedagogical, and organizational dimensions. Such frameworks recognize that teacher competence alone is insufficient for successful implementation if institutional conditions do not provide adequate support. Linguistic competence represents one of the most frequently discussed aspects of teacher readiness in CLIL research. Because CLIL teachers deliver disciplinary content through a foreign language, they require advanced language skills to facilitate learning effectively. Language competence influences teachers' confidence, instructional flexibility, classroom interaction, and ability to respond

to unexpected situations. Lasagabaster and Sierra (2010) found that teachers with stronger English proficiency demonstrated greater confidence when facilitating discussions, explaining complex concepts, and adapting instruction to learners' needs. Similarly, research indicates that language competence affects the quality of classroom discourse and the extent to which teachers provide meaningful opportunities for language use. However, linguistic competence extends beyond grammatical accuracy. CLIL teachers must possess discipline-specific vocabulary, academic discourse skills, pragmatic competence, and intercultural communication abilities. These competencies enable teachers to model authentic language use while supporting students' linguistic development. Interestingly, several studies report discrepancies between actual and perceived language competence. Some teachers underestimate their abilities and experience anxiety despite possessing adequate proficiency levels. Such findings suggest that confidence-building initiatives and language-focused professional development may be as important as language training itself. In EFL contexts, linguistic competence becomes particularly important because teachers often serve as students' primary source of authentic language exposure. Therefore, improving teachers' language proficiency remains a central objective of many CLIL implementation programs. Pedagogical preparedness constitutes another critical dimension of teacher readiness. Effective CLIL instruction requires specialized teaching strategies that integrate language and content objectives within coherent learning experiences. Teachers must understand how to design lessons, scaffold learning, facilitate interaction, and assess both content knowledge and language development. Research consistently identifies lesson planning as one of the most challenging aspects of CLIL implementation. Teachers must carefully balance content complexity with language demands while ensuring that learning objectives remain achievable. This often requires adapting materials, designing support activities, and differentiating instruction according to students' language proficiency levels. Scaffolding is a particularly important component of CLIL pedagogy.

Methodology

This study employed a mixed-methods research design to investigate teachers' readiness for the implementation of Content and Language Integrated Learning

(CLIL) in English as a Foreign Language (EFL) higher education contexts. The mixed-methods approach was selected because it allows for a comprehensive understanding of complex educational phenomena by combining quantitative and qualitative data. Quantitative data provided measurable information regarding teachers' perceptions of their readiness, whereas qualitative data offered deeper insights into individual experiences, challenges, and professional needs. The study adopted a convergent parallel mixed-methods design in which quantitative and qualitative data were collected during the same period, analyzed separately, and subsequently integrated during interpretation. This approach enabled triangulation of findings and enhanced the credibility and validity of the results. The study was conducted at several higher education institutions in Uzbekistan where English-medium instruction and CLIL-oriented practices have gradually been introduced as part of broader educational modernization and internationalization initiatives. These reforms aim to improve graduates' competitiveness in international labor markets and strengthen universities' global engagement. Although CLIL implementation remains relatively recent in the Uzbek higher education context, increasing emphasis has been placed on integrating English into content instruction across various disciplines, including education, tourism, economics, engineering, and social sciences. The quantitative phase involved 70 university instructors representing different academic disciplines. Participants were selected through purposive sampling based on their involvement in English-medium or CLIL-related teaching practices.

Interviews

Semi-structured interviews were conducted to gain deeper insights into teachers' experiences with CLIL implementation. The interview protocol included questions regarding:

- Perceived language competence
- Instructional challenges
- Professional development experiences
- Institutional support
- Recommendations for future implementation

Each interview lasted approximately 30–45 minutes and was audio-recorded with participants' permission. The reliability of the questionnaire was assessed using Cronbach's Alpha coefficient.

Results

The quantitative analysis revealed generally positive attitudes toward CLIL implementation among university instructors. However, the level of readiness varied across the three dimensions examined: linguistic competence, pedagogical preparedness, and institutional support. The highest mean scores were observed for linguistic competence, whereas institutional support received the lowest ratings. The findings indicate that teachers generally perceived themselves as linguistically capable of implementing CLIL. However, concerns emerged regarding pedagogical expertise and institutional support structures. Teachers reported relatively high confidence in their English language proficiency. The majority felt comfortable delivering lectures, preparing instructional materials, and explaining subject-related concepts in English. Nevertheless, some challenges were reported in spontaneous classroom interaction and academic discussion management. Overall, 78.6% of respondents agreed or strongly agreed that their English proficiency was sufficient for CLIL implementation. However, only 61.4% reported confidence in managing spontaneous interactions entirely in English. Interview findings supported these results. Participants frequently emphasized that language competence influenced their confidence and classroom performance. One interview participant commented:

“When I prepare my lectures in advance, I feel comfortable teaching in English. However, spontaneous discussions sometimes require additional linguistic flexibility.”

Another instructor stated:

“My language proficiency has improved through teaching experience, but academic discussion remains challenging in certain specialized topics.”

These findings suggest that while most teachers possess adequate language proficiency, continuous language development remains important for successful CLIL implementation. The second research question examined teachers' perceptions of their pedagogical readiness for CLIL instruction. Although

participants expressed positive attitudes toward CLIL, many reported difficulties integrating language and content objectives.

Interview data revealed three recurring pedagogical challenges:

1. Balancing language and content objectives.
2. Designing CLIL-based assessments.
3. Adapting materials to students' language levels.

One participant explained:

"I know my subject well, but combining language outcomes with content objectives requires additional planning and training."

Another instructor noted:

"Assessment is one of the most difficult aspects because we must evaluate both content understanding and language performance."

These findings highlight the importance of targeted professional development programs focused on CLIL pedagogy. The results demonstrate that teachers generally hold favorable attitudes toward CLIL and possess relatively strong linguistic competence. However, pedagogical preparedness remains uneven, particularly among instructors without formal CLIL training. Institutional support emerged as the weakest aspect of readiness, highlighting the need for stronger organizational commitment and professional development initiatives. Overall, the findings suggest that successful CLIL implementation requires a combination of individual competencies and supportive institutional conditions. Teachers' readiness is not determined solely by language proficiency but by the interaction of linguistic, pedagogical, and contextual factors.

Discussion

The present study explored teachers' readiness for CLIL implementation in EFL higher education through three interconnected dimensions: linguistic competence, pedagogical preparedness, and institutional support. The findings indicate that teachers generally demonstrate positive attitudes toward CLIL and recognize its potential benefits for students' academic and linguistic development. However, the study also reveals important challenges that may hinder effective implementation if not addressed systematically. One of the most significant findings concerns the role of linguistic competence. The results demonstrate that teachers who perceive themselves as having stronger English

language proficiency report higher levels of confidence and instructional flexibility. This finding supports previous studies conducted by Lasagabaster and Sierra (2010), who found that language competence significantly influences teachers' classroom practices and willingness to engage students in meaningful communication. Similarly, Coyle et al. (2010) emphasized that language proficiency forms the foundation upon which successful CLIL instruction is built. The findings further indicate that linguistic competence extends beyond grammatical accuracy and vocabulary knowledge. Teachers reported particular difficulties in managing spontaneous discussions, responding to unexpected questions, and facilitating higher-order academic interaction. These challenges are consistent with previous research suggesting that CLIL instructors require advanced discourse competence and academic communication skills in addition to general language proficiency (Dalton-Puffer, 2011). Therefore, professional development initiatives should focus not only on language improvement but also on academic communication and classroom interaction strategies. Another important finding relates to pedagogical preparedness. Although participants generally understood the principles of CLIL, many reported difficulties integrating language and content objectives, designing CLIL-based assessments, and implementing scaffolding techniques. These findings correspond closely with Pérez-Cañado's (2018) research, which identified pedagogical competence as one of the most challenging dimensions of teacher readiness. The statistically significant differences observed between teachers who had received CLIL training and those who had not highlight the importance of professional development. Instructors who participated in specialized training demonstrated greater confidence in lesson planning, assessment design, and classroom management. This finding reinforces the argument that successful CLIL implementation requires targeted teacher education programs rather than reliance on content expertise alone. Institutional support emerged as the weakest dimension of readiness. Participants frequently reported insufficient access to teaching resources, limited professional development opportunities, and inadequate administrative guidance. This finding aligns with Banegas (2016), who argued that institutional conditions significantly influence teachers' willingness to adopt innovative pedagogical approaches. Even highly motivated and competent instructors may struggle to implement CLIL effectively in the

absence of supportive organizational structures. The positive correlations identified among linguistic competence, pedagogical preparedness, and institutional support further emphasize the multidimensional nature of teacher readiness. The strongest relationship between linguistic competence and pedagogical preparedness suggests that language proficiency contributes to teachers' confidence in applying CLIL methodologies. Similarly, the association between institutional support and pedagogical preparedness indicates that organizational environments influence teachers' professional growth and instructional effectiveness. From a broader perspective, the findings support contemporary conceptualizations of teacher readiness as a dynamic and context-dependent construct. Rather than viewing readiness solely as an individual characteristic, the results suggest that it emerges through the interaction of personal competencies and institutional conditions. Consequently, universities seeking to implement CLIL successfully must adopt comprehensive strategies that address both teacher development and organizational support mechanisms. Several limitations should be acknowledged. *First*, the study relied primarily on self-reported data. Teachers' perceptions may not always accurately reflect actual classroom practices or competence levels. Future studies should incorporate classroom observations and performance-based measures to provide more objective assessments. *Second*, the sample was limited to university instructors from selected institutions. Consequently, the findings may not be fully generalizable to all higher education contexts. *Third*, the cross-sectional design captures readiness at a single point in time. Teacher readiness is dynamic and may evolve through experience, training, and institutional changes. Longitudinal research could provide valuable insights into how readiness develops over time. *Finally*, the study focused exclusively on teachers' perspectives. Future investigations should also examine students' experiences and learning outcomes associated with CLIL implementation.

Conclusion

This study investigated teachers' readiness for the implementation of Content and Language Integrated Learning (CLIL) in EFL higher education settings through the lenses of linguistic competence, pedagogical preparedness, and institutional support. The findings demonstrate that teachers generally hold positive attitudes

toward CLIL and recognize its potential to enhance both academic learning and language development. However, readiness levels vary considerably across the dimensions examined. Linguistic competence emerged as a fundamental factor influencing instructional confidence and classroom interaction. Teachers with stronger language proficiency reported greater flexibility in managing CLIL environments and facilitating meaningful communication. Nevertheless, many participants identified ongoing challenges related to spontaneous interaction and academic discourse. Pedagogical preparedness represented another crucial determinant of readiness. While teachers expressed familiarity with CLIL principles, many reported difficulties in lesson planning, assessment design, and integration of content and language objectives. The positive impact of prior CLIL training highlights the importance of structured professional development programs. Institutional support was identified as the most significant area requiring improvement. Limited access to resources, insufficient training opportunities, and unclear policy guidance were frequently cited as barriers to implementation. These findings suggest that successful CLIL adoption depends not only on individual teacher competence but also on supportive organizational environments. Overall, the study confirms that teacher readiness is a multidimensional and dynamic construct shaped by the interaction of personal and contextual factors. Effective CLIL implementation requires a holistic approach that combines language development, pedagogical training, and institutional support.

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