Journal of Technology and Value Addition
Vol. 8, Issue No. 2, July 2026, pp. 19-32
https://www.uwu.ac.lk/jtva/
ISSN: 3051-5203 (Online)

Research Article

Content and Language Integrated Learning (CLIL) in Sri Lanka's Higher Education: Evaluating Its Effectiveness and Pedagogical Implications

T. Arivarasy*

Department of English Language Teaching, University of Jaffna, Jaffna 40000, Sri Lanka

*Correspondence: marivarasy@univ.jfn.ac.lk; Tel.: +94 76 820 3264

Abstract

This study explores the implementation of Content and Language Integrated Learning (CLIL) in the Faculty of Arts at the University of Jaffna where most disciplines are delivered through the Tamil medium. While English Language Teaching (ELT) in Sri Lanka has traditionally prioritized grammatical accuracy over communicative competence, the growing interest in CLIL reflects a shift toward integrating language and content learning. Using a mixed-methods design, the study examined teachers' and students' perceptions of CLIL's effectiveness in improving English language proficiency and subject comprehension. The study involved a total of 49 participants, comprising 44 second-year undergraduate students and 5 English language teachers. The student participants were divided into an experimental group (n = 22) and a control group (n = 22). The five English language teachers participated in the questionnaire survey and semi-structured interviews to provide their perspectives on the implementation and effectiveness of the CLIL programme. Quantitative data were gathered through pre- and post-tests, while qualitative findings emerged from questionnaires, interviews, and lesson analyses. The findings revealed significant improvement in students' vocabulary, comprehension, and confidence in using English for academic communication. Both teachers and students expressed positive attitudes toward CLIL, acknowledging its capacity to foster engagement and disciplinary literacy. Nonetheless, several challenges were identified, including insufficient focus on grammar instruction, limited opportunities for professional training, and inadequate institutional support. Teachers also reported difficulties in balancing language and content objectives, a lack of time and resources for CLIL material preparation, and the absence of well-structured curricular guidelines. Furthermore, constraints such as large class sizes, limited exposure to authentic English input, and students' varying proficiency levels posed additional barriers to effective CLIL implementation. Overall, the findings highlight CLIL's potential to advance both language proficiency and subject knowledge in Sri Lanka's higher education context, emphasizing the need for sustained pedagogical and institutional commitment.

Keywords: Content and Language Integrated Learning (CLIL), English as a Second Language (ESL), disciplinary literacy, higher education, Sri Lanka, teacher perceptions, student perceptions

This article is published under the Creative Commons Attribution License (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. Introduction

For several decades, English has been taught as a Second Language (ESL) in Sri Lankan universities primarily through traditional, grammar-oriented approaches, with limited emphasis on integrating language form, meaning, and use. Consequently, many undergraduates continue to demonstrate English proficiency below the level expected for academic and professional success. Although recent curriculum reforms have shifted towards skills-based and discipline-specific English instruction, concerns remain regarding the effectiveness of current ESL practices in developing communicative competence.

One pedagogical approach that has gained international recognition for addressing such challenges is Content and Language Integrated Learning (CLIL), which simultaneously promotes subject knowledge and language development. However, CLIL has received limited attention in the Sri Lankan higher education context. This study addresses this gap by examining teachers' and students' perceptions of CLIL, exploring the rationale for its introduction, and investigating their expectations regarding its potential learning outcomes in Sri Lankan universities.

At the University of Jaffna, the Department of English Language Teaching (DELT) provides compulsory ESL courses for non-native English-speaking undergraduates across 11 faculties and 68 departments with different mediums of instruction, including Tamil, Sinhala, and English. The complexity of delivering ESL across such a multilingual institution presents significant pedagogical challenges. This study focuses on the Faculty of Arts, where Tamil is the medium of instruction and ESL is offered as a compulsory auxiliary subject over three years. Students study English for General Purposes (EGP) in the first year, English for Specific Purposes (ESP) in the second year, and discipline-specific English courses in the third year, including English for the Social Sciences, English for the Humanities, and General English. Despite these curriculum developments, students continue to face challenges in achieving the desired level of English proficiency, highlighting the need to explore innovative approaches such as CLIL.

2. Literature Review

Many educational contexts are increasingly adopting diverse forms of content-based instruction that recognizes the multiple benefits of integrating language development with subject content for learners of a second language. While these approaches vary in design, they share the fundamental understanding that language serves as a tool for learning, and content provides the context that makes this learning more meaningful and relevant. The reason for integrating content and language instruction grows from non-English speaking backgrounds. Children with Limited English Proficiency (LEP) frequently faced academic challenges because of language obstacles, highlighting the pressing need to speed up their second language learning. Hakuta, Butler, and Witt (2000) found that although learners can acquire basic interpersonal communication skills

relatively quickly, developing academic English proficiency generally requires four to seven years.

The Cognitive Academic Language Learning Approach (CALLA), developed by Chamot and O'Malley (1986) is an instructional model specifically designed to support students to develop the academic language proficiency required for success in subject-area classes while acquiring a second language. CALLA integrates three main elements: content-based instruction, explicit instruction in learning strategies, and the development of academic language skills. A key feature of CALLA is its strong focus on metacognitive, cognitive, and social/affective strategies, which guide learners to plan, monitor, and reflect on their own learning processes. Within this approach, students actively work with subject content-such as science, history, or social studies—while applying strategies like note-taking, summarizing, organizing information, and seeking clarification to strengthen both their subject knowledge and their English language skills (Chamot and O'Malley, 1987). reduced skills needed for academic tasks can take to five to seven years. CALLA aligns closely with Content-Based Instruction (CBI) and CLIL (Content and Language Integrated Learning) principles because it recognizes that mastering a second language for academic purposes goes far beyond conversational ability.

Content-Based instruction (CBI) is a language teaching approach that combines second or foreign language learning with the study of meaningful subject matter. Instead of presenting language as an isolated set of rules and structure, CBI uses subject matter-science, history, or social studies- as the vehicle through which students acquire language skills. This integrated focus helps learners develop both linguistic proficiency and academic knowledge at the same time, making the learning process more relevant and engaging (Brinton *et al*., 1989). Through this integrated approach, students simultaneously strengthen their language abilities and expand their content knowledge, making learning more meaningful, practical, and engaging (Brinton *et al*., 1989). According to Brinton *et al*. (1989), CBI is generally organized into three main models, each differing in how language and content are combined:

2.1. Theme-Based Instruction (TBI)

In theme-based CBI, language courses are structured around broad topics or themes that interest students. These themes serve as the framework for designing lessons, readings, vocabulary and tasks. While the main aim remains language learning, the thematic content provides a real-world context that motivates learners and encourages meaningful engagement. For instance, an English class might explore on themes such as environmental challenges, cultural practices, or health and well-being for teaching related language forms and skills.

2.2. Sheltered Content Instruction

Sheltered Instruction is a model in which subject area content- like science or history- is taught using simplified language and targeted supports to help English Language learners grasp complex material. Typically delivered by a subject specialist, this approach adjusts instruction to match students' language proficiency. Its aim is to make the subject matter comprehensible fostering English language development. Strategies such as scaffolding, visual aids, and guided discussions help students build academic knowledge and language skills together.

2.3. Adjunct Model

The fourth type of CLIL is the Adjunct model. The adjunct model connects two separate but coordinated courses: one focused on language and the other on a specific subject area. Students enroll in both courses at the same time, and the two courses are designed to complement each other. In this model, the language instruction targets the vocabulary, structures, and skills students need to succeed in the subject class. For example, a student might take an introductory biology course alongside an English class focused on academic reading and writing skills relevant to biology. The coordination between instructors ensures that language and content learning reinforce each other.

According to Mehisto *et al*. (2008), CLIL involves teaching content subjects through another language to promote both conceptual understanding and communicative ability. CLIL programmes involve learning subjects such as history, geography and others in a language that is not one's own (Marsh and Lange, 2000). According to European Commission's (2005) report, CLIL helps to ensure the attainment of EU objectives in the area of language and enables pupils to study a non-language- related subject in a foreign language.

The concept of Content and Language Integrated Learning (CLIL) is still relatively new in Sri Lanka in which English is regarded as a second language. According to the National Education Commission (2003), bilingual education was reintroduced in schools to improve students' English proficiency and ensure equitable access to higher education and future career opportunities. This renewed emphasis has strengthened early research and initiatives aimed at developing CLIL at the school level (Perera, 2014). This study contributes by implementing CLIL in a new context—the Faculty of Arts—at a Tamil-medium university, with an emphasis on exploring its potential impact instead of assessing a pre-existing model.

2.4. Gaps in the Research

Research on English Language Teaching (ELT) has largely centred on contexts where English is the first language (L1), focusing on Native English-Speaking Students and teachers who frequently come from cultural and linguistic backgrounds very different from their increasingly diverse student bodies. In contrast, the ELT context in Sri Lanka differs considerably, with most teachers and learners coming from non-native English-

speaking backgrounds. Their shared linguistic and cultural experiences allow teachers to demonstrate greater empathy and a deeper awareness of learners' potential difficulties.

Despite these, there remains a dearth of research in balancing language and content instruction in L2 contexts like Sri Lanka. Coyle *et al*. (2010) emphasize that CLIL integrates both content and language learning objectives, ensuring that subject matter and linguistic development occur simultaneously. Such integrated approaches hold significant potential for strengthening both language proficiency and disciplinary literacy, highlighting the need for continued research in contexts where English is taught as a second language. In English-speaking countries, CLIL mainly aims to boost English proficiency for Limited English Proficiency students to help them succeed academically. In Sri Lanka, however, English is taught as a second language in mainstream classrooms, so the context and goals of CLIL are different.

2.5 Objectives

Given the key factors influencing the successful implementation of a CLIL program and the varied outcomes reported in existing research, the present study set out to evaluate the effectiveness of a CLIL program in the Department of Sociology at the University of Jaffna. To guide this inquiry, the following research questions were formulated:

1. To what extent does the CLIL approach enhance English language proficiency among second-year sociology students at the University of Jaffna?

2. What are the perceptions of students and teachers of CLIL as a method for learning English?

3. Methodology

A mixed methods design, which integrates both qualitative and quantitative approaches, will serve as the foundation for this study. Creswell explains that quantitative research is "a means for testing objective theories by examining the relationship among variables. These variables can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures." (Creswell, 2014). By contrast, Dörnyei notes that qualitative research "emphasizes words rather than quantification" and focuses on "understanding phenomena from the participants' perspectives through in-depth data collection such as interviews, observations, and document analysis." (Dörnyei, 2007). As Johnson and Onwuegbuzie (2004) emphasize, a mixed methods approach seeks to integrate the strengths of both paradigms, enabling researchers to explore complex research questions more comprehensively. Mixed methods research provides a more comprehensive understanding of educational contexts than either method could offer on its own.

The data for this study was collected from the teachers and the students. The instruments used to collect the data included pre and post-test of students, questionnaires, interviews and an analysis of the lesson units used in the program. The data from the closed question were quantitatively analyzed using percentages. The participants comprised two intact

groups of second-year undergraduates enrolled in the Faculty of Arts, selected through purposive sampling. A placement test ensured comparability of proficiency levels at baseline. One group (n = 22) was designated as the experimental group, while the other (n = 22) functioned as the control group. The experimental group received instruction through 15-lesson CLIL lesson units, whereas the control group continued with the conventional ESL curriculum. The same English language teacher taught both the experimental and control groups throughout the study to ensure consistency in teaching style, instructional delivery, classroom management, and assessment practices, thereby minimizing teacher-related variability and allowing any differences in student outcomes to be more confidently attributed to the CLIL intervention.

The teacher participants consisted of five English language teachers involved in the implementation and evaluation of the programme. They participated in both the questionnaire survey and the semi-structured interviews. To further explore the teachers' perceptions in relation to the research questions, a semi-structured interview format was employed in which each teacher was asked the same set of questions, and their responses were recorded. A consent form and an information sheet were provided to the interviewees in advance. In addition to the interviews, a questionnaire was administered to gather complementary data on teachers' views. The lesson materials and selected lesson units used in the programme were also analyzed. Participants' perceptions of these materials and lesson units constituted another key aspect of the research study.

Quantitative test score data were analyzed using:

-Descriptive statistics (means and standard deviations) to provide a summary of performance,

-Paired-samples t-tests to examine differences between pre- and post-test scores within groups,

-Independent-samples t-tests to compare post-test outcomes between the experimental and control groups.

Qualitative data (questionnaires, journals, and focus group transcripts) were examined through thematic analysis to uncover recurring patterns concerning learner motivation, engagement, perceived usefulness and attitudes toward CLIL.

4. Results and Discussion

4.1. Pre-test and Post-test

Initial pre-test scores showed no statistically significant difference between the experimental group (n = 20, M = 45.2, SD = 6.8) and the control group (n = 20, M = 44.7, SD = 7.1), indicating that both groups were comparable at baseline ($p > 0.05$). Post-test results revealed a considerable improvement in the experimental group's mean score (n = 20, M = 67.4, SD = 7.5) compared to the control group's mean (n = 20, M = 57.8, SD = 8.1).

Paired-sample t-tests confirmed significant within-group gains for both groups:

- Experimental group: $t(19) = 14.2$, $p < 0.001$
- Control group: $t(19) = 8.5$, $p < 0.001$

An independent-samples t-test further showed that the experimental group's gains were significantly greater than those of the control group:

- $t(38) = 4.52$, $p < 0.001$

The pre-test analysis confirmed that the experimental and control groups were comparable at baseline, as no statistically significant improvement was found between the two groups. This indicates that any subsequent differences in post-test performance can be attributed to the instructional intervention rather than pre-existing disparities in ability. Post-test findings demonstrated that both groups improved significantly, suggesting that English instruction, whether through conventional EGP/ESP methods or through integrated discipline-specific approaches, positively influences language learning outcomes. However, the degree of progress differed markedly between the groups.

The experimental group, which received instruction integrating discipline-specific content with language learning, achieved substantially higher post-test scores than those in the control group. This suggests that embedding disciplinary knowledge within language instruction creates a more meaningful and context-rich learning environment, fostering both linguistic proficiency and subject-specific literacy. These results resonate with the principles of Content and Language Integrated Learning and disciplinary literacy, which emphasize the dual development of language and content knowledge. Overall, the findings indicate that integrating disciplinary content within language instruction is a more successful pedagogical strategy for developing ESL students' reading comprehension and academic writing abilities in higher education.

4.2 Questionnaires

The questionnaire responses revealed several important insights into both students' and teachers' experiences with the CLIL methodology, where English language instruction was integrated with sociology content. A majority of students reported that CLIL had a positive impact on their language development, as they were able to actively use English to understand and communicate sociological concepts. Many noted that teachers supported their learning by setting clear language goals, explicitly teaching vocabulary, and providing structured sentence frames. Students also highlighted that learning English through their subject allowed them to use the language in authentic contexts, which encouraged active participation and critical thinking.

At the same time, 60% of students indicated noticeable improvement in their understanding of lessons, even when these required additional effort to grasp complex topics. Many students reported that CLIL instruction significantly enhanced their content-

related vocabulary and enabled them to discuss subject-specific concepts more confidently. Furthermore, 45% of students observed progress in grammatical awareness, noting that while their vocabulary development advanced more rapidly, their grammar skills were also gradually improving through increased exposure to academic texts and communicative tasks. They highlighted that ongoing practice in oral presentations and written reports was helping them to construct more accurate and coherent sentences when discussing sociological issues.

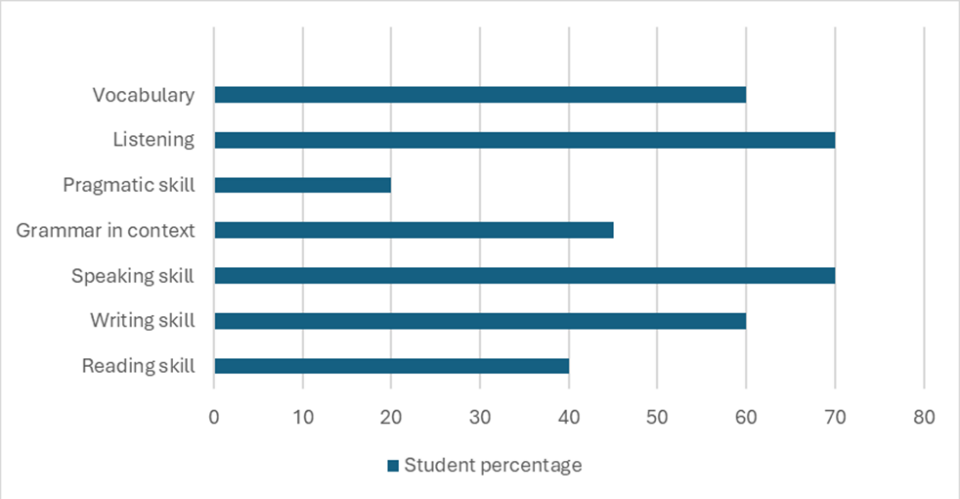


Figure 1. Distribution of students' responses on language skills developed through CLIL.

Listening and speaking skills showed the greatest improvement, particularly in the context of professional English and conversational exchange, which has helped boost students' confidence in professional settings. Students displayed strong writing skills overall; however, their writing development has mainly focused on technical and subject specific tasks and language frameworks. Consequently, they are less familiar with applying their writing skills to more general or non-specialized contexts. Notably, 60% of students reported that their subject-related writing skills had improved, underlining CLIL's positive influence on productive language use. Although grammar is embedded in lessons and taught in context, students tend to struggle when they need to transfer this grammatical knowledge to everyday or general language situations.

The questionnaire results indicated that teachers generally held a positive perception of CLIL as a pedagogical approach. They emphasized that integrating language with content created a more engaging and purposeful learning environment where students use English in authentic academic contexts. According to teachers, students appeared more motivated, confident, and participatory in classroom discussions when English was taught through their subject, and they regarded CLIL as effective in supporting both disciplinary literacy and academic language development. Nevertheless, teachers also identified several challenges. They pointed out the difficulty of balancing the delivery of subject matter with systematic attention to language development, particularly grammar. Concerns were raised that, while CLIL placed strong emphasis on vocabulary and content-related expressions, it did not always provide enough scope for improving grammatical

accuracy. In addition, teachers noted that planning and preparing CLIL lessons demanded considerable time and effort, as they were required to design activities and materials that addressed both content and language objectives simultaneously.

4.3 Interview

Students' Perspectives

Interviews with students revealed generally positive perceptions of CLIL. Many emphasized that learning English through their subject helped them use the language in more practical and meaningful ways:

"When we study sociology in English, it feels more real. I am not just learning grammar; I am learning how to talk about ideas that matter in my subject." (Student 3)

Students also highlighted improvements in their confidence and classroom participation:

"I used to be shy to speak in English, but because we always discuss in class, now I feel more confident to share my thoughts." (Student 7)

However, several challenges were also identified. Some students noted that grammar learning was less systematic:

"I know more vocabulary now, but sometimes I still make grammar mistakes. We don't have enough grammar focus in CLIL." (Student 12)

Another student emphasized the cognitive demand of CLIL:

"Some lessons are difficult to follow because I have to think about the subject and the English at the same time." (Student 9)

While 42% of students in both groups felt that the lesson material met their needs for improving L2 proficiency—particularly because it addressed all four language skills—others found the lessons repetitive and insufficiently challenging. Students also expressed a need for more opportunities to develop vocabulary, engage in micro-teaching, and increase speaking and listening practice.

Overall, students viewed CLIL positively, valuing its relevance and communicative nature. Yet, their responses revealed ongoing struggles with grammar accuracy, limited L2 proficiency, and the cognitive demands of learning both content and language simultaneously.

Teachers' Perspectives

Teachers likewise expressed positive views of CLIL, particularly regarding student motivation and engagement:

"Students are more motivated when the English lessons connect to their subject. They see the purpose and use the language more actively." (Teacher 2)

They also recognized the dual benefits of language and content integration:

"CLIL helps students build not just English skills, but also the way to think and write in their discipline." (Teacher 1)

However, only 40% of teachers found the lesson materials suitable for their students' needs, level, and interests. Although the materials covered all four language skills and included micro-teaching activities, 60% of teachers reported that they were inadequate for their teaching purposes. They identified issues such as repetition, insufficient challenge, and a lack of vocabulary development opportunities.

A major challenge highlighted was the time required for lesson preparation:

"Preparing CLIL materials takes much longer because I must plan for both the content and the language objectives." (Teacher 4)

Another key issue was the lack of professional development and institutional support:

"We have not received enough training in CLIL. Sometimes I feel I don't have enough knowledge of how to balance language and subject teaching." (Teacher 3)

Teachers also pointed out that the grammar component of the lessons was too basic, focusing on form rather than meaning or use. This approach contradicted CLIL principles, where the form and sequence of language presentation should emerge naturally from the content. Furthermore, opportunities for creative writing and authentic communicative practice were limited, and the explicit teaching of metacognitive, cognitive, and social/affective strategies was insufficient. Within this perspective, academic language is not taught sequentially but is developed organically as language skills emerge from the context. The lack of emphasis on these strategic and contextual learning processes represents a significant pedagogical gap in the lesson materials.

Teachers noted that while various strategies were introduced, learners were not made aware of how strategies could transfer across different language skills. This lack of explicit strategy instruction diminished learner autonomy and engagement. Additionally, teachers reported that students' limited L2 proficiency hindered lesson delivery, as many were not competent enough to absorb the things taught in the classroom.

Despite these challenges, teachers appreciated certain positive features in the lesson design, such as the inclusion of homework assignments and the overall interest level of materials. However, they emphasized the need for improvement in several key areas, including:

- Enhancing the content to align with CLIL objectives;
- Increasing focus on strategy development;
- Making lessons more task-oriented; and
- Strengthening opportunities for vocabulary and skills integration.

Moje (2008) emphasizes that disciplinary literacy requires students to engage with the unique ways each subject constructs knowledge through language and texts. However, the lessons did not sufficiently address this dimension, as they failed to incorporate the range of texts and activities necessary to develop students' content-specific vocabulary. Including relevant reading materials would help to bridge this gap and enhance learners' disciplinary language proficiency.

From the teachers' perspective, while CLIL offered clear benefits for students' engagement and language development, its implementation also presented notable challenges. A major difficulty was their limited specialization in both English language teaching and disciplinary knowledge of the subjects. Many teachers identified themselves primarily as ESL instructors, which restricted their ability to go beyond vocabulary instruction and effectively support deeper subject learning. Teachers also expressed concern about the lack of institutional support, particularly in terms of training and resources. They emphasized the need for professional development focused on teaching subject content through a second language, as well as access to didactic materials specifically designed for CLIL classrooms.

4.4. Key recommendations for successful CLIL implementation

Figure 2 presents teachers' perspectives on the key requirements for the successful implementation of Content and Language Integrated Learning (CLIL). The findings indicate several priority areas that require institutional support and systematic development.

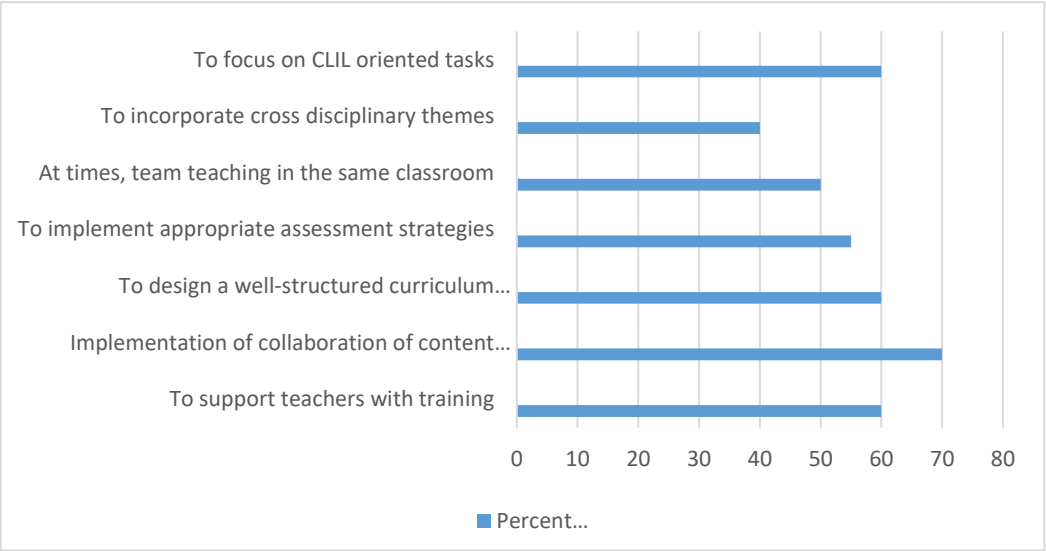


Figure 2. Key recommendations for successful CLIL implementation.

The most frequently identified recommendation was formal collaboration between content and language teachers, selected by 70% of participants. This suggests that teachers consider interdisciplinary cooperation essential for effectively integrating subject content and language learning objectives.

Three other recommendations were identified by 60% of participants:

- the development of a well-structured CLIL curriculum,
- the provision of professional training for teachers, and
- the incorporation of CLIL-oriented learning tasks.

These findings demonstrate teachers' recognition of the importance of coherent curriculum design, continuous professional development, and classroom activities that support both content and language learning.

Moderately important recommendations included the use of appropriate CLIL assessment strategies (55%) and team teaching within the same classroom (50%). These results highlight the perceived value of collaborative instructional practices and assessment methods that reflect CLIL principles.

The least frequently selected recommendation was the integration of cross-disciplinary themes (40%). Although this received the lowest percentage, it remains a relevant consideration and may reflect practical challenges in implementation or teachers' focus on more immediate instructional needs.

Overall, the findings suggest that successful CLIL implementation requires strong collaboration among teachers, a well-designed curriculum, ongoing professional development, effective CLIL-based teaching and assessment practices, and continuous monitoring and improvement. These recommendations provide valuable guidance for

educators, school leaders, and policymakers seeking to strengthen CLIL implementation and enhance both language proficiency and subject content learning.

5. Conclusions

The findings suggest that CLIL is more effective than the conventional ESL approach in enhancing English language proficiency among second-year Sociology undergraduates at the University of Jaffna while students and teachers expressed positive perceptions of its implementation. However, the study's limited sample size, its focus on a single academic discipline, and short duration of the intervention may restrict the applicability of the findings to other higher education settings. These findings will inform the development of university level English language education policies, particularly within Tamil-medium higher education institutions. The greater improvement achieved by the CLIL experimental group suggest that universities could explore incorporating CLIL-based instruction into existing English language programmes, initially through pilot initiatives in selected disciplines. Further studies should investigate the effectiveness of CLIL across a broader range of academic disciplines and universities in Sri Lanka, using larger participant groups and longer intervention periods to evaluate its long-term impact on grammatical accuracy, academic writing, oral communication, and the application of language skills beyond academic settings. Future research should investigate the effectiveness of CLIL across different disciplines and universities in Sri Lanka, using larger participant groups and extended intervention periods to evaluate its long-term impact on grammatical accuracy, academic writing, oral communication, and the application of language skills beyond academic settings.

Funding

This research received no external funding.

Conflict of Interest

The authors declare no conflict of interest.

References

Chamot, A. U., & O'Malley, J. M. (1987). The Cognitive Academic Language Learning approach: A Bridge to the Mainstream. *TESOL Quarterly*, 21(2), 227–249. [https://doi.org/10.2307/3586733] (https://doi.org/10.2307/3586733)

Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and Language Integrated Learning*. Cambridge University Press.

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). SAGE Publications.

Dörnyei, Z. (2007). *Research Methods in Applied Linguistics: Quantitative, Qualitative, and Mixed Methodologies*. Oxford University Press.

European Commission. (2005). A New Framework Strategy for Multilingualism. European Commission.

Hakuta, K., Butler, Y. G., & Witt, D. (2000). *How Long does It Take English Learners to Attain Proficiency?* Stanford University, The University of California Linguistic Minority Research Institute.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*, *33*(7), 14–26. [https://doi.org/10.3102/0013189X033007014](https://doi.org/10.3102/0013189X03300701)

Marsh, D., & Lange, G. (2000). *Using Languages to Learn and Learning to Use Languages*. University of Jyväskylä.

Mehisto, P., Marsh, D., & Frigols, M. J. (2008). *Uncovering CLIL: Content and Language Integrated Learning in Bilingual and Multilingual Education*. Macmillan Education.

Moje, E. B. (2008). Foregrounding the Disciplines in Secondary Literacy Teaching and Learning: A Call for Change. *Journal of Adolescent & Adult Literacy, 52*(2), 96–107. [https://doi.org/10.1598/JAAL.52.2.1] (https://doi.org/10.1598/JAAL.52.2.1)

National Education Commission. (2003). *Proposals for a National Policy Framework on General Education in Sri Lanka*. National Education Commission.

Perera, L. S. (2014). *Implementation of Bilingual Education in Sri Lankan Schools: Challenges and Perspectives*. National Institute of Education.

University Grants Commission. (2016). *Sri Lanka University Statistics*. https://www.ugc.ac.lk/index.php?option=com_content&view=article&id=1905%3Asri-lanka-university-statistics-2016&catid=%3Astatistics&Itemid=70&lang=en

University Grants Commission. (2024). *Report*. https://www.ugc.ac.lk/index.php?option=com_university&view=list&Itemid=25&lang=en

University of Jaffna. (2022). *Annual Reports and Accounts*. https://www.jfn.ac.lk/unit/academic-affairs-and-publication/