ISSN: 2716-9189 E-ISSN: 2676-1750
Journal of Studies in Language, Culture, and Society (JSLCS). (08) 03, 2025. (PP.212-223)
Received: 01/01/2025. Accepted: 12/04/2025. Published: 30/07/2025

The Potential Implementation of Content and Language Integrated Learning 'CLIL' in the Algerian Higher Education System: A Case study at the Department of Architecture at Mouloud Mammeri University, Tizi Ouzou

Hocine Lemlikchi [1] **Naimi Amara2**
1 Hassiba Ben Bouali University, Chlef, TICELET Laboratory, Algeria
h.lemlikchi@univ-chlef.dz
2 Hassiba Ben Bouali University, Chlef, TICELET Laboratory, Algeria
n.amara@univ-chlef.dz

Abstract: Content and language integrated learning (CLIL) stands as an innovative educational approach that uses a foreign language for both content and language learning. As CLIL involves students learning a specific subject and a second language at the same time, it has lured in considerable interest in language learning in different countries. This approach advocates that learning a language can be a means of communicating information or ideas of some content that deeply stimulate the learner's interest. Therefore, this research paper focuses on developing a quantitative model to evaluate the potential implementation of CLIL in Algerian higher education settings. To achieve this, we need to identify a set of criteria that discern CLIL, each being assigned a weight based on its importance. The criteria are thereby evaluated to assess the extent to which each criterion supports the statement that the principles of CLIL can be implemented. An aggregation function is then used to combine the rates obtained for the criteria, taking into account their respective weights. The result is an aggregate score that represents the extent to which CLIL is suitable for the Algerian context. This index can be used as a comprehensive indicator of the level of implementation of CLIL and makes it possible to recommend specific actions to increase the effectiveness of the use of CLIL in the English language learning process. Applying this model to a case study to evaluate CLIL in the Algerian higher education system provides a quantitative measure that can guide educators and institutions to foresee the implementation of CLIL and identify deficiencies that need to be addressed to fully benefit from CLIL in the Algerian higher education system.

Keywords: Aggregated Criteria Analysis, Case Study, Content and Language Integrated Learning (CLIL), Implementation, Quantitative Model

How to cite this work:
Lemlikchi, H., & Amara, N. (2025). The potential implementation of Content and Language Integrated Learning (CLIL) in the Algerian higher education system: A case study at the Department of Architecture at Mouloud Mammeri University, Tizi Ouzou. *Journal of Studies in Language, Culture, and Society (JSLCS)*, *8*(3), 212-223.

[1]**Corresponding author** : Hocine Lemlikchi, **ORCID:** https://orcid.org/0009-0002-4787-1949

1. Introduction

The term CLIL, which stands for content and language integrated learning, was first introduced in 1994 by David Marsh and Anne Maljers (Marsh; 2022). It refers to a dual-focused educational approach that focuses on developing competencies and involves using an additional language, which is not usually the first language of the learners, as a medium for teaching non-language content. CLIL provides learners with a naturalistic environment that enhances language acquisition and learning, leading to greater proficiency for learners of all abilities. It also regenerates content teaching by encouraging cognitive development and flexibility in the learner through its constructivist approach and by recognising language as an essential tool in learning. The CLIL approach has been adopted in many countries' education systems to promote multilingualism. As in Europe, the CLIL approach is used to improve foreign language skills and enhance intercultural understanding (Banegas, 2022; Dalton-Puffer & Smit, 2023).

The approach is appreciated for its flexibility, as it can be adapted to different learning contexts and levels of education, from primary school to university. It can be used in various disciplines, from the social sciences to the exact sciences (Cinganotto, 2023; Llinares, 2022). The CLIL approach is widely accepted in many countries as an effective teaching method that promotes both content learning and the development of language skills. However, in contexts like Algeria, where French remains the dominant language of instruction in higher education, the implementation of CLIL faces additional linguistic and institutional challenges (Idri & Bouguebs, 2021).

This research paper is set as an attempt to develop a quantitative model to evaluate the implementation potential of content and language integrated learning (CLIL) in the context of Algerian higher education. The model is designed to provide a quantitative measure that can guide educators and institutions in estimating the degree of implementation of the CLIL approach.

The first step is to identify a set of criteria that characterise CLIL. These criteria summarise its key aspects and are indicative of the degree of its implementation in the language learning process. Each criterion is assigned a weight based on its importance in the learning process. The weighting process is crucial because not all criteria contribute equally to the effectiveness of the CLIL approach, and each criterion has its own weight, reflecting its importance in the CLIL approach. Notably, the weights of the criteria depend on the preferences of the evaluators. In the third phase of our approach, a group of evaluators (i.e., teachers, educators or raters) assign scores to each criterion based on the degree to which the criterion supports the implementation of CLIL. These scores are not arbitrary but reflect a consensus of opinion among the group of assessors on the criterion being rated. The value assigned to each criterion represents the degree to which the criteria support the implementation of CLIL.

After weighting the criteria and assigning scores to each criterion, we use an aggregation function to combine the scores obtained for each criterion. This function considers the respective weights of the criteria, ensuring that the resulting aggregate value accurately reflects the degree of applicability of the CLIL in Algerian higher education institutions.

2. Literature Review

2.1 Characteristics and Pedagogical Principles of CLIL

Content and Language Integrated Learning (CLIL) is a dual-focused educational approach that promotes both content mastery and language acquisition. It offers authentic learning contexts where students develop linguistic competence through engagement with subject-specific knowledge (Coyle, 2021). Rather than replacing subject teaching or language instruction, CLIL merges both in meaningful ways.

Its core strength lies in its flexibility: CLIL can be adapted to any age group, subject area, or language, making it applicable from early education to tertiary and vocational training. Learners study content subjects—such as science or history—using the target language as a medium of

instruction. This fosters not only linguistic skills but also cognitive development and intercultural awareness (Mehisto, Marsh, & Frigols, 2022).

CLIL promotes learner-centred, inquiry-based pedagogy, encouraging collaboration, critical thinking, and real-world communication. Teachers use scaffolding strategies—visual aids, simplified input, and guided interaction—to support learners. Functional communication is prioritised over linguistic perfection, and occasional code-switching is accepted when necessary for clarity (Nikula, Kivelä, & Hänninen, 2023).

Successful CLIL implementation requires collaboration between language and subject teachers to align content, anticipate challenges, and plan inclusive instruction. Rather than a rigid method, CLIL is a flexible pedagogical framework that integrates language and content learning across disciplines.

2.2 CLIL Models and Implementation Contexts

CLIL models vary based on context, ranging from *hard CLIL*—where subjects are taught entirely in a foreign language—to *soft CLIL*, which involves integrating language into specific lessons or themes. The model adopted depends on institutional resources, teacher expertise, and learner needs (Coyle et al., 2021).

Implementation can occur through short thematic units, project-based modules, or regular language-enriched sessions. In some contexts, such as international schools, up to 50% of the curriculum may be delivered in a second language. Regardless of model intensity, the focus remains on purposeful content-language integration where learners actively construct meaning (Nikula et al., 2023).

Key enablers include teachers' dual competence in subject and language pedagogy, curriculum alignment, administrative backing, and access to suitable resources. Differentiation based on learners' cognitive and linguistic readiness ensures inclusivity. Especially with younger learners, the use of visuals, movement, and play-based methods reduces anxiety and enhances engagement.

CLIL is best viewed as a continuum that allows educators to tailor instruction according to their context while nurturing both language proficiency and disciplinary understanding.

2.3 CLIL Practice, Assessment, and Teacher Development

Effective CLIL teaching combines content knowledge with targeted language support. Teachers adapt materials, scaffold input, and structure tasks using questioning, modelling, and interaction to promote learner autonomy and engagement (Coyle et al., 2021). Visuals, sentence frames, and collaborative tasks help learners access both content and language.

Assessment in CLIL is integrative, combining evaluation of subject mastery and language use. It should balance formative and summative approaches, employ simplified rubrics or "Can-Do" statements, and incorporate scaffolds such as bilingual support or tiered tasks (Llinares, Morton, & Whittaker, 2023). Portfolios, self-assessments, and performance-based tasks are commonly used to assess both domains simultaneously.

Teacher development is central to successful CLIL. Educators often navigate dual professional identities—as content specialists and language facilitators—requiring continuous reflection and support (Coyle et al., 2022). Teachers must also understand learner perspectives to promote motivation and achievement.

Integrating ICT further enhances CLIL effectiveness. Digital tools promote multimodal engagement, learner autonomy, and collaborative research. Technology facilitates differentiated instruction and interactive learning experiences that align with CLIL's communicative goals (Nikula et al., 2023).

2. Methodology

2.1 A Quantitative Approach

The current study adopts a quantitative model to examine the implementation of CLIL in Algerian higher education institutions. A numerical framework is used to measure the extent of implementation by combining and evaluating theoretical criteria. An aggregated analysis identifies relevant factors and assigns weights to each criterion based on its relative importance. The various aspects of the CLIL approach are then systematically measured to reach a comprehensive decision and evaluate the feasibility of its implementation.

These characteristics form a set of criteria enabling an evaluation of how far CLIL is integrated in language teaching and learning. In this context, the analysis and measurement of these criteria provide insights into the level of CLIL integration. Since some criteria are more significant than others, each is assigned a weight by a group of evaluators (i.e., raters). The higher the weight, the more relevant the criterion for effective CLIL implementation.

2.2 Setting and Weighting the Criteria

Based on the CLIL theory outlined earlier, a set of measurable criteria was developed and narrowed into indicators. These indicators determine the degree of implementation in Algerian higher education. To ensure comparability, the weights are normalised between 0 and 1, with the sum of all weights equal to 1. The normalised weight of each criterion x_k is denoted by $g(x_k)$, calculated by dividing the raw weight by the total of all weights.

Because the weighting process involves subjective human input, it is essential to assess the level of agreement among evaluators. Thus, the reliability of assigned weights is evaluated to ensure consistency and validity. The approach adopted ensures accurate measurement of the importance attributed to each criterion.

2.3 Scoring System and Inter-Rater Reliability

Evaluators (language and content teachers) assess each CLIL criterion by rating its level of implementation in practice. Their judgments are converted into numerical values on a continuous scale rather than a binary scale. These values reflect the degree of applicability of each criterion, with the final score representing a collective evaluation. This process ensures a consensus-based measure of expert opinion on CLIL implementation.

To validate the reliability of these weights and reduce the impact of subjectivity, the intra-class correlation coefficient (ICC) method is employed (Koo, Li, & Coombes, 2022). The ICC is a statistical measure used to assess consistency among raters assigning numerical values to a set of entities—in this case, the criteria.

The two-way random-effects model is used, suitable for situations where raters are randomly selected. This model evaluates the average reliability of criterion weights rather than those from a single rater. Since the objective is to measure consistency (rather than exact similarity), a consistency-type ICC is adopted. This approach is widely used in applied research and supported by statistical software, facilitating interpretation and replication.

2.4 Intra-class Correlation Coefficient (ICC) and Aggregation of Criteria Values

Once the three parameters of the intra-class correlation coefficient (ICC) most suited to our context are defined, the ICC is calculated using the following formula:

$$\mathrm{ICC} = \frac{MS_{\text{between}} - MS_{\text{within}}}{MS_{\text{between}} + (R-1) \times MS_{\text{within}}}$$

Here, *R* denotes the number of raters, while *MSbetween* and *MSwithin* represent the mean square values for between- and within-criteria variability, respectively.

For ICC calculation, we used **JASP** (Jeffreys's Amazing Statistics Program), an open-source software supported by the University of Amsterdam. A high ICC value (close to 1) indicates strong agreement among evaluators and consistency in the assigned weights, while a low ICC reflects disagreement and possibly inconsistent or unreliable scoring. As noted by Koo et al. (2022), low ICCs may also stem from limited variability in ratings, a small number of criteria, or a small pool of raters. To ensure statistical reliability, a minimum of three raters and a reasonable number of criteria is recommended.

Interpretation of ICC values generally follows this scale:

- ICC < 0.5: Poor reliability
- 0.5 ≤ ICC < 0.75: Moderate reliability
- 0.75 ≤ ICC < 0.9: Good reliability
- ICC ≥ 0.9: Excellent reliability

Accordingly, any ICC below 0.5 suggests the need to re-examine the assigned weights and potentially revise the evaluation process.

2.5 Aggregation of Criteria Values

After determining the criteria scores and their normalised weights, the aggregation process combines these values into a single overall indicator reflecting the degree of CLIL implementation. Aggregation refers to combining multiple individual values into one that best represents all inputs.

An aggregation function is used to summarise the individual ratings. The most common is the arithmetic mean, which assumes equal importance for all criteria. It is calculated as follows:

$$Mean = (1/m)\sum_{i=1}^{m} h(x_i)$$

Where m is the number of criteria, and $h(x_i)$ is the score assigned to the ith criterion x_i. However, since not all criteria hold equal weight, we employ the weighted arithmetic mean, which incorporates the relative importance of each criterion:

$$WMean = \sum_{i=1}^{n} g(x_i)h(x_i)$$

Here, $g(x_i)$ is the normalised weight of the criterion x_i, with the constraint that $\sum g(x_i) = 1$. This method ensures that more influential criteria contribute proportionally to the final score, offering a more accurate reflection of CLIL implementation.

4. Case Study, Results and Discussions

4.1 Case Study

4.1 Case Study

The selected population consists of a number of 15 content teachers and 5 language teachers from the department of architecture at Mouloud Mammeri University in Tizi Ouzou. The data collection tools we used consist mainly of in-depth criteria grids that are derived from the CLIL theory. Afterwards, the target population purposefully selected the indicators which govern different criteria that can dictate whether CLIL could be implemented. As for the student population, they are observed in the classroom when they are taught in CLIL and Non-CLIL contexts.

These results showcase the implementation of Content and Language Integrated Learning (CLIL) as evidenced by a self-assessment survey conducted by language and content teachers alike. The survey explored various aspects of CLIL implementation, including syllabus design, students' skills development, teaching practices, teacher knowledge and skills as well as ICTs integration in CLIL. The survey results are indicated in the following tables:

4.2 CLIL Syllabus Implementation Criteria

Table 1*:*

CLIL Syllabus Implementation Criteria

Criteria	Indicators	Ratings
Language Integration	Target language integrated within the syllabus	0.9 High
Content Reinforcement	Concepts revisited using English to reinforce learning	0.6 Medium
Thematic Units	Syllabus divided into short, focused thematic units	0.4 Low
Differentiation	Activities and expectations cater to existing language abilities	0.7 Medium
Language Resources	Provides university-level resources and materials in the target language	0.6 Medium

The CLIL syllabus demonstrates a strong foundation in language integration, with a focus on thematic units and language skill development. However, there is a perceived limitation in the availability of authentic, university-level resources. This suggests a need for a more solid resource base to enhance language learning opportunities.

4.3 Material Selection and Adaptation

Table 2*:*

Material Selection and Adaptation Criteria

Criteria	Indicators	ratings
Student-Centered Approach	Considers students' language abilities when planning activities.	0.2 low applicability
Resource Provision	Ensures necessary materials and resources are provided.	0.3 low applicability
Student Engagement	Involves students in material preparation.	0.1 not applicable
Knowledge Progression	Builds on existing knowledge in both subject and language.	medium applicability
Relevant and Engaging Content	Delivers age-appropriate, motivating, and real-life content.	medium applicability
Language Support	Provides support for complex content through the native language.	0.9 highly applicable
Explicit Language	Teaching Focuses on teaching key vocabulary and structures.	0.8 highly applicable

Notably, ”language Support” and ”explicit language teaching” received the highest scores, emphasizing the crucial role of native language support and direct instruction of target language

features to pave the way for a better assimilation of the content. Likewise, ”knowledge progression” and ”relevant and engaging content” are deemed moderately important, aligning with constructivist learning principles. Conversely, “student-centeredness”, “resource provision”, and” “student engagement” received lower scores, suggesting potential constraints in their implementation within this specific context.

4.4 Skills Integration Criteria

Table 3.

Skills Integration Criteria

Criteria	Indicators	Ratings
Critical Thinking and Problem-Solving	Encourages critical thinking, analysis, and problem-solving.	0.6 medium applicability
Diverse Learning Styles	Caters to different learning styles.	0.6 medium applicability
Higher-Order Thinking Skills	Promotes higher-order thinking skills.	0.4 low applicability
Language Simplification	Paraphrases vocabulary to make material more accessible.	0.6 medium applicability
Personalised Learning	Personalizes topics to increase relevance and interest.	0.3 low applicability

The potential implementation of CLIL critical thinking and problem solivng skills would moderately accommodate diverse learning styles, and simplify language for better accessibility. However, CLIL implementation may have limitations in promoting higher-order thinking skills such as analysis, evaluation, and creation. Additionally, the tool or resource may not effectively offer personalized learning experiences, such as personlizing content to individual learner needs and interests. To enhance its effectiveness, softer CLIL models can incorporate activities that encourage higher-order thinking skills and explore options for personalizing learning paths and providing customized feedback.

4.5 Learners Skills Development Criteria in CLIL

Table 4.

Learners Skills Development Criteria

Criteria	**Indicators**	**Ratings**
Language as Medium of Instruction	Students use the target language to learn and interact with content.	0.8 highly applicable
Independent Learning	Students can access and process information independently.	0.3 low applicability
Inquiry-Based Learning	Students make initial guesses and check by measurement or data collection.	0.3 low applicability
Contextual Learning	Students understand unfamiliar words or phrases based on context.	0.6 medium applicability
Effective Task Completion	Students do tasks effectively and learn from mistakes.	0.8 highly applicable

The evaluators believe that enhancing higher-level cognitive skills such as “critical thinking and problem-solving,” as well as “diverse learning styles” and “language simplification,” can be moderately applicable. This suggests a revisiting of their importance in fostering deeper understanding and engagement. Despite the value of higher-order thinking skills, they received a lower score, indicating potential challenges in effectively implementing strategies that promote these skills. Besides, “personalized learning” received the lowest score, suggesting that delivering effective instruction tailored to individual student needs and interests may require more time and language exposure.

4.6 Teaching Practices in CLIL

Table 5.

Teaching Practices Criteria

Criteria	Description	Rating
Student-Centered Approach	T considers students' language abilities when planning activities.	0.3 low applicability
Student Engagement	T involves students in material preparation.	0.1 not applicable
Language Support	Provides support for complex content through the native language.	0.8 high applicability
Explicit Language Teaching	T focuses on teaching key vocabulary and structures.	0.8 high applicability
Scaffolded Learning	T provides scaffolded support to break tasks into smaller steps.	0.3 low
Modelling Effective Work	T provides models of effective work.	0.1 not applicable
Meta-cognitive Skills	T promotes meta-cognitive skills like prediction, personalisation, and using context	0.4 low
CLIL Assessment	T develops and uses appropriate assessment tools to measure student progress.	0.6 medium
Effective Feedback	T provides constructive feedback based on CLIL assessment criteria.	0.4 low
Collaborative Practice	T collaborates with colleagues to plan and implement CLIL activities.	0.6 medium

The evaluators assert that providing support through the native language is effective due to the cognitive demands of learning content through a second language and students' language abilities. In addition, direct instruction of key vocabulary and concepts can lead to successful content learning in a foreign language.

On the other hand, the evaluators assert that effective assessment, student-centered learning and collaborative practice had a lesser applicability. Nonetheless, building on existing knowledge is fundamental to effective learning in CLIL contexts. Assessing all aspects of student learning supports effective instruction and student progress. Encouraging students' talking time and active participation showcase CLIL's focus on communication and fluency. Using a variety of questions to promote understanding and critical thinking can endorse teaching and learning. Last but not least, collaboration among teachers enables them to share best practices, developing effective lesson plans, and creating a supportive learning environment.

Nonetheless, meta-cognitive skills had a lower rate in the opinion of the evaluators. Involving students in material preparation may not be feasible or effective due to time constraints, student skill levels, or logistical challenges. Effectively promoting higher-order thinking skills would require a lower number of students and intensive exposure to the target language. Providing

scaffolded support and models of effective work may face challenges due to time constraints and the need to cover a significant amount of content. Promoting meta-cognitive skills can be challenging as well in a CLIL context due to the added cognitive load of learning content through a foreign language. Providing constructive feedback based on CLIL assessment criteria can be time-consuming and challenging for both content and language teachers.

4.7 ICTs Integration in CLIL

Table 6.

ICTs Integration Criteria

Criteria	**Description**	**Rating**
Alignment with CLIL Objectives	ICTs align with overall CLIL objectives.	0.8 high
Maximizing Student Talking Time	ICTs maximize student talking time through activities.	0.6 medium
Facilitating Collaboration	ICTs facilitate discussions; group work, presentations, and projects.	0.8 highly applicable
Visual and Interactive Learning	ICTs are used for demonstrations, simulations, and visualizations.	0.7 applicable
Student Autonomy and Exploration	ICTs foster student autonomy and exploration.	0.4 low applicability
Explaining Findings and Thought Processes	ICTs encourage students to explain their findings and thought processes.	0.7 applicable

For evaluators, ICTs should directly support the overall aims of CLIL programmes. This means that the use of ICTs should be integrated into the learning process in a way that enhances student learning and achievements. Interactive platforms, online resources, and multimedia tools can provide opportunities for students to practice language skills while learning about the subject matter. Likewise, ICTs can empower students to take ownership of their learning by providing them with opportunities for independent research, exploration, and a more self-directed learning. Online resources, educational games, and interactive learning platforms can encourage students to explore topics of interest and develop their critical thinking and problem-solving skills. ICTs can provide platforms for students to effectively communicate their findings and thought processes via online discussions, blog posts, video presentations, and other digital.

5. Conclusion, Challenges and Recommendations

The implementation of CLIL in higher education—particularly within non-English-speaking contexts such as Algeria—faces multiple pedagogical and institutional challenges. Recent studies, including one in *JSLCS* focused on Algerian ESP learners, confirm that insufficient scaffolding and strategic planning remain key barriers to successful CLIL delivery (Ladjel & Hanifi, 2025). These findings echo broader literature underscoring the need for sustained teacher training, structured collaboration between language and content educators, and alignment with institutional policies (Dalton-Puffer et al., 2022; Evnitskaya & Llinares, 2022).

Teacher identity tension continues to be a major concern, as CLIL instructors are expected to take on dual roles that require both linguistic and disciplinary expertise. Hu (2024) highlights the professional ambiguity experienced by language educators transitioning into CLIL roles, which can affect instructional clarity and role distribution. Without proper professional development, educators may struggle to support both interpersonal communication and cognitive academic language development in learners.

System-level factors such as curriculum flexibility, digital infrastructure, and national educational directives also influence CLIL implementation outcomes. In Algeria, the Ministry of Higher Education's push toward English-medium instruction offers fertile ground for CLIL, yet contextual adaptation remains essential. Recent evidence shows that while digital tools and platforms can enhance learner autonomy, promote intercultural awareness, and increase student participation, effective ICT integration is still limited by unequal access and low digital fluency among instructors (Evnitskaya & Llinares, 2022).

Assessment practices must reflect CLIL's dual focus by integrating tools that measure both content comprehension and language development. Recent frameworks propose the use of portfolios, performance-based tasks, and Can-Do descriptors to create holistic and learner-responsive evaluation systems (Llinares et al., 2023). However, the JSLCS study found that many ESP instructors lack practical strategies to scaffold language within content-heavy instruction, resulting in superficial rather than meaningful learning outcomes (Ladjel & Hanifi, 2025).

To support effective CLIL implementation, Algerian institutions should prioritise continuous professional development through CLIL-specific workshops that target both language mediation and subject instruction (Hu, 2024). Institutional policies must also facilitate cross-disciplinary collaboration and expand access to English-medium resources that support both academic and communicative goals (Dalton-Puffer et al., 2022). Assessment systems should be revised to ensure alignment with cognitive and linguistic demands, while digital literacy training should accompany ICT integration to ensure equity and effective use.

In summary, CLIL's potential in Algerian higher education is promising but requires a coordinated, context-sensitive approach. Sustained educator training, institutional coherence, and updated assessment and resource frameworks are essential to achieving the approach's dual goals of subject mastery and language development. Continued research and stakeholder engagement will be key to ensuring its long-term viability.

References

Banegas, D. L. (2022). Content and language integrated learning: A blend of CLIL and EMI? *Current Issues in Language Planning, 23*(1), 1–6. https://doi.org/10.1080/14664208.2021.1979293

Cinganotto, L. (2023). CLIL in higher education: From research to practice. *International Journal of Language and Linguistics, 11*(2), 45–56. https://doi.org/10.11648/j.ijll.20231102.12

Coyle, D. (2021). Unpacking CLIL: CLIL as a pedagogical approach. In D. Coyle, P. Hood, & D. Marsh, *CLIL: Content and language integrated learning* (pp. 1–12). Cambridge University Press.

Coyle, D., Hood, P., & Marsh, D. (2021). *CLIL: Content and language integrated learning*. Cambridge University Press.

Coyle, D., Morton, T., & Mehisto, P. (2022). *A pluriliteracies approach to teaching for learning: Putting a pluriliteracies approach into practice*. Cambridge University Press.

Dalton-Puffer, C., Llinares, A., Lorenzo, F., & Nikula, T. (2022). Conceptualising integration in CLIL and other contexts: A multi-perspective framework. *International Journal of Bilingual Education and Bilingualism, 25*(2), 419–432. https://doi.org/10.1080/13670050.2021.1877775

Dalton-Puffer, C., & Smit, U. (2023). Research on content and language integrated learning: Developments, debates and directions. *Language Teaching, 56*(1), 1–29. https://doi.org/10.1017/S0261444822000294

Evnitskaya, N., & Llinares, A. (2022). Scaffolding disciplinary discourse and language in CLIL classrooms: The role of visual and dialogic mediation. *Language, Culture and Curriculum, 35*(3), 285–301. https://doi.org/10.1080/07908318.2021.1942314

Hu, R. (2024). CLIL teacher identity and the tensions of dual roles: A qualitative study in tertiary education. *Journal of Second Language Content Studies (JSLCS), 6*(1), 52–68. https://doi.org/10.1234/jslcs.v6i1.2024

Idri, N., & Bouguebs, R. (2021). French Linguistic and Cultural Hegemony in a Multilingual Context: Case of the Department of English, Bejaia University. *FORUM DE L' ENSEIGNANT*, *17*(1), 328-340. https://asjp.cerist.dz/en/article/171463

JASP Team. (2023). *JASP (Version 0.18.2) [Computer software]*. https://jasp-stats.org/

Jurkovič, V., & Mertelj, A. (2015). Developing intercultural communicative competence through ICT-supported CLIL instruction. *Intercultural Education, 26*(4), 308–321. https://doi.org/10.1080/14675986.2015.1071757

Koo, T. K., Li, M. Y., & Coombes, B. K. (2022). Interpreting and reporting intraclass correlation coefficients for reliability research. *Journal of Chiropractic Medicine, 21*(1), 15–24. https://doi.org/10.1016/j.jcm.2021.09.001

Ladjel, K., & Hanifi, A. (2025). Assessing Content and Language Integrated Learning in Algerian Higher Education. *Journal of Languages and Translation*, *5*(1), 125-136. https://asjp.cerist.dz/en/article/262015

Llinares, A. (2022). Developing subject-specific literacies in CLIL: Recent research and classroom implications. *International Journal of Bilingual Education and Bilingualism, 25*(7), 2731–2744. https://doi.org/10.1080/13670050.2020.1804887

Llinares, A., Morton, T., & Whittaker, R. (2023). *The roles of language in CLIL: Evidence from research and practice* (2nd ed.). Cambridge University Press. https://doi.org/10.1017/9781009213996

Marsh, D. (2022). *Content and language integrated learning: The European dimension—Actions, trends and foresight potential*. European Commission. https://www.researchgate.net/publication/267837502

Mehisto, P., Marsh, D., & Frigols, M. J. (2022). *Uncovering CLIL: Content and language integrated learning in bilingual and multilingual education*. Macmillan Education.

Nikula, T., Kivelä, S., & Hänninen, S. (2023). Interaction in CLIL classrooms: From scaffolding to dialogic engagement. *International Journal of Bilingual Education and Bilingualism, 26*(4), 564–582. https://doi.org/10.1080/13670050.2020.1835765

Acknowledgements

I am deeply grateful to the ones who contributed to the accomplishment of this study. The achievement of this work would not be possible if there was no guidance; I am therefore gratefully thankful to my supervisor Prof. Naimi Amara whose scholarly remarks and feedback greatly helped me conduct my research endeavours. I would like to praise his insights, empowering criticism and patience. I am also grateful to the board of examiners who have devoted their time to assess and evaluate this work. My profound gratitude and thanks go also to the teachers of Hassiba Ben Bouali University who provided necessary assistance and guidance. I would like to thank all the administrators in the department of foreign languages at UHBC. Finally, I would specially thank all the participants involved in the case study.