# Issues and Ideas in Education

# Content and Language Integrated Learning in Castilla-La Mancha, Spain: Exploring Pedagogical Practices and Experiences through Classroom Observations

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## ARTICLE INFORMATION

## ABSTRACT

**Background:** Content and Language Integrated Learning (CLIL) is a European innovative interdisciplinary educational convergence that intends to promote multilingual competence among students through the learning of the subjects in a second/foreign language. This approach is considered one of the significant developments in the field of education.

**Purpose:** A research study was designed with the objective of exploring and understanding the nature and method of CLIL practices prevalent in bilingual primary and secondary school classrooms in Castilla La Mancha, Spain. Spain was chosen because it is one of the pioneering countries that steered an exhaustive variety of research and experiments in CLIL practices in its diverse educational contexts.

**Methods:** Adopting qualitative research method Participant Classroom Observations, twenty classes of two bilingual schools—fifteen classes of Natural Science and Social Science in primary school and five classes of Music at Secondary School that used CLIL approach were observed and findings recorded using observation template.

**Results:** The findings provided a myriad view of the bilingual experiences in the classrooms, diversity and range of pedagogical practices used, student teacher interaction dynamics present, positive learning environment provided for the students in the classes to mention a few.

**Conclusion:** The study concludes with the understanding of the 'added value' and the numerous benefits the approach provides for the students. As a fresh and innovative approach, CLIL promotes holistic and meaningful learning catering to the needs of twenty first century education systems.

## 1. Introduction

European Union introduced Content and Language Integrated Learning (CLIL) in the early 1990s to promote multilingualism in its education system (Morton & Linares, 2017; Lo & Fung, 2018) and strengthen "European cohesion and competitiveness" (Mehisto, Marsh & Frigols, 2008). CLIL approach that promotes learning of content and foreign/additional language (Dalton, Nikula & Smit, 2010; Lialikhova, 2019) aims to fill the lacunae existent in the traditional educational approaches by improving the learners' target language competence and language learning outcomes (Agudo, 2019). The approach is considered distinct as it "adds value" (Mahan, Brevik & ∅degaard, 2018) of "didactic innovation and transdisciplinary collaboration" (Darvin, Lo & Lin, 2020).

What makes CLIL an innovative approach is its principles of interdisciplinary convergence that fosters the integration of content, language, cognition and culture, the purpose of their integration peer collaboration and learner autonomy (Codo, 2020). The convergence occurs through the principles termed as Coyle's 4Cs framework (2007) comprising of content, cognition, communication and culture. The "interrelationship between content (subject), communication (language), cognition (thinking) and culture" (Costa & D'Angelo, 2011) contributes to the innovation in the curriculum, teacher training, educational resources and pedagogical practices (Leung & Morton, 2016; Vázquez, Lancaster & Callejas, 2020). CLIL approach provides learning environments with diverse teaching-learning objectives, experiences, outcomes appropriate content, intercultural

understanding, peer and teacher supported scaffolding activities with regard to both content and language (Coyle, Holmes & King, 2009).

The European Union endorsed CLIL to promote multilingual proficiencies among its students as research in bi/multingualism provided evidence that speaking two or more languages simultaneously enhanced an individual's cognitive capacities by forming specific constructions of the mind that promote cognitive advantages (Kharkhurin, 2015). The extensive experience managing multiple languages influences cognitive processes as well as their neural correlates (Hayakawa & Marian, 2019). Content and Language Integrated Learning (CLIL) approach promotes critical thinking and problem solving skills, accommodates varied types of students, with often "diverse levels of competence in the vehicular language" (Marsh, Cañado & Padilla, 2015). The extensive research conducted in Europe on CLIL proves that CLIL approach depends on certain pedagogically distinct conditions (Agudo, 2019): Students being at the centre of learning (Hunt, 2011; Lasagabaster, 2011; Gándara, 2017), teachers forming collaboration and coordination (Vázquez & Garcia, 2017), the use of "cross linguistic pedagogy" (Ballinger, Lyster, Sterzuk & Genesee, 2017) and the use of a divergent pedagogical framework named- "the 4Cs framework".

An effective method of comprehending what CLIL approach is to understand how it is practised inside the classrooms. This study with the objective of understanding CLIL, explores pedagogical practices present in primary and secondary schools' bilingual classrooms by adopting qualitative research method structured participant classroom observations. The purpose for adopting participant classroom observations was that as an ethnographic research method, observations play a central role in exploring the method in which action occurs in its natural and authentic settings. Classroom observations can offer rich empirical data about the range of CLIL practices, their methodological orientations and the role of the teacher in developing academically strong, linguistically proficient students. The study aimed at gathering useful insights on CLIL practices used in the classes.

## 2. Literature Review

The methodological framework that operationalizes CLIL practices in the classroom stems from the sociocultural theory of Vygotsky (Dalton, 2008). According to Vygotsky, "the most significant moment in the course of intellectual development […] occurs when speech and practical activity, two previously completely independent lines of development, converge" (Vygotsky, 1978). Therefore, classroom talk can be considered "chief locus of knowledge construction" (Mahan, Brevik & Ødegaard, 2018).

The difference between CLIL and other forms of bilingual education is the merge of content and language into 'synergies' that create a whole (Coyle, Hood & Marsh, 2010). Cummins' (1979) threshold hypothesis provides linguistic competence necessary for cognitive enhancement of students studying in bilingual contexts and this theory too drives integration of variables necessary for the success of CLIL approach. According to Vidal & Roquet (2015), there are four interrelated features that are intrinsic to CLIL which aligns with the 4Cs framework of CLIL: i) the use of additional/foreign language, as the medium of instruction; ii) culture of the classroom permeating into curriculum and classroom communication practices; iii) the international ethos which such an educational option confers to the classroom iv) the policy that drives CLIL.

Oattes et al., (2018) state that based on Coyle's 4Cs framework (2009) and Cummins' matrix (1984), a CLIL lesson should be based on the intertwining among content, cognition, communication and culture. They elaborate on how essential it is for CLIL teaching, the preparation and execution of lessons inside the class in order to promote target language proficiency along with students' subject knowledge. In their terms, the basic CLIL lesson plan comprises of activation of prior knowledge, use of additional/foreign/second language, activities to stimulate comprehension of subject matter and facilitate students' language development, and finally teacher assessment of student performance by means of corrective feedback on the linguistic output. The SLA-inspired research instructs CLIL classrooms to provide more input and exposure to communicative practice by providing space for language acquisition and improved L2 competency. And this facilitation can be supported by using a CLIL lesson plan that takes into consideration teaching content with learning objectives, communication with scaffolding of vocabulary and grammatical aspects, academic language, critical thinking activities, and raising awareness and exhibition of intercultural communication.

Krashen (1982) suggests that input can influence learners only if their attitudes are positive and motivation is high. His hypotheses emphasize the importance of distinguishing between "language acquisition and language learning" as ways to develop competence in a second language. Krashen states language acquisition is a subconscious process which "[...] requires meaningful interaction in the target language- natural communication- in which speakers are concerned not with the form of their utterances but with the messages they are conveying and understanding". Several researchers such as Cummins & Swain (1979) have indicated the positive relationship among bilingualism, cognitive enhancement, and academic achievements.

The fundamental tenet of CLIL is based on 'integration' i.e., all forms of language learning will be supported during content classes and language learning classes in turn will be used to support content learning. Both goals enable the student to use the language without missing out on key concepts. According to Mehisto, Marsh & Frigols (2008), the CLIL programme is devised to create: i) grade-appropriate levels of subject expertise ii) grade-appropriate functional proficiency of a language iii) first language competence syncing with the learning levels of the students iv) an understanding of cultural aspects associated with CLIL target language v) cognitive and social skills and habits required for the digital age. Therefore, exploring and comprehending how CLIL integration is operationalized in the classroom instructional practices to promote multilingual proficiencies and content learning among children is essential for CLIL research and practice to be undertaken in any educational context. There are advantages for bilinguals in terms of working memory i) inhibition ii) metacognitive skills iii) cognitive flexibility iv) creativity v) enhanced inferential and analytic skills. The "cognitive efficiency and speed of processing" (Salthouse, 1996; Ziegler & Goswami, 2005) of the child enhances its literacy levels too. Focus on constructivism and interaction, learning is built on interactions, which are considered necessary for a child's cognitive progression and holistic growth (Vygotsky, 1978).

Going through the past research studies, it has been noted that the least research ash been performed on CLIL practices in diverse educational contexts. Therefore, a research study is proposed with the objective of exploring and understanding the nature and method of CLIL practices prevalent in bilingual primary and secondary school classrooms in Castilla La Mancha, Spain. The study is performed using the Participant Classroom Observation method. This method is implemented in 15 classes of Natural Science and Social Science in primary school and 5 classes of Music in Secondary School. Using CLIL approach, observation (by CLIL rubric tool) and findings are recorded. using an observation template.

The objective of this study is to explore and understand what CLIL pedagogical practices and the method in which they are used in classroom instruction and learning. Finally, it has been concluded that this knowledge would help the design of similar practices to promote quality, holistic and multilingual learning in the classrooms despite sociocultural aspects of any educational context.

## 3. Research Method Adopted-- Participant Classroom Observations

The data of this study was obtained through the use of qualitative research method Participant Observations. A total number of twenty participant classroom observations were conducted in two bilingual schools at Castilla La Mancha situated in the south central part of Spain. Fifteen observations at a bilingual primary school that used CLIL in Natural Science and Social Science and five participant observations at Secondary School that used CLIL in Music were conducted. An observation tool consisting of CLIL rubric was used to record the findings.

For following the complete procedure, a total number of 25 students are considered from each class. Where two languages (English and Spanish) have been involved in the classrooms. Finally, the participant classroom observations method and organization of school observations are incorporated to observe the nature and method of CLIL practices.

### 3.1. Rationale for Selecting Research Method-- Participant Classroom Observations

As an ethnographic research method, classroom observations play a key role in understanding the ongoing process of a social phenomenon in a natural setting. The observations are an attempt to gather "naturally occurring data" (Silverman, 2005). Therefore, the benefits of observation is that it allows

researcher to study people and their actions in their natural environment and understand things in their own perspectives thereby giving them a comprehensive understanding of the process or phenomenon they are studying. In the opinion of Gorman & Clayton (2005), Observation studies "involve the systematic recording of observable phenomena or behavior in a natural setting". Observation can go broad in its scope to ethnographic study or narrow its scope and come to be a participant observation (Baker, 2006). According to Gold (1958), a researcher can adopt four types of roles—the complete observer, participant observer, non-participant observer and complete participant. This study was conducted using Participant Observation method.

## 3.2. Organization of School Observations

The two groups observed in this study were Spanish bilingual school students studying in primary and secondary schools in the region of Castilla La Mancha. The co-ed school is located in an area of high socioeconomic status. Twenty classroom observations were conducted out of which fifteen observations were conducted at Primary School that used CLIL in Natural Science and Social Science and five observations at the Secondary School that used CLIL in Music. Table 1 indicates the organization of the observations.

**Table 1**: Organization of the Classroom Observations.

| Observation details | Primary education | Compulsory secondary education |
|---|---|---|
| Total number of classes observed | 15 hours | 5 hours |
| Grade | 1C, 1A, 2A, 2B, 4A, 5B, 6A, 6B, | Level 1 Level 2 |
| Duration of each class | 45 minutes | 55 minutes |
| Number of students in class | 25 | 25 |
| Subjects observed | Natural Science Social Science | Music |
| Languages used in the classroom | English Spanish | English Spanish |

## 4. Findings and Discussion

The findings revealed various insights on the nature of CLIL pedagogical practices, the classroom dynamics, the bilingual experiences of the students and the manner

in which CLIL approach harboured meaningful learning experiences for the students in primary and secondary schools. The key results and finding observations have been mentioned in the following phases: Design of the teaching objectives, focus on content and language learning, use of languages in the class, teaching methods & techniques, presence of a student-centric learning environment, and use of scaffolding activities. The insights are discussed below:

### 4.1. Design of the Teaching Objectives

The teaching objectives and learning outcomes were set to the level of the students at both primary and secondary schools. The teaching material was made challenging yet comprehensible for students. Concepts were divided into varied parts and subparts for the ease of the students. Activities involving a good mix of lower and higher order thinking skills were designed for each class. The teacher scrutinized if the content was comprehended sufficiently. If not, the teachers provided supplementary exercises and collaborative tasks to meet instructional goals.

### 4.2. Focus on Content and Language Learning

Although both primary and secondary schools denoted the focus on the teaching of content along with language activities, the degree of use differed in both the schools. In the primary school, the focus was primarily on the content acquisition with occasional showers of language exercises accommodated in teaching, and in the secondary school, a balanced blend of language activities along with content instruction was observed in each class. Activities on subject related vocabulary, lexical reinforcement, use of grammar aspects such as the use of linkers, parts of speech in sentences, appropriate pronunciation of certain music related terms, elaboration of complex concepts without simplifying, re-elaboration of texts, reformulation of ideas, summarising were the variety of activities used to provide language focus in the content learning.

### 4.3. Use of Languages (Spanish/English) in the Class

No rigid distinction was found in the use of two languages—mother tongue Spanish and foreign language English in both primary and secondary schools. The teachers encouraged the use of bilingual

interaction to smoothen comprehension of the concepts and in this regard, both primary and secondary school teachers exhibited similar method. However, the degree of use varied from class to class. The teacher used English with a blend of daily language, academic and subject-specific language. However, when students found terms incomprehensible, teachers encouraged students' participation/interaction in the class by translating difficult concepts and terms in mother tongue too. Mistakes in the interactions were also addressed and corrected. The notable factor about the use of mother tongue was that the teachers used mother tongue without inhibition.

## 4.4. Teaching Methods and Techniques

An interesting teaching method observed in both primary and secondary classes was the Initiation Response Feedback (IRF) method also called "follow up" (Diaz, 2018) aimed at developing the target language proficiencies among the students by providing them exposure to meaningful contexts. In this method, the teacher initiates communication with the students through the questions, the questions prompt students' response for which the teacher provides feedback. This method consists of three parts: i) teacher asking questions ii) students' responses to the questions and iii) teacher's feedback/correction of the responses. This method was observed in almost every class of music at the secondary school.

Diverse teaching techniques and methods were used in the classes. From short presentations to ICT methods, group and pair work, worksheets and assignments, activities using total physical responses (TPR), flashcards, pictures, charts and maps to aid comprehension of concepts, conduction of practical experiments in the science classes, watching videos, reflective activities at the end to promote reflective thinking, use of mother tongue to aid comprehension of the concepts, elicitation, questioning and probing from teachers to get students' responses were the ones predominantly visible in both primary and secondary schools.

The teachers commenced classes by testing the students' grasp of previously taught concepts. Work sheets were distributed for group work. And this practice was prevalent in both primary and secondary schools. In grade one, total physical response (TPR) activities using songs and dances, stories and narrations and use of games through gamification app were also observed. Pictures/drawings/props/post cards were used to teach basic concepts in lower grades. In grade one, numerous computer assisted audio, video activities were used to make the concepts interesting. Repeated uses of basic conversational chunks was also observed. In primary school, the teacher used reflective exercises to facilitate students' participation in the class. Through reflections, the teacher facilitated students to reflect on their content learning.

## 4.5. The Presence of Student Centric Learning Environment

Classrooms in both primary and secondary schools were found to be student centric. In the traditional educational setting, teachers generally expect students to listen to them most of the time. Given that CLIL promotes safe learning environment, it was observed that students in both the schools stayed at the centre of classroom dynamics. The teacher directed students towards hands-on, practical activities with positive enforcements of body language, elicitation of responses. Negative talk, reprimanding students was absent in both the schools. This appeared to make learning in foreign language more encouraging for the learners. The freedom to use mother tongue appeared to smoothen learning in foreign language for the students. Using warm up activities, positive, assuring body language, and reflection in the beginning, the teacher created a safe learning environment in the class. An interesting feature observed was that students even moved around in the class whenever required.

## 4.6. Use of Scaffolding Activities

Scaffolding is defined as "the temporary and contingent teacher support that helps learners to comprehend a text, to carry out the expected tasks on the text and to produce meaningful output on it in a second or foreign language" (Gibbons, 2002; Walqui & Van Lier, 2010).

A variety of scaffolding techniques such as eliciting responses through cues, giving feedback, hints, instructions, translation to mother tongue, positive body language, intonation, questioning, elaborating, redefining and explaining activities, repetition of students' answers to encourage responses were used by the teachers to facilitate students' participation in classes in terms of using language in the learning of the content. The key one was the use of mother tongue to

explain difficult terms. Effective use of L1 to reinforce comprehension and communication while retaining the focus on the students' interaction in L2 was observed in the class. There were constant language switches from English to Spanish by the teachers to clarify concepts, ideas and the new vocabulary.

Teachers encouraged students to work in groups and pairs by distributing worksheets and assignment sheets. When students worked in groups, the teachers played a mediating role. The teachers repeated key words and phrases for the learners to complete their tasks properly. When teaching the units of the content, they built on students' prior knowledge, pressed for accuracy through probing and eliciting responses, built on partial understandings and pressed students for communication.

The teacher in grade one and two was seen predominantly using different forms of positive body language and gestures to facilitate interaction and comprehension in his classes. The teacher in the secondary school in her music classes was seen brainstorming, eliciting responses, probing questions, building on prior knowledge of the students. It appeared that teachers considered students' level of linguistic knowledge, competence and age in applying scaffolding strategies. The younger the students, more active and reassuring was the body language and frequent translation to the mother tongue.

To sum up the discussion, it can be said that classroom observations of CLIL pedagogical practices and students' bilingual experiences have revealed useful insights that will enhance the understanding of what CLIL practices are and how they exactly work despite the diversity in the educational background. The primary school classrooms were content oriented and had more activities based on lower order thinking. Language exposure was limited to correcting subject vocabulary pronunciation and motivating students to speaking. The secondary school classes were both content and language rich. They denoted a wide range of predetermined activities introducing new content driven vocabulary and linguistic structures integrated along with the content exposition. This variation could be related to the teacher's expertise and knowledge of CLIL method and the academic level of students in the class. This denotes the significance of training teachers for CLIL instruction.

Among the teaching practices observed, very useful to pedagogical process can be the strategy Initiation-Response-Feedback pattern in the classroom talk and the scaffolding activities. Another interesting finding was the safe and positive learning atmosphere in the class and the uninhibited use of mother tongue. In both the schools, teachers were flexible and patient to facilitate students' output and interaction. Reprimanding and rebuking for the errors in interaction was not observed. The use of students' mother tongue repertoire to uphold their learning without considering it as a taboo can be a useful strategy facilitating meaningful learning for the students. In the end, it is reported that the overall focus on learning in bilingual schools in Spain was student-centered and task-based that providing freedom to students in learning, motivating them towards having a meaningful exposure and engagement in content and language learning.

## 5. Conclusion

In this research study, exploring and understanding the nature and method of CLIL practices prevalent in bilingual primary and secondary school classrooms in Castilla La Mancha, Spain has been undertaken. It is further stated that the Content and Language Integrated Learning (CLIL) with its freshness in approach is considered a "catalyst of change" as it provides students with numerous benefits. The shift from the teacher centered classes to the student centered classes, activation and motivation of content and language learning through innovative methods, creation of safe learning environment in classrooms, the non-compartmentalization of content and language learning not only add value to the quality of teaching, learning process, but also support students in developing the skills essential to meet the demands of twenty first century such as multilingual proficiencies, critical thinking, problem solving, and intercultural communication skills.

Educational research is essential to examine the role and impact of effective pedagogical practices in the development of students' cognitive abilities, meta-awareness, academic, linguistic and socio-cultural skills. This research too despite the limitations of duration and number of schools available for the observation, and the study based on one particular educational context nevertheless contributes to the understanding the newness of CLIL and its "added value" for the stakeholders of education. CLIL as an

innovative method is considered to have great potential as it has the flexibility to accommodate diverse, creative instructional practices within its dual approach rubric that promotes the unison of content and language in a single space contrary to the traditional educational settings where content and subject are taught separately. The integration of two significant areas in CLIL approach is going to impart students a stronger edge on proficiencies and skills as the cognitive attention stays undivided in integration. The method of input and interactions that bilingual classrooms facilitate can be immensely beneficial in providing holistic and meaningful learning in classrooms and mollifying the learning issues of any educational context. Finally, it is clear that as an innovative approach, CLIL promotes holistic and meaningful learning catering to the needs of 21st-century education systems.

## 6. Future Directions

This empirical evidence on existing CLIL classroom practices although based on a specific Spanish educational context can provide ways to address pedagogical issues such as multilingual deficiencies, poor learning outcomes, rigid compartmentalization between subject and content learning affecting quality education in linguistically and culturally complex educational contexts of countries such as India. In the absence of CLIL research and practice in India, the findings can aid in devising strategies to improve pedagogical issues in India aligning with the vision and objectives of the recent National Education Policy 2020 as well.

The curricular and pedagogical structure of school education needs reconfiguration to make it responsive and relevant to the developmental needs and interests of learners at different stages of their development says the National Education Policy 2020. Enhanced cognitive growth, acquisition of subject knowledge along with multilingual competence and intercultural skills operationalizing in tandem through CLIL's integration method can add value to the culturally and linguistically rich classrooms in countries such as India.

## Authorship Contribution

Dr Neeta Inamdar contributed to conception and design of the study, data collection and analysis, critically revised, edited and gave final approval for the manuscript.

Devika Rani contributed to conception and design of the study, data collection and analysis, drafted the manuscript.

## Conflict of Interest

The authors declare no conflict of interest towards this paper.

## Declaration

It is an original data and has neither been sent elsewhere nor published anywhere.

## References

Agudo, J. D. D. M. (2019). Which instructional programme (EFL or CLIL) results in better oral communicative competence? Updated empirical evidence from a monolingual context. *Linguistics and Education, 51*, 69-78. https://doi.org/10.1016/j.linged.2019.04.008

Baker, L. (2006). Observation: A complex research method. *Library trends*, 55(1), 171-189. Library Trends v.55, no. 1, 2006 (illinois.edu)

Ballinger, S., Lyster, R., Sterzuk, A., & Genesee, F. (2017). Context-appropriate crosslinguistic pedagogy: Considering the role of language status in immersion education. *Journal of Immersion and Content-Based Language Education*, 5(1), 30-57. https://doi.org/10.1075/jicb.5.1.02bal

Codó, E. (2020). The dilemmas of experimental CLIL in Catalonia. *Journal of Multilingual and Multicultural Development*, 1-17. https://doi.org/10.1080/01434632.2020.1725525

Costa, F., & D'Angelo, L. (2011). CLIL: A suit for all seasons. *Latin American Journal of Content & Language Integrated Learning*, *4*(1). doi:10.5294/laclil.2011.4.1.1 ISSN 2011-6721.

Coyle, D. (2007). Content and language integrated learning: Towards a connected research agenda for CLIL pedagogies. *International journal of bilingual education and bilingualism*, *10*(5), 543-562. https://doi.org/10.2167/beb459.0

Coyle, D., Holmes, B., & King, L. (2009). Towards an integrated curriculum–CLIL National Statement and Guidelines. *London: The Languages Company*. https://d1wqtxts1xzle7.cloudfront.net/

Swain, M., & Cummins, J. (1979). Bilingualism, cognitive functioning and education. *Language Teaching*, *12*(1), 4-18. https://doi.org/10.1017/S0261444800003918

Dalton-Puffer, C. (2008). Outcomes and processes in Content and Language Integrated Learning (CLIL): current research from Europe. https://d1wqtxts1xzle7.cloudfront.net/36790465/CLIL_research_overview_

Dalton-Puffer, C., Nikula, T., & Smit, U. (Eds.). (2010). Language use and language learning in CLIL classrooms (Vol. 7). John Benjamins Publishing Amsterdam.

Darvin, R., Lo, Y. Y., & Lin, A. M. (2020). Examining CLIL through a critical lens. *English Teaching & Learning*, *44*(2), 103-108. https://doi.org/10.1515/applirev-2018-0119.

Díaz Pérez, W., Fields, D. L., & Marsh, D. (2018). Innovations and challenges: Conceptualizing CLIL practice. *Theory Into Practice*, *57*(3), 177-184. https://doi.org/10.1080/00405841.2018.1484037

Gándara, D. G. (2017). The Role of the Students in the CLIL Classroom A New Perspective to Identify Types of Tasks. *International Journal of Applied Linguistics and English Literature*, *6*(4), 5-10. https://doi.org/10.7575/aiac.ijalel.v.6n.4p.5

Gibbons, P. (2002). *Scaffolding language, scaffolding learning*. Portsmouth, NH: Heinemann. https://d1wqtxts1xzle7.cloudfront.net/60105773/Scaffolding_Language Scaffolding Learning

Gold, R. L. (1997). The ethnographic method in sociology. *Qualitative inquiry*, *3*(4), 388-402. https://doi.org/10.1177/107780049700300402

Gorman, G. E., Clayton, P. R., Shep, S. J., & Clayton, A. (2005). *Qualitative research for the information professional: A practical handbook*. Facet Publishing.

Hayakawa, S., & Marian, V. (2019). Consequences of multilingualism for neural architecture. *Behavioral and Brain Functions*, *15*(1), 1-24. https://doi.org/10.1186/s12993-019-0157-z

Hunt, M. (2011). UK teachers' and learners' experiences of CLIL resulting from the EU-funded project ECLILT. *Latin American Journal of Content & Language Integrated Learning*, *4*(1). https://doi.org/10.5294/laclil.2011.4.1.3

Kharkhurin, A. V., & Wei, L. (2015). The role of code-switching in bilingual creativity. *International Journal of Bilingual Education and Bilingualism*, *18*(2), 153-169. https://doi.org/10.1080/13670050.2014.884211

Krashen, S. (1982). Principles and practice in second language acquisition.

Lasagabaster, D. (2011). English achievement and student motivation in CLIL and EFL settings. *Innovation in language Learning and Teaching*, *5*(1), 3-18. https://doi.org/10.1080/17501229.2010.519030

Lialikhova, D. (2019). "We can do it together!"–But can they? How Norwegian ninth graders co-constructed content and language knowledge through peer interaction in CLIL. *Linguistics and Education*, *54*, 100764. https://doi.org/10.1016/j.linged.2019.100764

Llinares, A., & Morton, T. (Eds.). (2017). Applied linguistics perspectives on CLIL (Vol. 47). https://www.google.co.in/books/edition/Applied_Linguistics_Perspectives_on_CLIL/

Lo, Y. Y., & Fung, D. (2018). Assessments in CLIL: the interplay between cognitive and linguistic demands and their progression in secondary education. *International Journal of Bilingual Education and Bilingualism*. https://doi.org/10.1080/13670050.2018.1436519

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*. https://doi.org/10.1080/13670050.2018.1472206

Mehisto, P., Marsh, D., & Frigols, M. J. (2008). Uncovering CLIL: Content and language integrated learning in bilingual and multilingual education. Oxford Macmillan Education UK.

Leung, C., & Morton, T. (2016). Conclusion: Language competence, learning and pedagogy in CLIL–Deepening and broadening integration. In. Nikula, T., Dafouz, E., Moore, P., & Smit, U.(Eds.),

Conceptualizing integration in CLIL and multilingual education (pp. 235-248). Multilingual Matters. https://doi.org/10.21832/9781783096145

Marsh, D., Cañado, M. L. P., & Padilla, J. R. (Eds.). (2015). *CLIL in Action: Voices from the Classroom*. Cambridge Scholars Publishing. https://www.google.co.in/books/edition/CLIL_in_Action/

Oattes, H., Oostdam, R., De Graaff, R., & Wilschut, A. (2018). The challenge of balancing content and language: Perceptions of Dutch bilingual education history teachers. *Teaching and Teacher Education*, *70*, 165-174. https://doi.org/10.1016/j.tate.2017.11.022

Salthouse, T. A. (1996). The processing-speed theory of adult age differences in cognition. *Psychological review*, *103*(3), 403.

Silverman, S. L. (2009). From randomized controlled trials to observational studies. *The American journal of medicine*, *122*(2), 114-120. https://doi.org/10.1016/j.amjmed.2008.09.030

Vázquez, V. P., & García, M. D. C. M. (2017). Analysing teachers' roles regarding cross-curricular coordination in Content and Language Integrated Learning (CLIL). *Journal of english studies*, *15*, 235-260. https://doi.org/10.18172/jes.3227

Vázquez, V. P., Lancaster, N., & Callejas, C. B. (2020). Keys issues in developing teachers' competences for CLIL in Andalusia: training, mobility and coordination. *The Language Learning Journal*, *48*(1), 81-98. https://doi.org/10.1080/09571736.2019.1642940

Pérez-Vidal, C., & Roquet, H. (2015). The linguistic impact of a CLIL Science programme: An analysis measuring relative gains. *System*, *54,* 80-90. https://doi.org/10.1016/j.system.2015.05.004

Vygotsky, L. S. (1978). Socio-cultural theory. *Mind in society*, *6,* 52-58.

Walqui, A., & Van Lier, L. (2010). *Scaffolding the Academic Success of Adolescent English Language Learners: A Pedagogy of Promise*. WestEd. 730 Harrison Street, San Francisco, CA 94107-1242.

Ziegler, J. C., & Goswami, U. (2005). Reading acquisition, developmental dyslexia, and skilled reading across languages: a psycholinguistic grain size theory. *Psychological bulletin*, *131*(1), 3. https:doi: 10.1037/0033-2909.131.1.3

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