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## **CLIL Implementation in Greece: Empirical Findings from 2006 to 2020**

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**Abstract:** Despite the increasing interest in CLIL in Greece over the past decade, Greek CLIL research is largely absent from international review studies. This systematic review focuses on primary and secondary education, and examines peer-reviewed empirical research on CLIL implementation in Greece from 2006 to 2020. A total of 33 items are reviewed using qualitative Content Analysis. Organized according to commonalities shared by their foci, the reviewed items highlight three main research areas of CLIL implementation in Greece: (1) CLIL project evaluation, (2) CLIL students' development, and (3) CLIL teachers. The reviewed studies suggest that CLIL implementation in Greece tends to be quantitatively examined, context specific, and very small in scale. The reviewed studies are largely outcome oriented and concerned with issues of efficacy. Contrary to project evaluation and learning outcomes, CLIL teachers in Greece have received significantly less attention from empirical research.

**Keywords:** review; bilingual education; Content and Language Integrated Learning; CLIL student; CLIL teacher; elementary school; high school; compulsory education

## 1. Introduction

Phenomena like globalization and internationalization in Europe have changed language landscapes and given rise to issues of multilingualism, plurilingualism, and interculturalism (Coonan, 2017). Responding to these changes became increasingly important and brought forth another pedagogical approach to language education, inspired by former foreign language learning theories and pedagogies as well as the need for more language-aware teaching of curricular content (Paschalidou, 2019). This approach was popularized as Content and Language Integrated Learning (CLIL), an umbrella term encompassing different types of bilingual education whereby “a second language (a foreign, regional or minority language and/or another official state language) is used to teach certain subjects in the curriculum other than language lessons themselves” (Eurydice, 2006, p. 8). CLIL aims to afford students, who have typically already acquired their basic literacy skills in their first language (L1), more possibilities for meaningful language use at school (Nikula et al., 2013).

Because a broad definition of CLIL lends the approach a flexible and inclusive character, CLIL in practice has varied considerably, even within the same national education context (e.g., Ruiz de Zarobe & Lasagabaster, 2010). This variation in curricular arrangements for bilingual or language-enriched education has allowed CLIL to adapt to context-dependent nuances as well as the variegated linguistic and policy contexts of Europe (San Isidoro, 2018). Perhaps because of this variation, CLIL continues to attract scholarly attention. Among other matters, recent research on CLIL has addressed processes and learning outcomes (e.g., Graham et al., 2018; Pérez Cañado, 2018), assessment practices (e.g., DeBoer & Leontjev, 2020), affective factors and attitudes (e.g., Navarro Pablo & García Jiménez, 2018; San Isidro & Lasagabaster,

2020; Sylvén & Thompson, 2015), stakeholder perspectives (e.g., Tedick & Cammarata, 2012), and teachers' experiences and professional development (e.g., Hillyard, 2011; Lazarević, 2019; Lo, 2019). In addition, attempts have been made to review CLIL implementation in various contexts (e.g., for Latin America, see Banegas et al., 2020; for tertiary education, see Macaro et al., 2018; for Finland and Sweden, see Ringbom, 2012; for minority languages, see Somers, 2017), as well as internationally (e.g., Li et al., 2020). However, Greek studies tend to be absent from international reviews, despite the increasing research on CLIL in Greece over the past decade. A notable contribution is Diamantidou and Kordoni's (2020) descriptive review in French, which presents the most representative projects of English-mediated CLIL in primary education.

This review examines evidence of CLIL implementation in Greece with a focus on both primary and secondary education, regardless of type (i.e., state-funded or private). In the absence of a statutory CLIL curriculum in Greece and government-initiated CLIL teacher education (Vourdanou, 2019), CLIL implementation may be broadly understood as the endeavors made on grassroots or institutional levels to experiment with and develop CLIL in schools. Such implementation aims to emphasize the completion of meaningful learning tasks through an additional language, coupled with a less compartmentalized view of the curriculum (San Isidoro, 2018). This systematic review draws on peer-reviewed empirical research on CLIL in Greece and spans fourteen years (2006-2020). The cut-off point in 2006 is based on the widely cited Eurydice (2006) report, according to which Greece was one of the few European countries not implementing CLIL in any official way. The next section offers background information on CLIL in Greece and is followed by a presentation of the

methodological procedures. The remaining sections center on the findings, overarching observations, and future directions.

## **2. CLIL in Greece**

Bilingual education has been present in Greece for many years in private schools. These schools are mostly affiliated with American and English schools, following their curricula instead of the Greek national curriculum (Vourdanou, 2019). CLIL as a bilingual approach, however, is a nascent phenomenon in Greece (Lagou & Zorbas, 2020). The integration of CLIL into the Greek education system is indirectly supported by the 2016 Integrated Foreign Languages Curriculum for compulsory education (RCeL, 2016), which views language “as the medium through which cognitive schemata are created and communicated” (Vourdanou, 2019, p. 97). CLIL integration is further supported by foreign language (FL) education in general, which has long been “a strong and important component of the Greek educational system” (Mattheoudakis & Alexiou, 2017, p. 113), and by actions taken by the Greek Ministry of Education from 2010 onwards to intensify English as a Foreign Language (EFL) teaching. This may account for the fact that EFL, rather than non-language, teachers have predominantly been involved in CLIL implementation in primary and secondary education (Mattheoudakis & Alexiou, 2017).

CLIL in Greece has not yet taken root in mainstream schools (Mattheoudakis et al., 2018), although a few private schools and experimental schools in large urban centers have been increasingly using CLIL (Chionis et al., 2017). Experimental schools are state-funded, university-affiliated schools known to implement experimental and innovative practices, enrol students with special learning abilities and talents (Kofou &

Philippides, 2017), and employ highly qualified EFL teachers (Mattheoudakis et al., 2018). Such schools are a minority and highly selective (Diamantidou & Kordoni, 2020). The first official attempt at CLIL was made in 2010 at the 3rd Primary-Experimental School of Evosmos (see Mattheoudakis et al., 2014). This is the only Greek state school to systematically implement English-medium CLIL (Mattheoudakis et al., 2018), covering 30%-40% of the curriculum (Diamantidou & Kordoni, 2020), and students are streamed into EFL classes according to FL competence and language test performance (Ziaka, 2014). Experimental schools aim to equally emphasize content and language instruction (Mattheoudakis & Alexiou, 2017), whereas private schools favor native-like accuracy and might, therefore, perceive the content-driven linguistic goals of CLIL as limited (Vourdanou, 2019).

In the absence of a central educational policy for CLIL (Kollatou, 2013), CLIL in mainstream state schools remains largely dependent on teacher-led exploratory initiatives (Lagou & Zorbas, 2020) and pilot projects (Mattheoudakis & Alexiou, 2017; Paschalidou, 2019), without governmental support or acknowledgement (Mattheoudakis et al., 2018). Additionally, CLIL implementation is impeded by institutional rigidity; teachers need to procure special permission to implement CLIL during hours meant for revisions or in-depth study of subject content, and restrict CLIL to hours allocated for FL teaching, isolated projects, and after-school classes (Iskos et al., 2017). CLIL is seen as a novel and appealing approach to content instruction despite these constraints. However, adjustments to the official curricula and more flexible study programs would be needed to facilitate the integration of CLIL and the development of 21<sup>st</sup> century skills (Diamantidou & Kordoni, 2020).

### 3. Methods

#### 3.1 Search strategies and outcomes

The research task was to identify peer-reviewed empirical studies to answer the following research question: What does empirical research reveal about CLIL implementation in mainstream Greek primary and secondary education? To this end, a systematic review was conducted in 2021 by searching the online databases EBSCO, Elsevier, Educational Resources Information Center (ERIC), Google Scholar, ProQuest, and Springer. First, the search used keyword combinations in English (see Table 1). Then, to include literature published in Greek, the search further used keyword combinations based on the terminology and corresponding acronyms used for CLIL in Greek, and accounted for noun declination. At the same time, the following inclusion criteria were applied to the retrieved results to identify relevant literature:

1. The item has been published between 2006 and 2020.
2. The item mentions Content and Language Integrated Learning or CLIL in the title, abstract, or keywords.
3. The item is academic communication material concerning the Greek education context.

Table 1. Search keywords

<b>Search keywords</b>	
<b>Language</b>	<b>Keyword combinations</b>
English	(CLIL OR “content and language integrated learning”) AND (Greece OR Greek)
Greek	“Ολοκληρωμένη Εκμάθηση Περιεχομένου και Γλώσσας” “Ολοκληρωμένης Εκμάθησης Περιεχομένου και Γλώσσας” “Ολοκληρωμένη Εκμάθηση Ξένης Γλώσσας και Γνωστικού Αντικειμένου” “Ολοκληρωμένης Εκμάθησης Ξένης Γλώσσας και Γνωστικού Αντικειμένου” “Ένσωματωμένη Εκμάθηση Περιεχομένου και Γλώσσας” “Ένσωματωμένης Εκμάθησης Περιεχομένου και Γλώσσας”

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“Συνδυασμένη Εκμάθηση Επιστημονικού Αντικειμένου και Ξένης  
Γλώσσας”  
“Συνδυασμένης Εκμάθησης Επιστημονικού Αντικειμένου και Ξένης  
Γλώσσας”  
ΟΕΠΕΓ, ΟΕΠΓ

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The initial search resulted in 175 items. After eliminating repeated studies, 136 items remained. The reference lists of all the retrieved items were searched for additional sources complying with the three initial inclusion criteria, which contributed 42 new items.

The resulting 178 items included 50 conference papers and proceedings, 43 unpublished Master’s degree theses (22 of which were in English), 41 journal articles, 23 book chapters, 8 reflective accounts, 3 workshop items, 3 slide presentations, 2 items of instructional material, 2 special issue introductions, 1 conference poster, 1 editorial, and 1 interview in a special issue.

To further refine the search for the purpose of subsequent analysis, additional criteria were applied to the retrieved items (see Table 2).

Table 2. Additional criteria for retrieved items

<b>Additional criteria</b>		
<b>Order</b>	<b>Inclusion criteria</b>	<b>Exclusion criteria</b>
1	The item mentions CLIL in the title, abstract, or keywords	The item concerns Content-Based Instruction or other forms of bilingual instruction
2	The item is published in an academic, peer-reviewed national or international journal or book	The item is published as a conference paper, conference abstract or proceedings; or is an item of academic communication with uncertain peer-review status
3	The item is available and freely retrievable online in its entirety	The item is not available and freely retrievable online in its entirety
4	The item is a study conducted in Greece involving teachers and/or students with L1 Greek	The item is a study conducted in a country other than Greece, even if it involves Greek-speaking students
5	The item concerns CLIL with a language other than Greek as the medium of instruction	The item concerns CLIL with Greek as the medium of instruction



6	The item is a study concerning primary and/or secondary education	The item is a study concerning tertiary education or preparatory classes for pupils with immigrant backgrounds
7	The item is an empirical study of CLIL implementation	The item is a review, a strictly theoretical or methodological study, a reflective account of CLIL implementation without empirical data, or instructional material for CLIL

This process reduced the sample to 33 items, which are presented in the Appendix.

### 3.2 Data analysis

The 33 items were analyzed on Atlas.ti 9 using qualitative Content Analysis. The analysis was inductively organized. An initial familiarity with the selected material and the open coding of seven items lead to the grouping and revision of codes into subcategories (Selvi, 2020). These subcategories were then defined and thematically structured under main categories. The textual corpus was formally segmented prior to the main coding following the inherent structure of the material (Selvi, 2020). The coding frame intended to capture the theoretical, contextual, practical, and methodological information about how CLIL implementation was realized and examined in the reviewed items. For example, it accounted for conceptual variation in CLIL and its context-appropriate operationalization (Vourdanou, 2019). Table 3 presents the coding frame in more detail.

Table 3. Coding frame for qualitative Content Analysis

<b>Coding frame</b>			
<b>Main categories</b>	<b>Subcategories</b>	<b>Description</b>	<b>Segmentation</b>
Definition of CLIL	Conceptual understanding of CLIL	The way(s) CLIL is conceptualized and theoretically described as an instructional approach to frame the study (e.g., definitions, main tenets, supporting FL teaching theories).	Introduction, Literature review/Theoretical framework

	Definition of the CLIL program	How the authors define the CLIL program they implemented and/or examined.	Throughout the item
Contextualization of CLIL implementation	Context	Information on the participants, location(s), and duration of the CLIL program reported in the study.	Introduction, Methodology, Discussion
	Focus	The main objective or phenomenon being examined.	Introduction, Methodology, Research questions, Findings
	Level of education	Whether the study took place in primary or secondary education.	Throughout the item
	Research methods	The research design (quantitative/qualitative), the data collected, and the data analysis procedures or methods reported in the study.	Methodology
	Student selection	Whether the students were randomly or purposefully selected (with possible criteria for student selection in the examined CLIL program).	Methodology, Participants
	Students' L2 proficiency level	The authors' evaluation of the participants' proficiency in the language used as the medium of instruction in the examined CLIL program.	Methodology, Participants
Outcomes of CLIL implementation	Challenges or limitations	Challenges and limitations encountered in conducting the CLIL program and/or the study.	Findings, Discussion, Conclusions
	Conclusions	The main conclusions or take-away messages the authors derive specifically from their data.	
	Findings	The findings reported in the study.	

Findings corresponding to the second main category can be retrieved, to some extent, from the Appendix. The following section elaborates on the third main category, with an emphasis on empirical findings.

#### **4. Findings**

In the majority of the reviewed items, the examined CLIL programs were referred to as interventions or pilot projects of a cross-curricular or cross-disciplinary nature. Both the items and the CLIL programs described therein were often premised on an understanding of CLIL as a dual-focused teaching and learning approach, and on the foundational theoretical constructs of the language triptych and the 4Cs framework of Content, Cognition, Communication, and Culture (Coyle et al., 2010). Similar to Latin American CLIL research (Banegas et al., 2020), CLIL research in Greece shows a keen awareness of the European origin of CLIL, although assessment practices in Greece seem to favor a content-driven approach. Students were not purposefully selected for participation in CLIL classes, with the exception of Efstathiadi's (2019) study, where CLIL students had to be monolingual. Primary education was notably popular for CLIL implementation, followed by lower secondary education. The most important shared challenges or limitations were the sample size and results that would be suggestive or hard to extrapolate from.

Thematically organized according to commonalities shared by their foci (see Appendix), the reviewed items highlight three main research areas regarding CLIL implementation in Greece: (1) CLIL project evaluation, (2) CLIL students' development, and (3) CLIL teachers. The following subsections elaborate on these areas.

#### 4.1 CLIL project evaluation

The items presented in this subsection suggest a prominent interest in the efficacy and feasibility of CLIL as an instructional approach and its compatibility with the Greek education system. Both the studies in primary education (12 items) and those in secondary education (5 items) concluded with a positive evaluation of CLIL projects and argued for CLIL as a viable teaching approach if introduced into Greek education. However, these largely small-scale studies indicated an overall moderate improvement in vocabulary learning and students' struggle with content comprehension. CLIL students' difficulty in understanding content has also been reported in CLIL studies on students' beliefs (Banegas et al., 2020). These findings seemed to be the case despite employing Information and Communications Technology (ICT) and culture-related modules, which managed to engage students and showed promise for CLIL projects. Moreover, although the studies observed benefits for peer collaboration and student involvement in the learning process, they suggested that inquiry-based activities and more cognitively and linguistically demanding tasks present challenges to students. Finally, the studies drew on students' improved attitudes towards CLIL and self-reported satisfaction with their learning during a project to conclude with a positive assessment of CLIL, particularly in secondary education. While the student perspective offers a more holistic approach to assessing CLIL efficacy, student reports may undermine an objective assessment of CLIL within the examined contexts.

##### *4.1.1 Primary education*

In primary education, one item reported on the positive outcomes of adopting the CLIL approach. Anagnostou et al.'s (2016) positive evaluation of their pilot CLIL project was based on an improvement in students' content knowledge and subject-specific

vocabulary in English. Students reportedly shared a positive attitude towards CLIL, although they sometimes struggled with comprehending and explaining content terms.

Three items reported on CLIL projects involving ICT in Geography classes. Dourda et al.'s (2014) study argued in favor of combining Game-Based Learning and CLIL as an educational tool to create meaningful learning environments. It reported a 30% improvement in students' content knowledge, improved vocabulary, markedly enhanced reading skills, varying use of learning strategies, and successful peer collaboration. Zampouli and Fokides (2016) and Fokides and Zampouli (2017) reported on two phases of the same project using a 3D multi-user virtual environment (MUVE), concluding that MUVE-assisted CLIL had statistically better results for cognitive and metacognitive learning than the other examined instructional approaches.

Another two items examined the potential of combining CLIL and ICT. Georgopoulou-Theodosiou's (2016) findings from a short-term pilot CLIL project showed that CLIL students were initially overwhelmed. Adjusting and gradually increasing the cognitive and language requirements led to improved interest, involvement, and performance outcomes. The use of ICT did not improve content understanding or assimilation, and it only moderately improved language learning. Hasogia and Vlachos's (2019) study suggested that ICT-assisted CLIL may have a positive influence on more active and cooperative learning, digital competence, and voicing beliefs, ideas and feelings. The study found that mainly sequential exposure improved receptive skills, and that peer collaboration on real-life situation tasks benefited productive skills.

Five items focused on culture-related lessons through CLIL, advocating CLIL as an effective and feasible alternative educational practice. Griva and Chostelidou's

(2017) study reported a positive impact on student outcomes in terms of cognitive skills, communication skills, cultural sensitivity, and citizenship awareness. However, although the students expressed positive attitudes towards the CLIL project, they also reported encountering difficulties in general and content-specific vocabulary. Griva and Kasvikis's (2015) study suggested that the Greek students in the examined contexts developed vocabulary and knowledge in the subject of History, increased their cultural awareness and appreciation of the Greek culture, enhanced cognitive and communicative skills, and improved their EFL skills. Students' willingness and positive attitude towards learning content through a L2 were also noted. In Korosidou and Deligianni (2017), students reported satisfaction with the CLIL project and particularly addressed art-based and game-based activities, peer collaboration, and the chosen content. The teacher-researcher journal findings suggested that the multimodal environment, task variety, and purposeful communication in English enhanced group work, and helped students to improve subject-specific vocabulary and knowledge. Very similar results were found by Korosidou and Griva (2014, 2016) in other culture-related pilot CLIL projects. However, in these studies, most students expressed their difficulty in dealing with unknown vocabulary, some students found inquiry-based activities and making artwork hard, and teacher-researchers and students alike noted content comprehension problems.

Finally, one item stood out for not using English as the medium of instruction. Gikopoulou et al. (2018) evaluated a Physics CLIL project through L2 German as part of a three-year Erasmus+ project. The authors observed an increase in students' motivation and interest. Students improved their attitudes, skills, cooperation, and performance in both L2 German and Science, Technology, Engineering and

Mathematics (STEM) content. Teachers reported time constraints and challenging lesson planning, despite being satisfied with the methodology and acquiring additional skills that strengthened their professional profile. Gikopoulou et al. (2018) also concluded with a positive evaluation of their CLIL project.

#### *4.1.2 Secondary education*

In lower secondary education, four items concluded in favor of the potential in using CLIL in mainstream Greek education. Anastasiadou and Iliopoulou (2017) argued that CLIL may promote students' multiple intelligences. Students in their study deemed CLIL beneficial, helping the most with their linguistic intelligence and helping the least with interpersonal, musical, and naturalistic intelligence. Kalogerakou et al. (2017) deemed their two examined projects successful based on students' self-reported content comprehension and benefit from a bidirectional effect between Greek and English at school. Yet, the authors noted the difficulty in involving students with lower L2 proficiency and using group work in large classes. Focusing on science-based CLIL, Chatzigeorgiou and Papageorgiou's (2016, 2017) studies further argue in favor of ICT-assisted CLIL involving group-based and student-centered learning activities. In these studies, students reported being overall satisfied and enthusiastic about their teachers' team teaching and task variety. Moreover, girls reported feeling less challenged in content comprehension, whereas boys believed more strongly that the dual-focused instruction simultaneously improved their L2 language skills. However, it should be noted that these students were advanced EFL learners.

A positive reception of CLIL was further observed in the item examining the implications of CLIL implementation for Greek education in upper secondary education. Kollatou (2013) piloted a CLIL project on democracy, and explored the

feasibility of CLIL in Greece through students' self-reported attitude change towards foreign languages and perceived CLIL benefits. Overall positive findings on students' code switching and attitudes suggested that CLIL is an option in inquiry-based project classes, and that Greek senior high schools are suitable learning environments for introducing CLIL.

#### 4.2 CLIL students' development

While the items presented in subsection 4.1 involved measuring students' development during or through a CLIL project for CLIL project evaluation purposes, the items presented here have an explicit focus on students' development because of CLIL. The studies on primary (6 items) and secondary (4 items) education indicate an interest in whether the L2 interferes with content learning, language skills development with an emphasis on vocabulary learning and output, and students' cognition. Students' linguistic development was mostly assessed on the basis of vocabulary metrics and, in some cases, the progress made was not sustained. Moreover, the development of students' L2 speaking skills seemed to be modest, and the studies suggested an advantage for already advanced learners and students who have had more exposure to CLIL instruction. This advantage has been observed in other contexts as well (Graham et al., 2018). Content learning in conjunction with L2 subject-specific language production was rarely evaluated in summative assessment, and the approaches adopted to measuring students' development through CLIL did not reflect communicative language teaching.

##### *4.2.1 Primary education*

In primary education, two items quantitatively examined cognitive aspects of learning through CLIL. One of these studies specifically measured students' L2 vocabulary



growth and the influence of working memory on L2 learning. Efstathiadi's (2019) study on second-graders confirmed that the phonological loop and the central executive of the working memory are powerfully related to vocabulary learning. The study also confirmed that vocabulary development in terms of production is more arduous and needs more time to emerge than vocabulary comprehension. Critical cognitive skills were vital in young learners' L2 vocabulary growth, although not in L2 competence, and speaking posed high attentional demands.

Psaltou-Joycey et al.'s (2014) study on students' learning strategies found that the CLIL students avoided memory strategies, preferring instead cognitive, metacognitive, and social strategies. Moreover, the CLIL students seemed to prefer communication, productive skills, and fluency-oriented strategies. Girls, more than boys, in the CLIL group claimed to use learning strategies much more frequently. Overall, the results revealed a curvilinear trend, where fifth-grade students in both CLIL and non-CLIL groups employed a range of strategies significantly more than fourth-grade peers, but fewer strategies than sixth-grade peers.

Similar to Psaltou-Joycey et al. (2014), three items compared CLIL to non-CLIL students, but used a qualitative or mixed methods approach. Mattheoudakis et al. (2014) found that the CLIL students performed better than their non-CLIL peers at two out of three content tests, suggesting that L2-mediated content instruction does not negatively affect content knowledge. Students' performance was statistically connected to L2 proficiency, with a clear advantage for already advanced L2 learners. Finally, both groups performed similarly well at the two language tests. Similar results were found by Mattheoudakis et al. (2018). However, in their study, initial differences in content test performance between the most and least advanced L2 learners became less pronounced

in the second test. Ziaka's (2014) study on language output found that CLIL students achieved high scores in listening, reading, and writing. The CLIL students with average L2 proficiency benefited the most in terms of speaking skills. The CLIL students with higher L2 proficiency responded the most positively in terms of affective involvement. Regardless of linguistic competence, CLIL students' motivation and confidence was unaffected.

Finally, one item primarily focused on the affective aspects of learning through CLIL. Emmanouilidou et al. (2016) examined students' and parents' perceptions of Physical Education CLIL. The vast majority of the students shared that they liked the project, did not find Physical Education through English particularly difficult, and were interested in having more subjects taught through English. The parents' responses indicated a higher degree of satisfaction with the project compared to students. Finally, both students and parents expressed their liking for team-teaching.

#### *4.2.2 Secondary education*

The four items concerning secondary education presented mixed findings about students' development in CLIL. In lower secondary education, Cafloglou's (2017) study showed that students benefited the most in vocabulary and listening comprehension, and the least in grammar. However, the students showed an active involvement with grammar benefits and an understanding of the etiology behind grammatical form. Hence, if students are explicitly made aware of grammar benefits, they will be further aided in making clearer associations between form and content (Cafloglou, 2017). Paschalidou's (2019) study showed an improvement in fluency (i.e., speech rate), with a gradually increasing variance in words per minute measurements, rather than syllables per minute measurements. However, the results also showed that oral production in

terms of quantity deteriorated, which the author attributed to either the demands of artwork interpretation or students' fatigue from the intensive CLIL modules. Finally, Vourdanou's (2017) study found a positive change in most students' attitudes concerning issues of intercultural awareness, and a positive experience of the integrated media, whose use students commented contributed to improving their language skills. In upper secondary education, Kofou and Philippides's (2017) study showed how most students believed they had improved all four language skills regarding communication, although there were no remarkable results regarding content, culture, and cognition.

#### 4.3 CLIL teachers

The six items presented in this subsection address Greek teachers implementing CLIL, an area which has not garnered as much empirical attention as the efficacy of CLIL projects and students' development through CLIL. First, these items collectively suggest a strong focus on EFL teachers, which might discount content teachers' contribution and potential for CLIL instruction. Second, they highlight how teachers are aware of how students could benefit from CLIL, but may nevertheless resist doing CLIL. This resistance is compounded by teachers' varied understanding of CLIL, their keen awareness of certain barriers and challenges, and the expressed need for EFL and content teacher collaboration. Third, the items stress how professional development for prospective CLIL teachers is needed irrespective of years of experience, and how such training has only recently begun to address teachers as education professionals beyond the technical aspects of teaching.

##### *4.3.1 Primary and secondary education*

One item adopted a comparative approach to compare primary school Greek and Cypriot EFL teachers to explore teachers' views and experiences of CLIL. Griva et al.

(2014) found that Greek EFL teachers with a Master's degree were more likely to be familiar with CLIL and more willing to implement CLIL. Although the majority of the Greek participants agreed on possible benefits and advantages for CLIL students' learning, nearly half of them opposed CLIL implementation in the fifth and sixth grades and lower secondary education. Moreover, the discouraging aspects of CLIL received significantly high percentages, particularly from participants with more years of teaching experience. Finally, the need for teacher education on certain skills for CLIL was stressed, especially from less experienced teachers and those without postgraduate studies. It should be noted that Griva et al. (2014) highlight how Greek EFL teachers may relate to CLIL, but do so by comparing them to EFL teachers working in a country that is not affected by Greek education policies and practices, and where CLIL may be implemented under very different circumstances.

Three items explicitly focused on EFL teachers in primary education. Iskos et al. (2017) found that teachers interpreted CLIL differently, and that the line between teaching language skills and teaching subject matter was blurred. Lesson planning and curricular focus were the most prominent barriers to CLIL implementation. The degree of EFL teachers' STEM-related knowledge, limited time, students' language ability, and the interactive activities in lab classes posed additional challenge. Lagou and Zorbas's (2020) larger study showed that the participating EFL teachers perceived advantages in CLIL for students' development of language, content knowledge, and critical thinking. Moreover, EFL teachers' responses suggested that CLIL may affect students' understanding of cultural differences, thus potentially building intercultural sensitivity and critical cultural awareness. However, the participants also acknowledged as challenges the lack of time, materials, training opportunities, administrative support,

and coordinators for CLIL. Similar challenges were voiced in Zafiri and Zouganeli's (2017) study, which focused on EFL teachers' student assessment practices in CLIL. Their participants claimed they tested both content and language using formative assessment. Formative assessment was achieved through questioning and student-centered activities, and its difficulty was adjusted according to teachers' perceptions of students' cognitive and L2 development. Summative assessment mostly concerned testing content knowledge.

Although there is no study exclusively focusing on secondary school teachers, two items examined primary and secondary school teachers at the same time. Mattheoudakis and Alexiou (2017) explored the CLIL teacher's profile. The eight interviewed teachers shared challenge, curiosity, and interest as reasons for starting CLIL. They also found important the affective impact of CLIL on students as L2 users and were aware of its potential for developing students' academic language, cognitive, and metacognitive skills. Another shared aspect was the belief that not using the L1 causes students and teachers to adopt alternative approaches to learning or teaching curricular content. Addressing bilingual education in private schools, Vourdanou's (2019) preliminary study focused on the development of a CLIL teacher identity for in-service teachers. The results indicated that many respondents had not received any pre-service preparation for CLIL, that they routinely supplemented textbooks produced in England with their own material, and that collaboration between EFL and non-language subject teachers seemed difficult to attain. The results implied teachers' ambivalence towards CLIL and a need for community-based CLIL implementation. In both studies, teachers shared the need for training on language and subject teaching methodology, and for

systematic collaboration between teachers of different disciplines to better support their complementary role in CLIL instruction.

## **5. Discussion**

This systematic review focused on the empirical examination of CLIL implementation in Greek primary and secondary education between 2006 and 2020. Peer-reviewed empirical research in this context may be limited, yet the existing research clearly indicates steadily developing CLIL practice. CLIL in Greece tends to be quantitatively examined and, similar to CLIL in Latin America (Banegas et al., 2020), it is also context specific and small in scale. Nonetheless, it reflects the increased initiatives and experimentation with CLIL, with some experimental schools at the forefront of CLIL implementation.

The reviewed items were largely outcome oriented and concerned with issues of efficacy. The authors' interpretations of their empirical findings collectively implied that CLIL is a possible and viable option in the Greek education system. However, the positive evaluations of CLIL projects were based on rather small student samples and implemented in the same experimental schools. Some of these experimental schools emphasized L2 language learning more than mainstream schools, and streamed students according to L2 proficiency (e.g., Mattheoudakis et al., 2018). This, in addition to the usually positive attitude students and parents have towards educational innovations introduced in experimental school curricula (Emmanouilidou et al., 2016), might influence students' self-reported learning and attitudes towards CLIL, which were taken into account when assessing the success of CLIL implementation. While research maintains that CLIL students have more positive attitudes towards language learning compared to non-CLIL peers, attitude is really complex to conceptualize (San Isidro &

Lasagabaster, 2020). This complexity was not addressed in the reviewed studies that partially used attitudes to support their positive evaluation of their CLIL projects.

Connected to the issue of viability is that of inclusivity. Although international discourse rhetorically connects CLIL to multi- and plurilingualism, all but one of the reviewed items concerned English-mediated CLIL projects. These projects may be a response to the government's demand for increased EFL provision in state schools. At the same time, however, they promote EFL instruction at the expense of other foreign languages, and emphasize the role of EFL teachers in introducing or establishing CLIL at the expense of other subject teachers. Moreover, students' increased and systematic exposure to EFL in experimental schools may reinforce the view of CLIL as elitist and render CLIL success dependent on students' EFL proficiency. However, empirical evidence from Spain suggests that, in a monolingual context, "CLIL appears to be attenuating the effect of socio-cultural and socio-economic differences on L2 attainment," and that L2 attainment can be attributed to the CLIL program itself rather than to the type of school (Pérez Cañado, 2020, p. 15). It would, therefore, be worth examining whether mainstream students' learning and affective reactions render CLIL implementation truly viable in contexts where students are assumed to share Greek as an L1. In doing so, future studies could also address diversity within otherwise monolingual CLIL cohorts, such as students' language strengths and learning needs, thus going beyond a differentiation of CLIL students based on L2 proficiency levels alone. The need to address and account for diversity extends to students who speak heritage languages or have a migrant/refugee background, who are hardly represented in the corpus of CLIL research in Greece. Inclusivity, or lack thereof, becomes particularly important when the institutionally-hampered access to CLIL in mainstream schools

raises questions about the democratic and egalitarian nature of CLIL in Greece (Lagou & Zorbas, 2020).

The reviewed items also highlighted an interest in how students develop and affectively respond to CLIL. Similar to Graham et al. (2018), the CLIL studies reviewed here indicate a predominant interest in students' vocabulary and general language proficiency. However, findings of either positive or neutral effects of CLIL on language and content outcomes may not allow for any strong conclusions about the effectiveness of CLIL. This may be partly attributed to the assessment procedures used, which did not seem to simultaneously account for cognitive academic language proficiency nor ascertain content subject learning. Previous CLIL research has noted how subject and EFL teachers devise and use evaluation differently, with content teachers seeing content as the main concern and EFL teachers being more familiar with formative and alternative assessment techniques (Lazarević, 2019). Teachers' content and language awareness could be raised using CLIL-based assessment tools (Banegas et al., 2020), which examine content and linguistic knowledge along with learning strategies so as to evaluate student progress and needs (DeBoer & Leontjev, 2020). Concerning affective aspects, some of the reviewed studies reported improved attitudes towards CLIL and mixed findings on motivation. Earlier research has assigned higher levels of motivation to CLIL settings, although a more nuanced approach shows that disaggregated motivation variables do not have a statistically significant effect on CLIL students' language attainment, except for a lack of interest particularly in primary education (Navarro Pablo & García Jiménez, 2018). The positive findings reported in the reviewed studies may be explained by the student-centered activities, which afforded students opportunities for more active involvement and cognitive engagement with the subject



matter. Such opportunities may be a source of further motivation for CLIL in the future. However, as Sylvén and Thompson (2015) cautioned, positive attitudes and higher motivation might not be due to CLIL itself, but factors like previous experiences, personality traits, and interests. Hence, more nuanced research in this area is needed.

Contrary to project evaluation and learning outcomes, teachers in CLIL have received significantly less scholarly attention. This might suggest these teachers are an afterthought, and reflect a preference for promoting students' learning results and school reputation, rather than the professional development and well-being of teachers as employees in state schools. It is interesting to note that many of the reviewed studies were conducted by or with teachers, implying that teachers actively assume the role of the practitioner-researcher. In addition, some studies included teacher diary data, classroom observations and detailed project summaries, suggesting that Greek teachers are acknowledged as important stakeholders in CLIL implementation. Except for Vourdanou (2019), however, the studies on teachers rather centered on EFL teachers. This might be because, contrary to common practice in other European countries, CLIL is mostly done by EFL teachers in experimental schools (Ziaka, 2014). It is important to note that EFL teachers may be more used to curriculum design and task design that take foreign or additional languages into consideration, whereas content teachers may have to reinvent both pedagogy and classroom practices to address the integrated curricular design of CLIL (San Isidoro, 2018). Reinventing how to teach, in conjunction with other perceived challenges and needs (see 4.3.1), acted as deterrent factors to implementing CLIL, and gave rise to reluctance and hesitation towards CLIL. As in Lazarević's (2019) study, however, teachers' attitudes seem to have been influenced by circumstances around CLIL, rather than by CLIL itself.

Consistent with the expressed need for professional development in the reviewed studies, CLIL teachers' attitudes could be addressed by changing teachers' orientation to professional learning. According to Lo (2019), this would entail a cyclic and complex process of teacher change, involving changes in CLIL teachers' beliefs and practices, observed changes in students, and the interplay of context-bound and personal factors (e.g., self-efficacy, professional identity, personality traits). Given the potential support for CLIL implementation from experts at Greek universities (Diamantidou & Kordoni, 2020; Mattheoudakis et al., 2014), CLIL research should further address pre-service and in-service teacher education on language-sensitive teaching, bilingualism, and CLIL. Future empirical research in the Greek context could explicitly address non-language subject teachers' experiences of CLIL and CLIL teachers' L2 use in the CLIL classroom, beliefs, context-responsive material design, and professional learning (e.g., Hillyard, 2011; Lazarević, 2019). By including teachers as objects of study in their own right, CLIL in Greece can be internationally depicted more holistically and lay foundations for Greek CLIL teacher education.

The limitations of this review need to be addressed to avoid a misrepresentation of the current state of CLIL research and CLIL implementation in Greece. First of all, of the twenty-seven items concerning CLIL project evaluation and students, thirteen were studies conducted in experimental schools and nine in mainstream education. The former studies were conducted in the two largest cities, Athens and Thessaloniki, and revisited the same school contexts. Experimental schools promote educational research in partnership with local universities (Kofou & Philippides, 2017), which may account for the over-representation of certain scholars in this review. Such studies misleadingly skew the picture in favor of CLIL, and inflate the amount and quality of CLIL research

in Greece. The latter consequence is compounded by the fragmentation of a single CLIL project into small publishable units, as was observed in some of the items reviewed. Second, despite adopting similar theoretical backgrounds, the small scale of most reviewed studies, coupled with students' self-reports and qualitative data generated by the researcher-practitioner, renders the studies unsystematic and not rigorous enough to substantiate the claim that CLIL can be sustainably implemented in Greek education. Third, the focus on students with Greek as their first language might be considered too narrow, in that it excludes CLIL research conducted with students speaking different mother tongues. However, only two journal articles and two chapters pertaining to CLIL with this student population were identified in the initial search, suggesting this area of CLIL research in Greece is of interest, yet underdeveloped compared to CLIL research on L1 Greek students. Fourth, the focus on items with empirical findings meant the exclusion of items where teachers explained and reflected on first-hand experiences of CLIL pedagogy in practice (e.g., Chionis et al., 2017). However, similar to CLIL research in Latin America (Banegas et al., 2020), such practice-based accounts were generally descriptive and focused on the practitioner-researchers' own practice with a small group of students. Finally, the scientific rigor of the reviewed items varied, and their quality as such was not assessed as an additional screening stage. Thus, this review includes items that have been published in academic outlets of science communication but have undergone varying degrees of peer review, and includes journal articles based on Master's theses (see manuscripts published in *Research Papers in Language Teaching and Learning*).

Notwithstanding these limitations, the emerging contribution of CLIL implementation in Greece is indicative of a response to changing social dynamics and

innovation in education. This response aligns with national curricular aspects (Anastasiadou & Iliopoulou, 2017; Kollatou, 2013), but it is undermined by the lack of sustained educational policy and continuity characterizing the Greek education system (Lagou & Zorbas, 2020). This is compounded by inherent conservatism and skepticism about reform and far-reaching changes (Diamantidou & Kordoni, 2020). Stronger support from the Greek Ministry of Education and school leadership could facilitate longer, broader, and more systematic CLIL implementation that would, in turn, enable projects that yield statistically significant results and generalizable findings. Before this is possible, teachers' persisting efforts and resourcefulness are necessary for sustaining curricular integration through CLIL and paving the way for more rigorous CLIL implementation in the future. This review provides a window into bottom-up experimentation with language-enriched education in Greece, and underscores CLIL as a complex and tailored approach in need of support beyond the micro level.

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## Appendix

## Items selected for review

Items selected for review				
Author and date	Level of education	Contextual information	Focus	Research methods
Anagnostou, Griva, & Kasvikis (2016)	primary	<ul style="list-style-type: none"> <li>Experimental primary school</li> <li>6th graders</li> <li>A2+*</li> </ul>	Estimating the efficacy of a communicatively-oriented CLIL project with ten themes on Western art	Mixed methods; pre- and post-tests, student satisfaction questionnaire, teacher journals
Anastasiadou & Iliopoulou (2017)	secondary	<ul style="list-style-type: none"> <li>Experimental junior high school</li> <li>2 teachers</li> <li>25 9th graders</li> </ul>	Whether CLIL enhances students' Multiple Intelligences, and students' attitudes towards a three-session CLIL project in History	Quantitative case study; student questionnaire

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		<ul style="list-style-type: none"> <li>• B1-B2</li> </ul>		
Cafloglou (2017)	secondary	<ul style="list-style-type: none"> <li>• Unspecified junior high school</li> <li>• 98 9th graders</li> </ul>	Naturalistic emergence of grammatical form through content in a three-month History CLIL project	Quantitative; questionnaire and one multiple-choice question
Chatzigeorgiou & Papageorgiou (2016)	secondary	<ul style="list-style-type: none"> <li>• Experimental junior high school</li> <li>• 51 8th graders</li> </ul>	ICT and CLIL in a two-hour Biology project; whether ICT and CLIL need to be introduced to Greek schools; and possibilities for interdisciplinary lesson planning	Mixed methods; questionnaire including an open-ended question
Chatzigeorgiou & Papageorgiou (2017)	secondary	<ul style="list-style-type: none"> <li>• Experimental junior high school</li> <li>• 55 9th graders</li> <li>• advanced L2 learners</li> </ul>	ICT and CLIL as tools for conceptual understanding in a two-hour Chemistry project, and the potential of CLIL as an instructional option	Mixed methods; questionnaire including an open-ended question

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Dourda, Bratitsis, Griva, & Papadopoulou (2014)	primary	<ul style="list-style-type: none"> <li>Mainstream primary school</li> <li>17 6th graders</li> </ul>	The teaching potential of combining Game-Based Learning and CLIL for learning contexts in Geography	Mixed methods case study; questionnaire, pre- and post-test on content knowledge, a satisfaction/feedback questionnaire, observation, student journals, researcher journal, video-recording, evaluation tasks
Efstathiadi (2019)	primary	<ul style="list-style-type: none"> <li>Experimental primary school</li> <li>49 2nd graders</li> </ul>	Students' L2 vocabulary growth (comprehension, production); the phonological store of working memory; and the central executive of working memory	Quantitative; sub-tests of the Diagnostic Test of Verbal Intelligence, a forward digit span and recall test, a backwards digit span task, a listening span and recall task, two non-word repetition tests (The Children's Test of Nonword Repetition and the Test of Nonword

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				Repetition for Greek-speaking children), two English vocabulary sub-tests
Emmanouilidou, Laskaridou, & Mattheoudakis (2016)	primary	<ul style="list-style-type: none"> <li>• Experimental primary school</li> <li>• 24 2nd graders</li> <li>• 19 parents</li> </ul>	Students' and parents' perceptions of a year-long Physical Education CLIL project	Mixed methods; student semi-structured interviews, parent questionnaires
Fokides & Zampouli (2017)	primary	<ul style="list-style-type: none"> <li>• Mainstream primary school</li> <li>• 105 6th graders</li> <li>• A1-B1</li> </ul>	Whether a Geography CLIL project using a 3D multi-user virtual environment is better at improving students' cognitive and metacognitive learning than conventional CLIL or conventional teaching	Quantitative; pre- and post-tests with conventional CLIL (N = 35) and ICT-assisted CLIL (N = 70) groups
Georgopoulou-Theodosiou (2016)	primary	<ul style="list-style-type: none"> <li>• Unspecified primary school</li> </ul>	Compatibility of CLIL with the Greek education system and the efficiency of ICT	Quantitative; digital and analogue questionnaires for CLIL and non-

		<ul style="list-style-type: none"> <li>• about 40 5th and 6th graders</li> <li>• mixed ability</li> </ul>	use in CLIL in Personal and Social Health Education	CLIL students, the CLIL Matrix, the Leuven Scale
Griva & Chostelidou (2017)	primary	<ul style="list-style-type: none"> <li>• Two unspecified urban primary schools</li> <li>• 47 6th graders, of which 25 were Greek</li> <li>• A2- – A2+</li> </ul>	Evaluating the effectiveness of a ten-module CLIL project in EFL teaching on cultural diversity, and students' attitudes towards it	Qualitative; teacher journals, structured student interviews
Griva, Chostelidou & Panteli (2014)	primary	<ul style="list-style-type: none"> <li>• Mainstream primary school</li> <li>• 248 Greek teachers</li> </ul>	EFL teachers' experiences and key competences in CLIL, views and attitudes concerning CLIL, awareness of the benefits of CLIL, and readiness	Quantitative; questionnaire

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100 Cypriot teachers				
Griva & Kasvikis (2015)	primary	<ul style="list-style-type: none"> <li>• Experimental primary school</li> <li>• 6th graders</li> <li>• A2+</li> </ul>	Evaluating the feasibility of 12 small-scale CLIL projects on history, culture, archaeology, and folk literature; and CLIL effectiveness regarding students' language skills and content knowledge	Mixed methods; pre- and post-tests, summative and formative assessment
Gikopoulou, Slavi, Sotiropoulou, & Kikidou (2018)	primary	<ul style="list-style-type: none"> <li>• Private primary school</li> <li>• 5th–7th graders</li> <li>• STEM and FL teachers</li> </ul>	Evaluation of the CLIL-inspired “Schools: Future Labs” project in STEM subjects (feasibility, success and usability), and dissemination of the project	Mixed methods; pre- and post-questionnaires, in-situ observations, teacher interviews
Hasogia & Vlachos (2019)	primary	<ul style="list-style-type: none"> <li>• Mainstream primary school</li> </ul>	Evaluation of a CLIL project in Science using ICT for improving students' language skills	Mixed methods; pre- and post-course questionnaires, student interviews, classroom observation

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		<ul style="list-style-type: none"> <li>• 48 6th graders (6 of which had L2 Greek)</li> </ul>		
Iskos, Ralls, & Gegkiou (2017)	primary	<ul style="list-style-type: none"> <li>• Private primary school</li> <li>• 6 EFL teachers</li> <li>• 3rd graders</li> <li>• A1-B1</li> </ul>	EFL teachers' experiences of the extent and qualitative characteristics of CLIL implementation at a school's English department	Qualitative; semi-structured interviews, teacher journal, examples of lesson plans
Kalogerakou, Baka, & Lountzi (2017)	secondary	<ul style="list-style-type: none"> <li>• Experimental junior high school</li> <li>• 26 7th and 8th graders</li> <li>• mixed ability</li> </ul>	Evaluation of a 12-module CLIL project in Biology and in Home Economics	Quantitative; student questionnaire

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Kofou & Philippides (2017)	secondary	<ul style="list-style-type: none"> <li>• Experimental senior high school</li> <li>• 26 10th graders</li> <li>• B2-C2</li> </ul>	Students' content comprehension, language skills development, and attitudes in a two-month pilot Physics CLIL project	Quantitative; formative and summative assessment, a student 4Cs-based self-assessment questionnaire
Kollatou (2013)	secondary	<ul style="list-style-type: none"> <li>• Mainstream senior high school</li> <li>• 10th graders</li> </ul>	Examining the feasibility of CLIL implementation in Greek state schools through a pilot CLIL project on democracy	Mixed methods; questionnaire, a focus group interview, student diaries, self-assessment sheets
Korosidou & Deligianni (2017)	primary	<ul style="list-style-type: none"> <li>• Mainstream primary school</li> <li>• 6th graders</li> <li>• A2+</li> </ul>	Evaluation and feasibility of a pilot CLIL project on Cretan history and culture in an EFL classroom	Qualitative; teacher journal, structured student interviews
Korosidou & Griva (2014)	primary	<ul style="list-style-type: none"> <li>• Mainstream primary school</li> <li>• 6th graders</li> </ul>	Evaluation and feasibility of a thirty-session pilot CLIL project on Byzantine history and culture through students' skills performance	Qualitative; teacher journal, structured student interviews

		<ul style="list-style-type: none"> <li>• A2+</li> </ul>	and students' attitudes towards foreign language and content learning	
Korosidou & Griva (2016)	primary	<ul style="list-style-type: none"> <li>• Mainstream primary school</li> <li>• 4th graders</li> <li>• A1</li> </ul>	Evaluation and feasibility of a pilot CLIL project promoting sensitivity towards diversity and citizenship awareness	Mixed methods; pre- and post- test, teacher journal, structured student interviews
Lagou & Zorbas (2020)	primary	<ul style="list-style-type: none"> <li>• Mainstream primary school</li> <li>• 60 EFL teachers</li> </ul>	EFL teachers' practices and attitudes towards interculturally-sensitive teaching through CLIL, and EFL teachers' perceived benefits and/or constraints in CLIL instruction	Mixed methods; questionnaire, semi-structured teacher interviews, classroom observations
Mattheoudakis & Alexiou (2017)	primary and secondary	<ul style="list-style-type: none"> <li>• Mainstream schools</li> <li>• 8 teachers</li> </ul>	EFL and subject teachers' profile as CLIL teachers	Qualitative; semi-structured teacher interviews

Mattheoudakis, Alexiou, & Laskaridou (2014)	primary	<ul style="list-style-type: none"> <li>• Experimental primary school</li> <li>• 51 6th graders</li> <li>• mixed ability</li> </ul>	Students' content knowledge and L2 language competence in a pilot Geography CLIL project	Qualitative; 3 formative assessment tests on content, a pre- and post-test on receptive skills
Mattheoudakis, Alexiou, & Ziaka (2018)	primary	<ul style="list-style-type: none"> <li>• Experimental primary school</li> <li>• 33 6th graders</li> </ul>	Students' content knowledge and the influence of L2 proficiency levels on students' performance at content tests	Quantitative case study; a revision test and a formative assessment test
Paschalidou (2019)	secondary	<ul style="list-style-type: none"> <li>• Music school</li> <li>• 32 9th graders</li> <li>• B1-C2</li> </ul>	Students' L2 language gains (fluency and quantity) in oral output in Art History CLIL	Quantitative; pre- and post-test involving self-regulated and presentation monologues
Psaltou-Joycey, Mattheoudakis, & Alexiou (2014)	primary	<ul style="list-style-type: none"> <li>• Experimental primary school</li> </ul>	Students' use of learning strategies	Quantitative; self-report student questionnaire

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		<ul style="list-style-type: none"> <li>• 40 4th graders, 46 5th graders, and 50 6th graders</li> <li>• mixed ability</li> </ul>		
Vourdanou (2017)	secondary	<ul style="list-style-type: none"> <li>• Mainstream junior high school</li> <li>• 9th graders</li> <li>• B2</li> </ul>	Students' intercultural awareness through wiki-assisted English and literature CLIL in the EFL classroom	Mixed methods; pre- and post-project questionnaire, weekly student journals
Vourdanou (2019)	primary and secondary	<ul style="list-style-type: none"> <li>• Private schools</li> <li>• 27 teachers</li> </ul>	CLIL teachers' identity and boundary-crossing in an online professional development program for EFL and content teachers	Quantitative; questionnaire for preliminary study
Zafiri & Zouganeli (2017)	primary	<ul style="list-style-type: none"> <li>• Experimental primary school</li> </ul>	EFL teachers' assessment of students' learning	Mixed methods case study; questionnaires, semi-structured

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		<ul style="list-style-type: none"> <li>• 4 teachers</li> </ul>		teacher interviews, classroom observations
Zampouli & Fokides (2016)	primary	<ul style="list-style-type: none"> <li>• Mainstream primary school</li> <li>• 108 6th graders</li> <li>• A1-B1</li> </ul>	Whether a Geography CLIL project using a 3D multi-user virtual environment is better at improving students' cognitive and metacognitive learning than conventional teaching	Quantitative; three formative assessment tests, questionnaires
Ziaka (2014)	primary	<ul style="list-style-type: none"> <li>• Experimental primary school</li> <li>• 39 4th graders</li> <li>• mixed ability</li> </ul>	Students' language output and emotional reactions in a year-long pilot CLIL project on Environmental Studies	Mixed methods; pre- and post-tests using the Movers Cambridge Young Learners Language Test; student questionnaires

\* *Note:* Authors' evaluation of students' foreign language (L2) proficiency, according to the Common European Framework of Reference for Languages

Περίληψη: Παρά το αυξανόμενο ενδιαφέρον για το CLIL στην Ελλάδα την τελευταία δεκαετία, η ελληνική έρευνα στο CLIL απουσιάζει σε μεγάλο βαθμό από διεθνείς μελέτες ανασκόπησης. Η παρούσα συστηματική ανασκόπηση επικεντρώνεται στην πρωτοβάθμια και δευτεροβάθμια εκπαίδευση και εξετάζει την αξιολογημένη από κριτές εμπειρική έρευνα σχετικά με την εφαρμογή του CLIL στην Ελλάδα από το 2006 έως το 2020. Συνολικά ανασκοπούνται 33 μελέτες με χρήση ποιοτικής Ανάλυσης Περιεχομένου. Οργανωμένες σύμφωνα με τα κεντρικά κοινά τους σημεία, οι μελέτες αυτές δίνουν έμφαση σε τρεις κύριους ερευνητικούς τομείς εφαρμογής του CLIL στην Ελλάδα: (1) αξιολόγηση των πρότζεκτ CLIL, (2) μαθησιακή ανάπτυξη των μαθητών CLIL και (3) δάσκαλοι CLIL. Οι ανασκοπημένες μελέτες υποδεικνύουν ότι η εφαρμογή του CLIL στην Ελλάδα τείνει να εξετάζεται ποσοτικά, να γίνεται εντός περιορισμένων πλαισίων και να είναι πολύ μικρής κλίμακας. Οι ανασκοπημένες μελέτες είναι σε μεγάλο βαθμό προσανατολισμένες στα μαθησιακά αποτελέσματα και αφορούν σε θέματα αποτελεσματικότητας του CLIL. Σε αντίθεση με την αξιολόγηση των πρότζεκτ και τα μαθησιακά αποτελέσματα, οι δάσκαλοι CLIL στην Ελλάδα δεν έχουν λάβει αρκετή προσοχή στην εμπειρική έρευνα.

Λέξεις-κλειδιά: ανασκόπηση; δίγλωσση εκπαίδευση; Ολοκληρωμένη Εκμάθηση Περιεχομένου και Γλώσσας; μαθητής CLIL; δάσκαλος CLIL; δημοτικό σχολείο; Λύκειο; υποχρεωτική εκπαίδευση

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