CONCEPTUALISING LANGUAGE ACQUISITION PROCESS IN CONTENT AND LANGUAGE INTEGRATED LEARNING (CLIL) CLASSROOM CONTEXT: A SYSTEMATIC REVIEW

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Abstract

Researchers have highlighted that a critical component of language acquisition is the opportunity to learn in authentic contexts where natural teaching-learning scenarios can occur. Despite this, the Direct Method (DM) and the Grammar Translation Method (GTM) remain the predominant approaches in English schools. This systematic review, however, aimed to delve into the complexities of language acquisition in Content and Language Integrated Learning (CLIL) classrooms worldwide. Findings from the review reveal that instructional methods and teachers' proficiency play a crucial role in language learning success within CLIL settings. The results showed a strong case for continuing CLIL methods in educational methodology. Similarly, the research suggests that using CLIL allows both the teacher and students to acquire learning in a natural context, including developing cognitive skills.

Keywords: Content-based language instruction; CLIL; systematic review; language acquisition

Abstrak

Banyak penyelidik menekankan bahawa komponen utama pemerolehan bahasa ialah peluang untuk belajar dalam konteks autentik, di mana senario pengajaran-pembelajaran semula jadi boleh berlaku. Walaupun begitu, Kaedah Langsung (DM) dan Kaedah Terjemahan Tatabahasa (GTM) kekal sebagai pendekatan utama di sekolah berbahasa Inggris. Kajian sistematik ini bertujuan untuk menyelidiki kerumitan pemerolehan bahasa dalam bilik darjah Pembelajaran Bersepadu Kandungan dan Bahasa (CLIL) di seluruh dunia. Hasil daripada semakan mendedahkan bahawa kaedah pengajaran dan kecekapan guru memainkan

peranan penting dalam kejayaan pembelajaran bahasa dalam tetapan CLIL. Keputusan menunjukkan kes yang kukuh untuk meneruskan kaedah CLIL dalam metodologi pendidikan. Begitu juga, penyelidikan mencadangkan bahawa menggunakan CLIL membolehkan kedua-dua guru dan pelajar memperoleh pembelajaran dalam konteks semula jadi, termasuk membangunkan kemahiran kognitif.

Kata kunci: Pengajaran bahasa berasaskan kandungan; CLIL; semakan sistematik; pemerolehan bahasa

1.0 INTRODUCTION

CLIL is an intensely discussed issue in instruction language acquisition. In the past few years, many schools throughout European countries have adopted progressive CLIL educational methods to more effectively equip young individuals for the ever-globalizing 21st-century world. An outstanding innovation, CLIL has received widespread endorsement from teachers, parents, and students due to its remarkable achievements. Researchers have highlighted that diverse pioneering methodologies in foreign language education yield favourable outcomes, particularly when learners are immersed in authentic situations conducive to acquiring language skills (Tough, 1991).

According to Marsh (1994), CLIL is an educational method where subjects or parts of subjects are taught in a foreign language, with the dual goal of learning the subject matter and becoming proficient in the foreign language simultaneously. Additionally, Hidalgo and Ortega-Sánchez (2023) corroborate the beneficial impact of CLIL on students across varied educational levels. As a result, the efficacy of CLIL has rapidly become a key focus of scholarly investigations, particularly within the domain of foreign language acquisition. Research findings in this domain consistently reveal positive results, highlighting higher levels of second language (L2) proficiency in CLIL programs than in traditional language courses (Dalton-Puffer, 2008; Lorenzo et al., 2010). Indeed, multiple studies have pinpointed the factors contributing to this enhanced L2 performance within CLIL settings.

Dalton-Puffer (2007) exemplified the CLIL classroom as a genuine setting where the practical application of a foreign language occurs, fostering more profound levels of information processing. A recent investigation has informed that learners engaged in CLIL showcase enhanced proficiency in their second language (L2), increased motivation, and a propensity for linguistic and academic pursuits. Notably, these findings from studies by Bruton (2011), Küppers and Trautmann (2013), and Paran (2013) suggest an inclination for high-

achieving students towards CLIL. However, this insight offers restricted insights into the inherent efficacy of the CLIL approach itself.

Existing research endeavours within this domain have primarily focused on singular assessments at specific junctures. While often showing a preference for CLIL, these studies have tended to lack a comprehensive, long-term perspective. In addition, critical research reviews conducted by Dalton-Puffer (2011) and Pérez-Cañado (2012) have highlighted the additional benefits of CLIL for various educational methods and motivational results. Despite the overall positive trends, the exact impact of CLIL interventions on enhancing EFL skills remains somewhat ambiguous due to the limited scope of available studies. The lack of significant findings has led to criticism in CLIL literature, underscoring the need for robust evidence to thoroughly assess CLIL's effectiveness on L2 learning. As a result, no systematic review has explicitly connected CLIL practices with L2 learning outcomes. Therefore, the main goal of this research is to investigate language acquisition studies published since the start of CLIL, analyzing how different CLIL methods in secondary and higher education across various European contexts affect the improvement of EFL skills.

This systematic review highlights a comprehensive exploration of the language acquisition process in the context of CLIL classrooms, aiming to synthesize existing research, identify gaps, and uncover insights that can inform educational practices and future studies. Through a rigorous analysis of instructional strategies, contextual factors, and the unique conditions created by CLIL, this review sheds light on how CLIL can effectively contribute to developing language skills while nurturing subject matter expertise. In summary, this research contributes by consolidating existing studies on the role of CLIL in language acquisition, endeavouring to outline the most recent trends observed in language acquisition within CLIL classrooms. Furthermore, this study presents a structured analysis process based on the following research questions:

RQ1. According to the reviewed literature, what is the role of language acquisition in the CLIL classroom?

RQ2. What are the trends of language acquisition in CLIL classes according to the reviewed literature?

2.0 MATERIALS AND METHODS

This systematic review utilizes the PRISMA guidelines (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). Developed by Liberati et al. (2009), the PRISMA

protocol offers a detailed checklist designed to improve the transparency and accuracy of the review process. Additionally, a specific protocol was crafted to steer the literature search in alignment with the review's objectives. This protocol outlines pertinent details, including search keywords, databases to be utilized, and selection criteria. For the search, three databases, Google Scholar (GS), ProQuest (PQ), and Scopus, were chosen for their widespread use across diverse disciplines, given the continuous evolution of technology impacting information archiving and retrieval methods. To ensure a comprehensive yet current scope, the publication date range was confined from 2019 to 2023, encompassing the past five years and providing an overview of developments over the last eight years based on the information in the selected papers. This ensures that the review is firmly grounded in the most up-to-date literature, reflecting the current information and synthesis in the digital era.

2.1 Screening for Inclusion and Exclusion Criteria

Additionally, after carefully examining the abstracts of the twenty-two studies to assess their suitability concerning the research focus, which is a part of the strict methodology of systematic literature review. After this initial screening, researchers identified twenty-two studies as pertinent and procured the full-text articles for a comprehensive quality evaluation as shown in Table 1.

Table 1. Inclusion and exclusion criteria of the systematic review

Characteristics of the literature	Inclusion Criteria	Exclusion Criteria
Type of publication	Journal articles, conference papers	Reports, books, book chapters, theses, dissertations
Time	Only articles published in the 2019-2023	Journal articles published before 2019
Language	Articles are written in English	Articles are not written in English
Geography	No exclusions	No exclusions
Population groups	Secondary and Senior High School students	Primary education students
Type of policies/ interventions in scope	CLIL classrooms can create the process and conditions required for English Acquisition	English subject teaching approach focused on content learning only (e.g., English Medium Instruction); language-oriented versions of CLIL.

2.2 Quality and Eligibility Assessment

The authors examined the full-text articles to assess their quality and suitability for inclusion in the study. The authors regarded journal articles published by esteemed publishers as exemplars of high-quality research and incorporated them into the review process. Then, inclusion criteria were stringent, resulting in the inclusion of only a select few high-quality reports that boasted well-cited references. The search was conducted according to one research question: (CLIL OR "Content and Language Integrated Learning") AND (Language acquisition in senior high school). The inclusion and exclusion criteria were designed based on the PRISMA statement recommendations, study objectives, and questions.

Adhering to the PRISMA protocol, the data collection process employed a systematic four-step screening procedure as shown in Figure 1. Initially, the identification phase generated 2,412 results from searches across four databases using the designated "question." In the subsequent screening stage, duplicate entries were eliminated, and the application of inclusion and exclusion criteria further narrowed the number of relevant publications to 17. Moving forward to the eligibility phase, the complete articles of these publications underwent meticulous scrutiny to verify their alignment with the essential information outlined in the research questions. Throughout this stage, strict adherence to inclusion and exclusion criteria was maintained. Finally, 22 articles were collected as the research sample in the inclusion step.

3.0 RESULTS

The study's objectives and stringent inclusion/exclusion criteria were met by a total of seventeen (17) articles. A further explanation of how the article selection process was used is that there were three bases of database scientific journals: Google Scholar, ProQuest, and Scopus. In addition to the data collection, 606 articles were found based on keyword searches, while ProQuest was 81, and Scopus was 1,725. Thus, the data obtained was summed up to produce 2,412. However, in its stages, 17 articles were selected with provisions based on the criteria described earlier, including the requirements that were not included in the screening process. Finally, 17 screening article results based on keywords and researcher needs in answering research questions were taken to articulate and conceptualise.
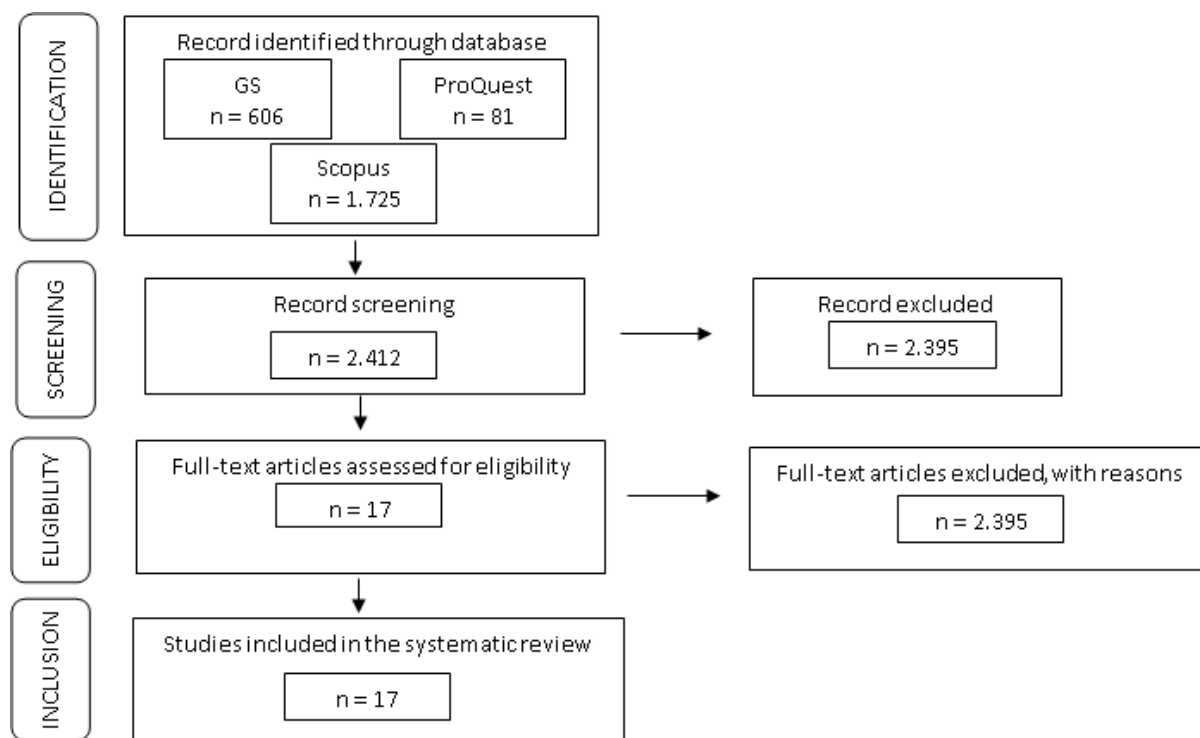
Figure 1. Systematic four-step screening procedure

The selected articles were specifically chosen to address targeted research questions, and their findings are synthesized and presented in Table 2 for a comprehensive overview and detailed analysis. Each article was selected based on relevance to the study's objectives and adherence to rigorous inclusion criteria, ensuring that only the most pertinent and insightful research contributions were included. This structured approach facilitates a focused exploration of the research questions and provides a clear framework for comparing and interpreting the findings across the selected literature.

Table 2. The selected articles for a comprehensive overview and detailed analysis

Author (Year)	Title	Journals
Mahan et al. (2018)	Characterizing CLIL teaching: New insights from a lower secondary classroom	International Journal of Bilingual Education and Bilingualism
Mahan, (2022)	The comprehending teacher: Scaffolding in content and language integrated learning (CLIL).	The Language Learning Journal

Li & Zhang, (2022)	Exploring teacher scaffolding in a CLIL-framed EFL intensive reading class: A classroom discourse analysis approach	Language Teaching Research
Lo, Lin & Liu (2023)	Exploring content and language co-construction in CLIL with semantic waves	International Journal of Bilingual Education and Bilingualism
Hu & Gao, (2021)	Understanding subject teachers' language-related pedagogical practices in content and language-integrated learning classrooms	Language awareness
Cadias, (2019)	Preparing for the Challenges of a Bilingual Teacher in Teaching English as a Foreign/Second Language	Second Language. SSRN Paper
Luo & Chen, (2022)	Constructing a teaching capability maturity model for content and language-integrated learning teachers in Taiwan	Humanities and Social Sciences Communications
Satayev et al. (2022)	The Effect of CLIL Combined with Language Instruction on Language Learning and the Role of Individual and Institutional Factors in Students' Perspectives: Empirical Evidence from Kazakhstan	EURASIA Journal of Mathematics, Science and Technology Education
Tachaiyaphum et al. (2023)	Definitions did not effectively help my students': Pre-service teachers' language modification strategies in Thai language-driven CLIL classrooms	Language Teaching Research
Rodrigo, (2022)	CLIL for the teaching of History and English in Secondary Education: How to complete the existing materials	Language Value
Puspitasari, (2020)	Mind mapping in CLIL: How it facilitates students' reading comprehension	Journal of English Education and Teaching
Pham & Unaldi, (2022)	Cross-curricular collaboration in a CLIL bilingual context: the perceptions and practices of language teachers and content subject teachers	International Journal of Bilingual Education and Bilingualism

Amor et al. (2023)	The Interaction between Language Skills and Cross-Cultural Competences in Bilingual Programs	MDPI Journal languages
Dack, Argudo & Abad (2020)	The Development of Pragmatic Competence in CLIL Classrooms	MEXTESOL Journal
Somers & Llinares (2021)	Students' motivation for content and language integrated learning and the role of programme intensity	International Journal of Bilingual Education and Bilingualism
Tagnin & Ní Ríordáin, (2021)	Building science through questions in Content and Language Integrated Learning (CLIL) classrooms	International Journal of STEM Education
Zarichna et al. (2020)	Content and language integrated learning in tertiary education: Perspectives on terms of use and integration	East European Journal of Psycholinguistics

The table above provides an overview of selected results, offering new insights into teaching CLIL in secondary schools, focusing on the learning characteristics in this context. Additionally, further research explores the role of teachers in understanding and supporting students in CLIL through scaffolding methods. In summary, all selected articles are relevant to the current research. For instance, one study examined how teachers use scaffolding in English as a foreign language reading classes within the CLIL framework through classroom discourse analysis. This article employed a semantic wave approach to investigate the co-construction of content and language in CLIL. It also examined language-related pedagogical practices by subject teachers in CLIL classes to prepare bilingual teachers for teaching English as a foreign or second language. Notably, it assessed the effects of combining CLIL with language instruction on language learning, considering individual and institutional factors in Kazakhstan. These findings provided a foundation for conceptualizing the present research.

4.0 DISCUSSION

This review seeks to provide an extensive summary of current research on the effects of CLIL on language acquisition. The outcomes, illustrated in Tables 1 and 2, revealed extensive investigations within CLIL-centered language acquisition. Numerous researchers have delved into diverse teaching strategies, each striving to address the crucial aspects surrounding language acquisition's role in the CLIL classroom and the observed trends within CLIL language acquisition. For example, Mahan et al. (2018) uncover the integrated teaching

dynamic within Norwegian CLIL classes, revealing critical content and language fusion alongside comprehensive instructional explanations and language support. Further, Mahan's work (2022) focuses on scaffolding strategies in CLIL classrooms, uncovering varied approaches across natural and social sciences and underscoring the need for more targeted learning activities for improved student support. At the same time, Li and Zhang's study (2022) about the impact of teacher scaffolding on language and cognitive development in CLIL indicates effective strategies like dialogic inquiry and tailored feedback, offering potential insights for CLIL pedagogy globally.

In another research study, Lo, Lin and Liu (2023) asserts that teachers believe delving into non-language subjects in CLIL classes can enhance foreign language learning, emphasizing the complexity of grasping the academic language. By exploring 'semantic waves' and 'semantic profiles,' the study delves into two science lessons in Hong Kong, highlighting a varied approach between emphasising explanation and striking a balance between explanation and simplification. Hu and Gao (2021) examine the intricate effects of CLIL programs on language acquisition, emphasizing the critical significance of CLIL educators. It investigates how secondary subject content teachers in Hong Kong perceive language awareness while teaching subject content in English, underscoring the importance of CLIL teacher education programs to boost effective CLIL implementation.

A further example is Cadias (2019), who explores Taiwan's bilingual education policy, outlining strategies for its implementation, discussing plans by the Ministry of Education, and proposing recommendations for supporting teachers and refining the bilingual policy's execution, including a model for addressing educational reform challenges. Luo and Chen (2022) emphasize the impending demand for CLIL teachers in Taiwan and address the necessity for a comprehensive teaching capability model, which revealed three crucial levels, highlighting the importance of enhancing course management capabilities and providing practical teaching experiences.

Satayev et al. (2022) found that integrating a one-semester CLIL program with English language instruction significantly improved university students' overall English language proficiency. The study highlights that prior CLIL experience and non-first-year student status were linked to better language and subject knowledge recognition, emphasizing the need for comprehensive language instruction in higher education English-medium programs and courses. Tachaiyaphum et al. (2023) also shed light on the unexpected journey of language

teachers in CLIL classes. They explore the inventive ways teachers break down subject-specific language for students, offering practical recommendations and strategies to enhance teachers' language awareness in the enchanting world of CLIL settings.

Rodrigo (2022) underlines the importance of a well-crafted CLIL textbook by introducing a tool based on nine fundamental criteria. This tool, presented in a table format, aims to assist teachers in selecting materials by incorporating insights from CLIL models. The study emphasises the need for improved textbook content and activities that support students' language use. Meanwhile, Puspitasari (2020) delves into how using mind maps aids EFL students in understanding English texts in CLIL classrooms. The study highlights how mind maps support L2 reading comprehension despite students finding the process slightly complex, emphasising the role of mind maps in comprehending English texts.

Pham and Unaldi (2022) emphasise the critical role of language and content teacher collaboration in CLIL education, as revealed by their study in a Vietnamese CLIL program. The research uncovers a limited view of teachers' roles, a lack of comprehensive support, and challenges in achieving consistent collaboration, signalling the need for enhanced training and curriculum development in CLIL programs. Amor, Tinedo-Rodríguez, and Osuna-Rodríguez (2023) highlight teachers' resistance to CLIL programs, this underscores the imperative for targeted improvements through robust teacher training and careful consideration of resources. They emphasise the need to foster exchange programs for students and teachers and enhance cultural learning through extensive L2 use. This study examines the differing viewpoints of students and teachers regarding these programs and their influence on language and cultural acquisition.

Additionally, Dack, Argudo, and Abad (2020) explore the development of pragmatic skills in CLIL classrooms, emphasising their role in nurturing language skills without compromising the curriculum. They highlight how CLIL intertwines language and subject learning while fostering intercultural understanding by exposing students to actual language use. Somers and Llinares (2021) address motivation in CLIL, unveiling the concept of 'CLIL motivation' that encompasses learners' drive for both foreign language and content learning. They highlight the substantial impact of track intensity on students' engagement with CLIL and their outlook on its prospective usefulness, connecting these variations to language proficiency and academic accomplishments.

Moreover, Tagnin and Ni Ríordáin (2021) expound on the emergence of science education through CLIL, expressing apprehensions regarding students' active involvement in classroom discussions. However, to address the discussion earlier, the focus turned to the nature of questions posed by teachers in upper secondary CLIL biology classes. Using a multiple-case study, researchers delved into three CLIL senior secondary science classrooms in Germany and Italy, audio-recording classroom interactions for analysis. Zarichna et al. (2020) differentiate tertiary CLIL from other English courses, emphasising its potential to address students' cognitive and communicative needs. They suggest that CLIL substantially enhances student satisfaction with L2 courses and fosters academic thinking and communicative culture development even as a variable sub-module.

However, from the discussion above, in this research context, mainly when referring to the earlier debate, language acquisition processes in CLIL classrooms were low (or lack thereof). In contrast, the previous research examined the same topic, but only three studies were offered in the same area. Research from Satayev et al. (2022), Tachaiyaphum et al. (2023), and Halbach (2018) are good examples. While the other topics are indeed noteworthy, there is a lack of research focusing on second language acquisition and or for EFL students. The current findings support this evidence.

Table 3. Distribution of selected relevant articles based on Google Scholar.

Authors	Title	Year	GSRank	CitesPerYear
Halbach	A literacy approach to language teaching: a proposal for FL teaching in CLIL contexts	2018	28	1.83
Walenta	Balancing linguistic and extra-linguistic gains in CLIL: a case for content-based structured input	2018	45	2.33
De Smet et al.	Classroom anxiety and enjoyment in CLIL and non-CLIL: Does the target language matter?	2018	7	22.67
Gutiérrez-Mangado & Martínez-Adrián	CLIL at the linguistic interfaces	2018	3	2
Awan & Sipra	CLIL Content Based Instructional approach to second language pedagogy	2018	2	2.5
Romanowski	CLIL's role in facilitating intercultural learning	2018	43	2.67
Van de Craen et al.	CLIL, languages of schooling and the role of implicit learning with special reference to the learning of	2018	21	1

	mathematics			
Figueroa	ICT workshops based on CLIL to impact speaking	2018	42	0
Reitbauer et al.	Towards a cognitive-linguistic turn in CLIL: Unfolding integration.	2018	18	6.5
Amatulli	Content and Language Integrated Learning (CLIL)	2019	30	0
Corino & Onesti	Data-driven learning: a scaffolding methodology for CLIL and LSP teaching and learning	2019	16	7.4
Guzmán-Alcón	Investigating the Application of Communicative Language Teaching Principles in Primary-Education: A Comparison of CLIL and FL Classrooms	2019	36	2.6
Otto & San Isidro	Language as the articulator of a CLIL ecosystem: the Spanish case	2019	25	2.2
Basterrechea & Leeser	Language-related episodes and learner proficiency during collaborative dialogue in CLIL	2019	11	6.2
Martinez & Hernández	Pragmatic Markers Produced by Multilingual Speakers: Evidence from a CLIL Context	2019	46	1.4
Simons et al.	Remedying Foreign Language Anxiety through CLIL? A mixed-methods study with pupils, teachers and parents	2019	29	2.8
Martí & Portolés	Spokes in the Wheels of CLIL for Multilingualism or How Monolingual Ideologies Limit Teacher Training.	2019	22	5.2
Marongiu	Teaching materials and CLIL teaching	2019	8	3
Bower et al.	CLIL in multilingual and English-background contexts: Expanding the potential of content and language integrated pedagogies for mainstream learning	2020	24	3.5
Coyle & de Larios	Exploring young learners' engagement with models as a written corrective technique in EFL and CLIL settings	2020	35	8.5
Moate & Ruohotie-Lyhty	Identity and agency development in a CLIL-based teacher education program	2020	49	5.25
Jaekel	Language learning strategy use in context: the effects of self-efficacy and CLIL on language proficiency	2020	37	9.5
Lo	Professional development of CLIL teachers	2020	47	21
Gabillon	Revisiting CLIL: Background, pedagogy, and theoretical	2020	20	11.5

	underpinnings			
Martínez Agudo	The impact of CLIL on English language competence in a monolingual context: A longitudinal perspective	2020	6	10.75
Yalçın et al.	Triggering effect of CLIL practice on English as a lingua franca awareness	2020	12	3
Baten et al.	Vocabulary Development in a CLIL Context: A Comparison between French and English L2.	2020	19	5.75
Artieda et al.	… impact of age and exposure on EFL achievement in two learning contexts: formal instruction and formal instruction+ content and language integrated learning (CLIL)	2020	44	10
Liu & Lin	(Re) conceptualizing "Language" in CLIL: Multimodality, translanguaging and trans-semiotizing in CLIL	2021	34	4
Pfenninger	About the INTER and the INTRA in age-related research: Evidence from a longitudinal CLIL study with dense time serial measurements	2021	32	4
Milla & Mayo	Teachers' oral corrective feedback and learners' uptake in high school CLIL and EFL classrooms	2021	40	4.67
Gálvez Gómez	The Effects of CLIL on FL Learning: A Longitudinal Study	2021	41	1.33
Roiha & Mäntylä	'It has given me this kind of courage…': the significance of CLIL in forming a positive target language self-concept	2022	23	7.5
Dalton-Puffer et al.	CLIL in the 21st Century: Retrospective and prospective challenges and opportunities	2022	1	9
Figueiredo & Cruz	LEARNING OR ACQUISITION?- ENGLISH L2 IN A CLIL CONTEXT AT PRIMARY LEVEL	2022	31	0
Spada	Reflecting on task-based language teaching from an Instructed SLA perspective	2022	39	6.5
Jafarigohar et al.	The effect of CLIL context on the primary education EFL receptive and productive lexical growth	2022	27	5
Kao	Understanding and addressing the challenges of teaching an online CLIL course: a teacher education study	2022	33	20
Tachaiyaphum et al.	'Definitions did not effectively help my students': Pre-service teachers' language modification strategies in Thai language-driven CLIL classrooms	2023	50	0

Llinares	Discussion: multiple approaches in CLIL: cognitive, affective, and linguistic insights	2023	10	3
De Smet et al.	Does CLIL shape language attitudes and motivation? Interactions with target languages and instruction levels	2023	4	31
Li	The Four Roles of L1 in CLIL and Translanguaging: Negotiator, Mediator, Encourager, Facilitator	2023	26	1

The data presented studies conducted between 2018 and 2023, focusing on CLIL in various contexts. These studies explored different aspects of CLIL, including language teaching approaches, linguistic gains, classroom anxiety, intercultural learning, cognitive-linguistic turns, and pedagogy. However, one notable trend was the prevalence of studies in 2018-2022, indicating a concentrated effort to examine CLIL during that period. A significant survey by Spada (2022), Milla and Mayo (2021), and Halbach (2018) highlighted the most relevant topic. Nevertheless, it is sad that those studies are still lacking, and scholars focus more on the other aspects based on the table above. This was also supported by the evidence that most occurrences related to the previous research found in the language aspects followed by the term approach, content, and CLIL context were the highest when scholars researched the same topic. Therefore, the present study's position was relatively new and contributed to the previous research.

Table 4. The most terms used, occurrence, and score per/year in Vos Viewer tools

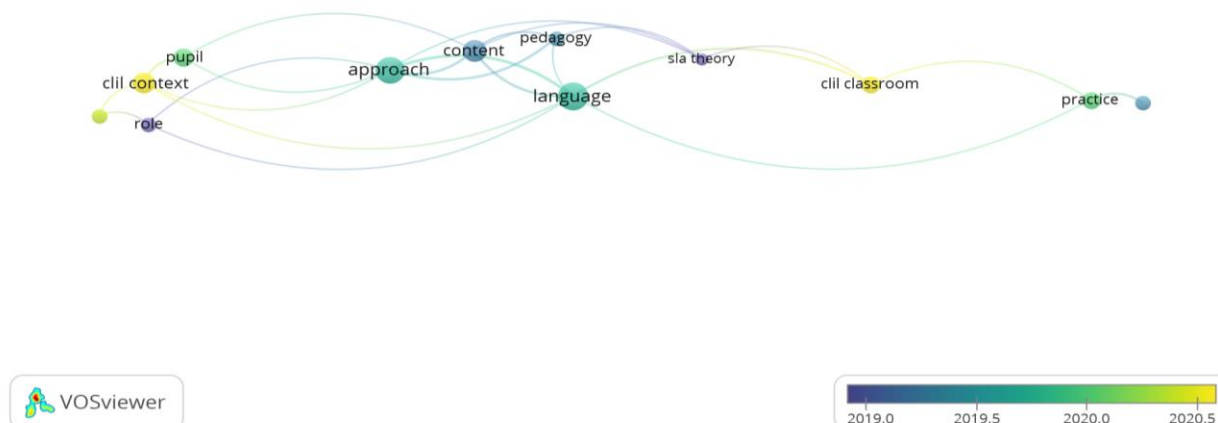| ID	TERM	OCCURRENCES	RELEVANCE SCORE
1	approach	10	0.1693
2	clil classroom	4	0.7529
3	clil context	6	0.9413
4	content	7	0.2483
5	English	3	3.4662
6	language	11	0.22
7	pedagogy	3	0.2431
8	practice	4	2.0419
9	pupil	5	0.819
10	role	3	0.7651
11	sla theory	3	0.4244
12	target language	3	1.9085

Figure 2. Overlay visualization of Vosviewer results

In the figure above, language-related research showed the most extensive, followed by terms or links to approaches and content. Therefore, the current study showed a significant contribution level after data processing using Vosviewer. As the yellow colour was an example of research that was still rarely done, there was a space for the present research to update the literature. For instance, although there are studies that have been tested before, such as Spada's (2022) study, the focus of the survey of task-based language teaching (TBLT) within the context of instructed second language acquisition (SLA) offers a nuanced perspective on how language is acquired in CLIL environments.

Investigating task-based language teaching within the instructed Second Language Acquisition (SLA) framework demonstrates a purposeful endeavor to comprehend the intricacies of language learning in CLIL classrooms. To sum up, task-based approaches are known for effectively promoting language learning through meaningful and purposeful activities. In the context of CLIL, where language is learned through content-rich tasks, this work may offer a growing recognition of the importance of task-based methodologies in facilitating language acquisition for learners within the classroom context and beyond. Moreover, the patterns delineated in Spada's research mirror a more significant shift in language education, where scholars and educators are progressively embracing task-based language teaching as a pedagogical method that resonates with the objectives of CLIL.

Other research, such as Halbach (2018), indicates a unique view through which the trends in language acquisition within CLIL classes can be well understood. For instance, the emphasis on a literacy approach is a movement from traditional language teaching methods,

suggesting a growing recognition of literacy skills' importance in CLIL. The study may explore the strategies and methodologies for incorporating a literacy approach into Foreign Language (FL) teaching within CLIL contexts. This could include discussions on using authentic texts, writing tasks related to content areas, and integrating language skills with subject matter learning. Halbach's research also delves into the potential advantages of adopting a literacy-oriented strategy in CLIL, including heightened language competency, refined critical thinking abilities, and a more profound grasp of subject-specific terminology. This study enriches our comprehension of language acquisition patterns in CLIL settings by advocating for a literacy-based approach to foreign language teaching and learning.

5.0 CONCLUSION

The study has highlighted some intricate facets inherent in CLIL programs for language acquisition. It has brought to the forefront the subtleties embedded in teaching strategies, the integration of language and content, and their consequential impact on student learning experiences. From our meticulous literature examination of scaffolding strategies to unravel the intricacies within CLIL classrooms, the research unequivocally advocates for heightened teacher training and curricula development. The exploration into CLIL motivation, the role of pragmatic skills, and the integration of innovative tools such as mind maps contribute to a more profound comprehension of the complex dynamics within CLIL education.

Recent research has emphasized the significance of cooperation between language and content instructors, highlighting the necessity for the strategic implementation of CLIL programs. Moreover, these studies have convincingly demonstrated the efficacy of CLIL in meeting students' academic needs. These cumulative findings illuminate the transformative role that CLIL plays in the language classroom context, emphasizing its potential for refining programs to foster comprehensive language learning and subject-specific knowledge acquisition. The study concludes by examining the repercussions of these recognized patterns for CLIL educators, students, and curriculum developers. It offers valuable insights into practical strategies for optimizing language acquisition outcomes in CLIL classrooms. The implications derived from these discerned trends extend to the design of CLIL curricula, teacher training programs, and instructional practices. This collective insight contributes to fostering and enhancing language acquisition in CLIL classrooms, underscoring the need for ongoing efforts to refine and improve CLIL programs.

6.0 ACKNOWLEDGEMENTS

6.0 REFERENCES

Amor, M. I., Tinedo-Rodríguez, A. J., & Osuna-Rodríguez, M. (2023). The Interaction between Language Skills and Cross-Cultural Competences in Bilingual Programs. *Languages*, 1-15.

Bower, K., Cross, R., & Coyle, D. (2020). CLIL in multilingual and English-background contexts: Expanding the potential of content and language integrated pedagogies for mainstream learning. *Curriculum integrated language teaching: CLIL in practice*, 3-21.

Bruton, A. (2011). Is CLIL so beneficial, or just selective? Re-evaluating some of the research. *System*, *39*(4), 523-532.

Cadias, A. (2019). Preparing for the Challenges of a Bilingual Teacher in Teaching English as a Foreign/Second Language. *Second Language,* 1-10.

Creese, A. (2010). Content-focused classrooms and learning English: How teachers collaborate. *Theory Into Practice, 49*(2), 99-105.

Dack, T. F., Argudo, J., & Abad, M. A. (2020). The Development of Pragmatic Competence in CLIL Classrooms. *MEXTESOL Journal*, *44*(3), n3, 1-20.

Dalton-Puffer C (2011) Content-and-language integrated learning: From practice to principles? *Annual Review of Applied Linguistics 31*, 182–204.

Dalton-Puffer, C. (2007). *Discourse in Content and Language Integrated Learning (CLIL) Classrooms*. Amsterdam, Netherlands: John Benjamins Publishing Company

De Diezmas, E. N. M. (2016). The impact of CLIL on the acquisition of L2 competences and skills in primary education. *International Journal of English Studies, 16*(2), 81-101.

Gabillon, Z. (2020). Revisiting CLIL: Background, pedagogy, and theoretical underpinnings. *Contextes et didactiques. Revue semestrielle en sciences de l'éducation*, (15), 10-35.

Halbach, A. M. (2018). A literacy approach to language teaching: a proposal for FL teaching in CLIL contexts. *Pulso*, 205-223.

Hidalgo, D. R., & Ortega-Sánchez, D. (2023). CLIL (content and language integrated learning) methodological approach in the bilingual classroom: A systematic review. *International Journal of Instruction, 16(*3), 915-934.

Hu, J., & Gao, X. (2021). Understanding subject teachers' language-related pedagogical practices in content and language integrated learning classrooms. *Language awareness*, *30*(1), 42-61.

Jiang, P., Akhter, S., Azizi, Z., Gheisari, A., & Kumar, T. (2022). Exploring the role of content and language integrated learning approach in developing transversal skills in university students with respect to the mediating role of emotional intelligence. *Frontiers in Psychology*, *13*, 1-12.

Küppers, A., & Trautmann, M. (2013). It is not CLIL that is a success-CLIL students are! Some critical remarks on the current CLIL boom. *Content and Language Integrated Learning (CLIL) in Europe. Research perspectives on policy and practice*, 285-296.

Lasagabaster, D., & Doiz, A. (2016). CLIL students' perceptions of their language learning process: delving into self-perceived improvement and instructional preferences. *Language Awareness, 25*(1-2), 110-126.

Li, D., & Zhang, L. (2022). Exploring teacher scaffolding in a CLIL-framed EFL intensive reading class: A classroom discourse analysis approach. *Language Teaching Research*, *26*(3), 333-360.

Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P., ... & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. *Annals of internal medicine*, *151*(4), 65-94.

Lo, Y. Y., Lin, A. M., & Liu, Y. (2023). Exploring content and language co-construction in CLIL with semantic waves. *International Journal of Bilingual Education and Bilingualism*, *26*(3), 289-310.

Lorenzo, F., Casal, S., & Moore, P. (2010). The effects of Content and Language Integrated Learning in European education: Key findings from the Andalusian bilingual sections evaluation project. *Applied Linguistics*, *31*(3), 418-442.

Luo, W. H., & Chen, Y. C. (2022). Constructing a teaching capability maturity model for content and language integrated learning teachers in Taiwan. *Humanities and Social Sciences Communications*, *9*(1), 1-10.

Mahan, K. R. (2022). The comprehending teacher: Scaffolding in content and language integrated learning (CLIL). *The Language Learning Journal*, *50*(1), 74-88.

Mahan, K. R., Brevik, L. M., & Ødegaard, M. (2018). Characterizing CLIL teaching: New insights from a lower secondary classroom. *International Journal of Bilingual Education and Bilingualism,* 942-956.

Marsh, D. (1994). *Bilingual education & content and language integrated learning*. Jyväskylän yliopisto, Finlandia: University of Jyväskylä.

Metlí, A., & Akıs, D. (2022). Challenges and Strategies on the Content and Language Integrated Learning Approach (CLIL): A Case Study from the Turkish Context. *Latin American Journal of Content & Language Integrated Learning, 15*(1), 109-125.

Pérez-Cañado, M. L. (2012). CLIL research in Europe: Past, present, and future. *International Journal of Bilingual Education and Bilingualism*, *15*(3), 315-341.

Pham, P. A., & Unaldi, A. (2022). Cross-curricular collaboration in a CLIL bilingual context: the perceptions and practices of language teachers and content subject teachers. *International Journal of Bilingual Education and Bilingualism*, *25*(8), 2918-2932.

Porc, G., & Bundy, L. (2020). The effectiveness of CLIL for English language learning in Swedish primary schools. *Journal of Education Research*, *25*(2), 134-150.

Puspitasari, E. (2020). Mind mapping in CLIL: How it facilitates students' reading comprehension. *Journal of English Education and Teaching*, *4*(2), 154-169.

Rodrigo, A. Á. V. (2022). CLIL for the teaching of History and English in Secondary Education: how to complete the existing materials. *Language value*, *15*(1), 1-29.

Satayev, M., Barrios, E., Fernandez-Costales, A., Agaidarova, S., Izbassarova, R., & Balta, N. (2022). The Effect of CLIL Combined with Language Instruction on Language Learning and the Role of Individual and Institutional Factors in Students' Perspectives: Empirical Evidence from Kazakhstan. *EURASIA Journal of Mathematics, Science and Technology Education,* 1-15.

Shah, S. H., Shaikh, P. A., & Khan, S. K. (2022). The Impact of Direct and Traditional Grammar Translation Methods on The Student's Performance at Secondary Level: An Empirical Evidence from Balochistan. *Pakistan Journal of Educational Research, 5*(2), 1-10.

Somers, T., & Llinares, A. (2021). Students' motivation for content and language integrated learning and the role of programme intensity. *International Journal of Bilingual Education and Bilingualism*, *24*(6), 839-854.

Tachaiyaphum, N., Gurney, L., & Daly, N. (2023). 'Definitions did not effectively help my students': Pre-service teachers' language modification strategies in Thai language-driven CLIL classrooms. *Language Teaching Research*, 1-20.

Tagnin, L., & Ní Ríordáin, M. (2021). Building science through questions in Content and Language Integrated Learning (CLIL) classrooms. *International Journal of STEM Education*, *8*(1), 34, 1-14.

Templier, M., & Paré, G. (2015). A framework for guiding and evaluating literature reviews. Communications of the Association for Information *Systems, 37*(1), 112-137.

Tough, A. M. (1991). *Crucial questions about the future*. Boston Way Lanham, Maryland: University Press of America.

Trent, J. (2010). Teacher identity construction across the curriculum: Promoting cross-curriculum collaboration in English-medium schools. *Asia Pacific Journal of Education, 30*(2), 167-183.

Villabona, N., & Cenoz, J. (2022). The integration of content and language in CLIL: a challenge for content-driven and language-driven teachers. *Language, Culture and Curriculum, 35*(1), 36-50.

Zarichna, O., Buchatska, S., Melnyk, L., & Savchuk, T. (2020). Content and language integrated learning in tertiary education: Perspectives on terms of use and integration. *East European Journal of Psycholinguistics,* 184-198.