



## Exploring the transformative effects of CLIL methodology on EFL instruction in Greece

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### Abstract

Content and Language Integrated Learning (CLIL) has become increasingly popular over the past decade in language teaching. This paper probes into the effectiveness of the CLIL approach in Greek EFL classrooms in boosting learners' language learning, subject knowledge and academic achievement. A qualitative methodology was employed, including interviews which enabled the collection of qualitative data. The sample comprised primary and secondary education teachers in Greece, a European country where CLIL has been implemented in some schools. The findings indicate that CLIL has a positive effect on learners' motivation and engagement and can lead to significant gains in language achievement and subject content knowledge. The paper also highlights some challenges to successful implementation such as teachers' language skills and the need for appropriate materials and resources and concludes with suggestions for future research in this field as well as some suggestions for the improvement of CLIL implementation.

**Keywords:** Content and Language Integrated Learning (CLIL), educational policies, Greek preschool education.



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## 1 Introduction

Nowadays, being multilingual and a good communicator is quite indispensable in every aspect of our lives: academic, professional and social. To meet this growing need, researchers and teachers have been investigating new ways to teach languages that transcend traditional language classes. One of these innovative methods which has shown great results is Content and Language Integrated Learning (CLIL).

Content and Language Integrated Learning, or CLIL as it is commonly known (Marsh, 1994), was introduced by David Marsh in 1994 and commissioned by the European Commission. Later on, it was also adopted by the European Network of Administrators, Researchers and Practitioners. CLIL involves teaching part or all of a subject in a second language with the aim of achieving not only content objectives but also language objectives at the same time (Marsh, 1994). Moreover, this researcher states that, in addition, this type of approach “can help to further the development of foreign language learning and foster a positive attitude to language learning in young people” (Marsh, 2002: 1).

Essentially, it is a teaching approach that combines language education (a second or foreign language) with subject knowledge in any subject area or discipline. CLIL, therefore, results in a different combination of language and content learning which aims to support linguistic development and students’ subject understanding in any field, from science and mathematics to art.

One of its basic principles is that learners have the opportunity to use language for authentic and meaningful purposes. According to Marsh (2002), this language pedagogy allows learners to develop active thinking and problem-solving skills and make connections between language and content knowledge so that they deepen their understanding. This learner-centered approach (Bloom, 1956) involves collaborative learning and discovery-based activities in which students engage in the process of investigating, analyzing and creating content in the target language. They usually work on their own but, also in groups, in order to investigate and explore content and develop their ideas together using the target language. This educational approach promotes higher-order thinking skills and develops linguistic competence, intercultural competence and cross-cultural awareness (Bloom, 1956).

The outcomes of CLIL go beyond language and subject learning. According to Marsh (1994; 2002), students are more motivated and interested in their CLIL classes because they are provided with meaningful and purposeful contexts to learn a language. Additionally, this approach provides students with the necessary language skills and subject knowledge to cope with future studies and professional demands. Although CLIL has had more popularity in Europe, its ideas and practices have been adopted and implemented in many different educational systems around the world. Teachers, curriculum developers and even policymakers have considered CLIL as a way to improve language learning results and establish connections between subjects.

The CLIL approach can be defined as an integrated model of language and content learning which combines language proficiency with subject knowledge. By blurring the lines between language and content areas, the CLIL methodology provides rich and meaningful learning experience which not only improves linguistic competence but also enhances understanding in academic areas. Thus, as an approach, CLIL is now considered as a highly valued methodology which can equip students with necessary skills and knowledge to succeed in our global society. To this end, in this study, we will examine the CLIL approach which started to be used in Greece in recent years and try to evaluate its effectiveness. We will also theoretically investigate what CLIL is and how it is implemented in Greek and Cypriot schools, what the pedagogical characteristics of the CLIL approach are and what the teacher profile in CLIL courses is like.

## 2 Theoretical and Conceptual Framework of Content and Language Integrated Learning (CLIL)

### 2.1 Historical Evolution of Content and Language Integrated Learning (CLIL)

Even though CLIL as a term was introduced in 1994, the underlying ideas have historical backgrounds dating back centuries. Some researchers (Coyle et al., 2010) argue that CLIL can be traced back to almost 2000 years ago when the Romans educated their children in Greek with a twofold aim- to learn the Greek language and access social and professional benefits in the Greek environment. In the medieval period in Europe, Greek and Latin were the dominant languages of instruction and French was reserved for the privileged class (Hanesová, 2015). At the end of 19th century, wealthy families sent their children to other countries to learn the foreign language in its natural environment. Before the 1970s, there was no real need to plan integrated content and language programs due to several geographical and economic reasons.

The reason to establish programs aiming at providing content-based language education was to provide bilingual education to communities living in certain regions and enable them to develop language skills for authentic communication with native speakers of that language. An example of such a model is the “immersion” model which was adopted in the Canadian education system (Hanesova, 2015). After that, immersion programs were developed all over the world including Canada, the United States and other countries (Mehisto, Marsh & Frigols, 2008). Approximately 300,000 children in Canada were enrolled in such programs between the 1960s and 1998 (Marsh, 2002). By 2005, there were 317 immersion programs in primary schools in the United States serving 10 different languages (Potowski, 2007). The success of these programs attracted the attention of the Europeans and in 1978, the European Commission (EC) recommended the introduction of programs for multilingual teaching (Marsh, 2002). Since the early 1990s, the CLIL approach has been implemented and promoted as an effective approach to language learning in the heart of Europe’s multilingual society and has continuously received support from the European Commission (European Commission, 1990, 1995, 2004, 2009, 2012; Eurydice, 2006, 2012, 2017).

It was believed that the implementation of CLIL would contribute to the achievement of the European goal of making every European citizen proficient in two foreign languages under the “mother tongue+2” policy. The CLIL approach is considered beautiful for the EU citizens as it does not require the addition of hours for language learning in an already packed curriculum (European Commission, 2004). Instead, CLIL integrates with other curriculum subjects without the demand for extra hours dedicated to language instruction (Marsh, 2002). As a result, EU citizens can achieve language competence much faster through the CLIL approach. Additionally, through CLIL, learners acquire foreign languages as they acquire their mother tongue naturally by focusing on the message rather than the linguistic medium. This naturalistic approach in pedagogy supposedly leads to an increase in learner motivation and develops positive attitudes towards language learning (Lasagabaster & Sierra, 2009; Van de Craen, Ceuleers & Mondt, 2007). According to Eurydice (2012:39), Greece, Denmark, Iceland and Turkey are the only countries where CLIL has not yet been introduced as an official language of instruction. Regarding Greece’s case, Eurydice (2006:3) explains that linguistic homogeneity in Greece creates a unique difficulty which hampers the introduction of CLIL in the country. The use of a foreign language to teach non-linguistic subjects requires careful organization since Greece is linguistically homogeneous. CLIL is not included in the Greek public primary and secondary schools and no clear plan exists for its future (Eurydice, 2006). However, English Language Schools, as privately run institutions, adopt the CLIL approach in Athens, Thessaloniki and Larissa.

CLIL is used mainly in non-linguistic subjects at primary level, such as Geography, History and Art. At secondary level, CLIL is employed in Mathematics and History and at high school level in Sociology. Where CLIL has been adopted in Greece, by private schools, teachers have identified management problems, a lack of CLIL materials and curriculum problems. However, teachers claim that the use of the CLIL approach has resulted in increased motivation among students and improvements in their language levels (State-of-Art reports from partners in the CORE project, 2013:2-5).

Before proceeding with the presentation of the theoretical background of the CLIL approach, it should be noted that various theories support the teaching and learning process in CLIL. Many of these theories apply to any communicative language learning, but the way they have been incorporated into the CLIL approach highlights the strength of this approach and shows how effective it can be in facilitating natural, appealing and successful foreign language learning. In the subsequent sections, the theoretical background supporting CLIL will be presented in detail and the basic principles of the CLIL approach will be explained.

### 2.2.1 Krashen's Theory (Language Input Hypothesis)

Krashen's Language Input theory in L2 environment has strongly influenced research and can be considered as one of the pillars on which the CLIL methodology is based. There are five hypotheses which expound this model according to Krashen (1985):

1. The acquisition – learning hypothesis: This hypothesis states that language is learned systematically through conscious study in guided educational settings (learning) as opposed to acquisition which happens subconsciously in natural communicative settings (acquisition). Meyer (2010: 298) suggests that in order to exploit authentic materials, teachers may consider using videos, diagrams, maps in the classroom to motivate and support learners.
2. The natural order hypothesis: This hypothesis suggests that as learners become comfortable with the L2, rules are acquired naturally in a fixed order. This theory emphasizes on the natural assimilation of rules in a set order of simpler to more complex levels.
3. The monitor hypothesis: This hypothesis explains an internal system, people monitor their own speech and try to enhance the quality of linguistic forms they produce.
4. The comprehensible input hypothesis: This hypothesis assumes that clear linguistic input provides a trigger for the grammar stored in the minds of individuals, enabling them to comprehend structures they encounter and more complex linguistic phenomena.
5. The Affective filter hypothesis: This hypothesis highlights the role of affective state in language learning and explains how people's affective state influences their ability to use L2. Emotional factors such as anxiety or lack of motivation may raise the affective filter and prevent language acquisition. On the other hand, the management of emotional ups and downs and the creation of an optimal atmosphere enhance language learning.

### 2.2.2 Vygotsky's Theory (Sociocultural theory)

Vygotsky's sociocultural theory derives from individual social psychology theories and postulates that L2 learning is a natural sociocultural process that takes place in an interactive social environment. One of the key concepts in Vygotsky's work is «scaffolding» which cannot be overlooked since it motivates learners' process in the CLIL approach. Although the term scaffolding is not used by Vygotsky (1978), it is a key concept in CLIL research (Marsh, Mehisto, Wolff Frigois, 2011; Meyer 2010).

Indeed, according to Saville-Troike and Barto (2016), the interpersonal level in Vygotsky's framework refers to the unique way in which an individual interacts with his or her social environment, which

continuously offers the learner help and support. Vygotsky refers to this learning environment as the Zone of Proximal Development (ZPD). In the ZPD, learners are always given the needed help or scaffolding to achieve learning goals. The primary purpose of this support or scaffolding is to lead learners to linguistic autonomy, a level at which they no longer need external help or support and can deal on their own with the newly acquired knowledge. This is closely related to the nature of CLIL which can be considered as a type of top-down approaches to pedagogy (Pérez Cañado, 2016).

With respect to scaffolding, Saville-Troike and Barto (2016) explain that any type of support leads to the internalization of external stimulus and to a better understanding of the authentic materials used by the CLIL teacher. Scaffolding contributes in L2 structures learning and goes deeper into the linguistic aspects enabling better linguistic production with more academic skills (Meyer, 2010). Teachers should take advantage of this scaffolding and optimize the CLIL pedagogical process enabling students to learn both language and content deeply and clearly.

### 2.2.3 Piaget's Cognitive Theory

Jean Piaget's cognitive theory is based on the constructivist approach to teaching, which suggests that people, from the moment of their birth, attribute meaning to the world through their own experience. According to Piaget, it is the learner who plays the central role in the learning process, as he or she actively constructs knowledge and internalizes language (Mattheoudakis, Alexiou & Laskaridou, 2014).

Therefore, human beings as active agents adjust their receptive mechanisms to accommodate complex linguistic information and educational measures should be taken so that learners reach insightful linguistic observations. CLIL, which is characterized by a learner-centered approach to pedagogy, is in accordance with Piaget's cognitivist theory, as learners are actively involved in the language and content learning process (Mattheoudakis et al., 2014).

### 2.2.4 Long's Rich Interaction Hypothesis and Swain's Pushed Output Hypothesis

Long (1996) underlines interaction as a fundamental aspect of L2 acquisition defined as the ability of individuals to adapt their speech patterns if successful communication is to be achieved. Interaction facilitated by reciprocal feedback and dialogue in the learning setting improves learner interlanguage and motivates students to achieve fluent L2 structures (Meyer, 2010). In CLIL, interaction can be seen as a vehicle for collaboration, critical thinking skill development and deep language and content engagement (Mattheoudakis et al., 2014).

Closely related to Long's interaction hypothesis is Swain's pushed output hypothesis (Swain, 1985). According to this, when learners are forced or encouraged to move beyond their linguistic repertoire, mental processes are heightened resulting in more significant learning. Task-based teaching in CLIL encourages interaction and language production pushing students towards deeper language learning and understanding.

### 2.2.5 Cummins Model

The bidimensional model of Cummins (1984) describes the two aspects of language proficiency – Basic Interpersonal Communicative Skills (BICS) and Cognitive Academic Language Proficiency Skills (CALPS) – that underlie bilingual education programs. BICS are developed primarily through everyday communication in informal natural contexts and include high frequency vocabulary and simple grammatical patterns.

CALPS are developed in school situations and require systematic teaching of academic language proficiency. The integration of BICS and CALPS in bilingual education corresponds to the underlying

premise of CLIL, which is the development of higher order thinking skills to solve problems involving language and content in depth and complexity (Mattheoudakis et al., 2014).

To conclude, the theoretical background of CLIL encompasses a number of influential theories and paradigms which contribute to the effectiveness and productivity of the CLIL pedagogical approach. In the subsequent sections, a more detailed presentation of these theories will provide a better understanding of the underlying principles of the CLIL approach.

### 3 Basic Features of CLIL

Content and Language Integrated Learning (CLIL) methodology fits within student-centered approaches to teaching and learning which have been proved to promote autonomy and flexibility (Custodio – Espinar, 2019; Pérez Cañado, 2016). It offers students the chance to take an active role in classroom happenings by asking questions, giving arguments and participating in activities. Student-centered teaching in CLIL contributes to developing students' spoken proficiency in the target language from a qualitative and quantitative point of view (Urmeneta, 2019).

CLIL activities help to awaken students' interest by using authentic materials from the reality around them and this encourages students to carry out language practice (Ζάγκας, 2005). Moreover, ICT (Information and Communication Technology) complements the CLIL approach by promoting students' autonomy and technological, literacy skills (Custodio – Espinar, 2019; Prentza, 2013).

#### 3.1 Distinctive Attributes of CLIL

Considering the organizational, design, and implementation issues of CLIL, its double pedagogical role should be noted, which distinguishes it from the rest of the bilingual education forms. A necessary condition for CLIL is the simultaneous teaching of the target language and the content. In a bilingual educational framework, lessons of CLIL are incorporated into the curriculum, as well as content-driven lessons. This means that specialized teachers offer content instruction, while foreign language teachers continue to offer language instruction during separate curriculum hours. This way CLIL is placed among the enrichment instruments of foreign language learning of the regular curriculum practice (Dalton-Puffer, 2011; Van Kampen et al., 2018).

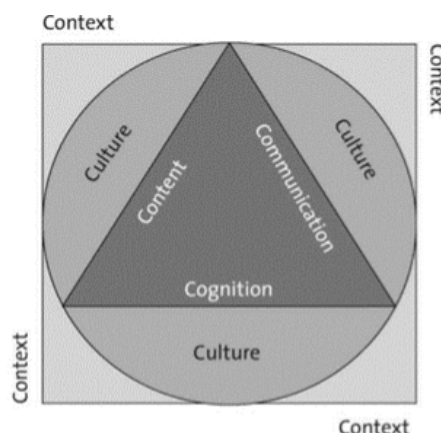
According to European research, two main models of CLIL implementation are distinguished. The first involves the teaching of non-linguistic subjects in a foreign language, while the number of these subjects that can be taught in the chosen foreign language varies from country to country. The second model refers to the teaching of non-linguistic subjects in two different languages; the first language is the local, minor or non-official one, while the second can be any other language. This different approach is due to the various linguistic contexts that exist in each country, as some of them include the teaching of a third foreign language in the background (Παύλου & Ιωάννου, 2008).

Different classroom practices of CLIL include the "CLIL showers", which are short periods during the standard lessons including foreign language activities, the selective teaching of certain modules in the foreign language, as well as full lessons entirely taught in the foreign language. These different ways of implementation meet various language learning preferences and pedagogical goals (Παύλου & Ιωάννου, 2008).

#### 3.2 The 4Cs Framework

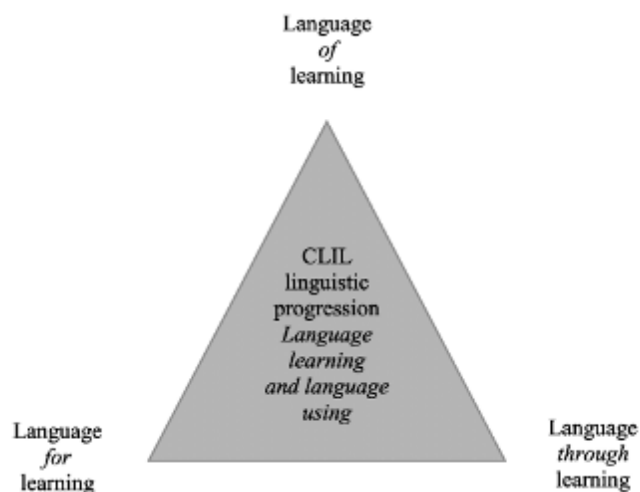
The central idea behind the CLIL approach is the fusion of content and language, and this requires a pedagogical framework to sustain the integration. The 4Cs framework (see image 2.1.) proposes an interaction between content, cognition, communication and culture, which supports holistic language development through different ways (Coyle, 2007):





**Image 2.1** *The 4Cs framework (Coyle et al., 2010)*

- **Content:** the information that the learner obtains from the assigned material (e.g., the environmental consciousness from the topic of Geography). It inspires students to advance their unique skill development by fusing fresh knowledge with what they already know (customized learning).
- **Cognition:** it describes how learners' cognitive systems get more refined as a result of the stimuli presented in the cognitive environment. Instead of giving the students pre-made materials from the teacher, special attention is paid to the development of their autonomy. This implies that the students alone are responsible for creating the new, deeper information entirely using their own set of talents and then deriving meaning from it. It appears that in order for students to construct more complex meanings, they must «upgrade» their thinking from lower order thinking skills (LOTS) to higher order thinking skills (HOTS) (Custodio-Espinar, 2019).
- **Communication:** it refers to the «transformation» of the students' meaningful ideas about the language (foreign) into structured speech (language utilizing) in order to accomplish the desired interaction with the environment. Combining language and cognitive tasks can lead to something similar, which is particularly advantageous for CLIL instructors and educators. This co-dependency is presented through the Language Triptych, which was created by Coyle et al. (2010) to address the requirement that all (all) of the CLIL content materials be understood by using the language as a guide. The Triptych is broken down into three primary analysis axes (refer to image 2.2), each of which represents a type of language activity necessary for the learning process:
  - **Language of learning:** it emphasizes gaining information and abilities that will aid in improving understanding of the content-obligatory language. For instance, in a CLIL course, students must comprehend the purpose of the future tense as well as any potential signs of it before they may utilize it. Therefore, the CLIL instructor needs to use strategies like keywords, phrases, perilingual meanings, and specific language that is related to the subject matter.
  - **Language for learning:** it contains techniques that grant students the freedom to behave naturally in a foreign language setting (language that is compatible with the material). It concerns how the students engage with the surroundings in the CLIL classroom. Indicative tactics include flexible teamwork training as well as the development of communication, questioning, verification, and negotiation abilities.
  - **Language through learning:** it states that having a deeper understanding of the CLIL context (content-enriching language) is essential for having appropriate language abilities. It is made possible by the students' efforts to go deeper and acquire new information that will help to advance their current understanding (Coyle, 2007).



**Image 2.2** *The Language Triptych (Coyle et al., 2010)*

- Culture: it ensures the student's intercultural awareness, one of the components of the CLIL technique. The kids completely understand not only their own existence but also that of their peers through intercultural adequacy. They can adapt, communicate, and work better in the multilingual and multicultural environments of today when they are open to the differences of others (Coyle, 2015).

### 3.3 Advantages of Content and Language Integrated Learning (CLIL)

The benefits of CLIL have been widely researched and can be divided into five different dimensions (see Bonces, 2012). Ball (2006), Bonces (2012) and Ravelo (2014) have investigated and described the benefits of CLIL. CLIL offers benefits in the dimension of culture. When students are taught via CLIL methods, they encounter different cultural aspects and develop an intercultural awareness and knowledge about habits and ways of life in other countries. This implicit cultural teaching offers benefits for students and promotes a positive intercultural attitude towards different cultures (Mattheoudakis, 2017; Ravelo, 2014).

CLIL teaches students skills to develop in the globalized world of tomorrow. According to Cenoz et al. (2013) and Dalton-Puffer (2008) CLIL offers preparation for multilingual settings and improves students' communication skills and their social competences. CLIL develops students' basic interpersonal communication skills (BICS) and their cognitive academic language proficiency (CALPS) and can be considered as a way to educate successful members of multilingual European society (Bonces, 2012).

CLIL also offers benefits regarding knowledge of the subject matter. With the help of different methodologies (e.g. information and communication technologies (ICT)), students' comprehension of the academic content can be enhanced. So CLIL offers new ways of teaching and learning academic content and promotes creative thinking, critical thinking, cognitive flexibility and metalinguistic awareness (Pavón-Vázquez, 2014).

Regarding the dimension of language, CLIL has transformed the way L2 is learned in educational institutions and has promoted students' academic results and their language levels in CLIL classrooms. According to Martinez Adrian (2011) and Dalton-Puffer (2008) CLIL improves students' linguistic abilities and helps them to acquire both the mother tongue and the target language in an effective way. CLIL develops receptive and productive vocabulary and focuses on the relationship between form and meaning. It also develops lower-order and higher-order cognitive processing skills. Furthermore, CLIL fosters a multilingual orientation due to its transversal nature (Mattheoudakis, 2017; Ravelo, 2014).



Finally, the last benefit of CLIL in bilingual education is the promotion of individualized learning models. Mattheoudakis (2017) underlines the close relationship between input and output regarding language production via CLIL, since there are different stimuli that motivate students to produce meaningful utterances in a relaxed and accurate way. Moreover, CLIL has been reported to boost students' psychological well-being by boosting their motivation, lowering stress levels, building confidence and spontaneity and allowing cooperative interactions needed for future development (Pavón-Vázquez, 2014).

## 4 The CLIL Method in Greece

Content and Language Integrated Learning (CLIL) has been used in various countries as a way to improve both language and content achievement. Interest in CLIL in Greece is increasing and there are many reasons and educational considerations that support the combination of language and content learning in Greece. One of the main reasons for using the CLIL approach in Greece is the promotion of bilingualism: In Greece, the acquisition of excellent language skills, especially in English, is considered important in order for students to be able to communicate and make the most of the opportunities in a globalized environment (European Commission, 2009). By using the CLIL approach, students learn content and at the same time improve their language proficiency so that they can become bilingual, or even multilingual. The CLIL approach supports the idea that language is retained better when it is acquired in meaningful, authentic contexts. Combining language learning with content learning enables students to learn practical language, vocabulary and grammar in relation to relevant subject content (Marsh, 2008). This supports language learning and encourages students to use the language for practical purposes. CLIL supports the idea that students learn best when they are doing something with the content they are studying. Presenting subject content in a foreign language requires learners to struggle to understand, analyze and discuss complex ideas in a different format. This adds a cognitive dimension that promotes critical thought and problem-solving and, as a result, subject comprehension.

CLIL offers learners the chance to discover and appreciate different cultures and ways of thinking, which helps develop intercultural awareness, tolerance and understanding. Through exposure to authentic materials, collaborative work with classmates and participation in meaningful discussions, learners develop the global dimension needed to function in today's interconnected world (Eurydice, 2006, 2008). The CLIL approach also takes into account the different language characteristics and specialist vocabulary of different subject areas (Marsh, 1994). By using CLIL, subject teachers can help students to develop subject-related language skills, which are so important for success in subsequent stages of education and in future working life. Combining language and content learning blurs the gap between language learning and the needs of specific subject areas. At the same time, the CLIL approach supports the main goals of the Greek national curriculum, which emphasize both language and subject achievement. By using the CLIL approach, schools can deal with both at the same time, making the best use of available resources and time (European Commission, 2009).

The CLIL approach provides a creative and interactive learning environment which motivates and engages students. This student-centered methodology fosters internal motivation because students realize the relevance of the language and subject content they are learning, and so they become more involved and participatory in class, taking responsibility for their own learning (Krashen, 2009). In summary, the adoption of the CLIL approach in Greece is encouraged by the need to improve language competence, assure subject-based knowledge, promote intercultural awareness and raise the general motivation of students. Thus, by combining language and content teaching, the CLIL approach provides purposeful and comprehensive learning and endows students with competencies needed to meet the requirements of the 21st century. Furthermore, due to its relatively recent introduction to the Greek educational system, the CLIL approach has been adopted more in primary education than in units of

secondary education (Mattheoudakis, 2017). The implementation of the CLIL approach in Greece so far, characterized by Anastasiades-Symeonides (2014), has faced serious constraints. The Greek education system is not ready to accept integrated pedagogical approaches because it lacks the necessary technological equipment and educational staff is not fully prepared for this educational innovation. Before conducting CLIL lessons, teachers need in-service training and specialization in combining foreign language and content teaching in order to develop higher skills and to be able to adjust to this new educational context. Assessment is also an essential component for the success of the CLIL method; unfortunately, the Greek education system does not possess the necessary structures for the proper assessment of CLIL lessons. Nevertheless, there are encouraging initiatives in some school units which give hope that the CLIL approach will spread in Greece in the future.

#### 4.1 The CLIL initiative at the 3rd Experimental Primary School of Evosmos, Thessaloniki

The pilot program of Content and Language Integrated Learning (CLIL) that was carried out in Greece, was the CLIL program that was implemented by the Department of English Language and Literature of Aristotle University of Thessaloniki in the 3rd Experimental Primary School of Evosmos, during the academic year 2010-2011. This program was pioneering, as it was the first time that a foreign language and subject combination was systematically implemented in a Greek public school, with content from a specific subject area being taught in the English language. The main aim of this program was to investigate whether the CLIL approach could have a positive effect on the linguistic and cognitive skills of the students (Αναστασιάδη-Συμεωνίδη et al., 2014).

During the following two years (2010-2012) the CLIL approach was progressively implemented in more grades and subjects of the school, namely in Geography and Religious Education for 5th grade students and Geography and History for 6th grade students. Interestingly, the research carried out by Mattheoudakis et al. (2014) showed positive results in the academic achievement in both subject content and English language proficiency after the application of the CLIL approach. Thus, the CLIL program was further expanded to more grades and subjects, namely in Physical Education and Art for 1st and 2nd grade students, History for 3rd grade students and Environmental Education for 4th grade students. In addition, attempts were made to implement lessons in French language and partnerships with foreign Universities were developed in order to boost CLIL (Αναστασιάδη-Συμεωνίδη et al., 2014).

#### 4.2 The 12 CLIL Projects for History Education

Griva and Kasvikis (2014) describe a series of twelve experimental CLIL programs that were carried out in Greek primary schools over three academic years (2011-2014). The CLIL programs, which were developed by the research team of the University of Western Macedonia, focused on the teaching and learning of History lessons. In eight cases English was used as a medium of instruction and in four Greek.

The general objective of these programs was the development of students' linguistic, cognitive and intercultural skills through the multiple representation of historical knowledge. The results of the research programs confirmed the positive effect of the CLIL approach. Specifically, students involved in the CLIL projects acquired new linguistic structures, enriched their vocabulary with historical and cultural terminology and thus expanded their cognitive framework.

Finally, the CLIL projects contributed to the development of intercultural awareness of students so that they could value and spread the cultures of others particularly in case of the use of Greek as a second language (Papadopoulos, 2020; Papadopoulos & Agathokleous, 2020), in order to respond to the challenges of the school inclusion of immigrant and refugee students (Griva & Kasvikis, 2014).

### 4.3 Diapolis and EPPAS Initiatives

The spread of the CLIL idea has given rise to many educational programs that aim to combine language and content teaching. Such programs include EPPAS and Diapolis. EPPAS (2006-2008) was an intervention aiming to provide staff training and expertise to primary and secondary school teachers, based on integrated teaching. This program highlighted the importance of integrating different subjects so that learning is interconnected and the language taught is directly related to content (Αναστασιάδη-Συμεωνίδη et al., 2014).

On the other hand, Diapolis (2010-2014) is a four-year program targeting refugee and immigrant students, implemented in fifty school units, using an integrated approach, which means teaching the Greek language and subject content at the same time. The overall objective of the program is to improve participants' communication skills and active participation in class. The joint nature of Diapolis allowed teachers to develop their pedagogical skills, promoting interaction and cooperation in the classroom. Specifically, the CLIL approach of the program created conditions for a smooth transition of students from different levels of education (Ζάγάκα et al., 2014).

### 4.4 CLIL Advocacy in Cyprus

Unlike in Greece, the CLIL model is now a part of the official education program in Cyprus. It was first introduced in 2006, within the framework of PROCLIL program, a European Union funded Comenius 2.1 project, implemented by the University of Cyprus and the Pedagogical Institute of Cyprus, in a limited number of pre-primary and primary school units. Based on its success, CLIL approach started to spread, covering more and more schools, to become part of the national curriculum in 2011.

English is the main foreign language taught through CLIL, which is not surprising given the British cultural hegemony in the country. CLIL in Cyprus has been implemented through various educational models, such as CLIL "showers" and content-only language teaching. The aim is twofold: to develop students' language skills and to boost their cognitive abilities.

A key element in CLIL teaching, in Cyprus, is Scaffolding, which is the teacher's effort to build students' language and cognitive skills, so that they can use them independently, both in academic and social contexts. It is also noteworthy that the CLIL teacher in Cyprus must undergo CLIL training, which goes beyond the teacher and includes all educational stakeholders and aims at creating a student-centered learning atmosphere, which takes into account the individual learning requirements (Παύλου & Ιωάννου, 2008).

### 4.5 The Role of the CLIL Instructor

The CLIL teacher profile requires a high degree of specialization that goes beyond the requirements of either language or subject teachers. First and foremost, the CLIL teacher must be proficient in the target language (English) and in the academic discipline to be taught. For instance, for those teachers who choose English as the language to be used in the classroom, a high language proficiency (C2) is required to ensure seamless fluency and cultural awareness (Hillyard, 2011). For other languages, different proficiency levels may apply, although most studies suggest a C1-C2 range for the FL and B2 for the subject (Garcia Laborda & Alcalde Penalver, 2020).

Besides the language proficiency, teachers need to have a good understanding of language learning theories so that they can diagnose learners' individual needs and cater for their language acquisition devices. The principles of Scaffolding (Vázquez and Ellison, 2013) help teachers to support learners through the language and cognitive learning difficulties by planning task-based activities that involve students in multi-modal learning experiences. Moreover, the CLIL teacher is expected to adopt a student-centered approach through student participation, interaction and turn-taking, as well as offering meaningful and constructive feedback, thus creating a communicative space where students can improve their language

and cognitive skills. Overall, the responsibility of the CLIL teacher extends to the ability to cater for the different needs of all students in the classroom.

Although the profile of the CLIL teacher seems to require many different and complex abilities, recent studies point out the possibility of establishing cooperative strategies between language and subject teachers as a way to maximize students' learning. Teachers' team work (Hillyard, 2011; Pavón-Vázquez, 2014) can yield beneficial outcomes for students due to the different professional backgrounds and teaching philosophies that each teacher brings to the educational setting. To sum up, and according to De Graaff, Koopman and Westhoff (2007), the profile of an effective CLIL teacher should include a holistic view of language and subject teaching, with a strong focus on student-centered learning.

## 5 Methodology - Research Justification

As it was pointed out in the previous chapters, the researches of scientists, which are based on the Greek educational reality, show that the CLIL approach is not organized in the Greek educational system and it is used in some pilot projects in a few Primary and Secondary schools. Thus, the main reason of this research is the further investigation of the possibilities of a wider application of the CLIL approach in Greece. The current research will serve two major goals. Firstly, based on the characteristics of CLIL which are described in the literature, CLIL teachers' skills will be assessed in order to see if they are able to design and execute CLIL lessons. Later on, CLIL teachers' attitudes towards the use of the CLIL approach in their classrooms will be explored.

### 5.1 Research Goals – Questions

The broad objective of this study is to examine if the Greek educational environment is ready to accept bilingual programs like CLIL. More specifically, the interest of this study lies in investigating the attitudes of Greek teachers who are actively employed in Primary and Secondary education. Personal interviews are used as the main method of data collection in order to explore teachers' views, perspectives and difficulties as well as their concerns and reluctances toward the CLIL approach. The main research question which this study will attempt to answer is:

#### Main Goal - Question:

- What is the general impact of the CLIL method in Greek EFL Classroom?

In parallel to the primary research question, the following sub-questions will also be explored:

- The educational preparedness of instructors to teach via the CLIL method.
- Educators' attitudes and inclinations towards the potential implementation of the method in their classrooms.

### 5.2 Research Design

To answer the above research questions, qualitative approach was adopted for this study. Subjectivity is inherent in this study and qualitative research focuses on the reality of the phenomena through the first-hand information derived from the interviewees. The qualitative method was considered appropriate for this study as it includes participants' own views and perceptions about the CLIL phenomenon. Qualitative methods of data collection are well suited to elicit subjective experiences of the participants which is the overall goal of this study (Creswell, 2011).

### 5.3 Participants

The sample was selected by using purposive sampling technique with the aim of qualitatively investigating the views of certain participants. The study population consisted of 9 teachers, 4 of whom were primary school teachers and 5 of whom were secondary school teachers. While selecting the participants, we not only considered the English teachers but also the teachers from different departments since the aim was to see the whole picture of CLIL approach which includes the instruction of both language and content. The participants reported their work experience, foreign language proficiency and additional educational qualifications in varying degrees.

### 5.4 Research Tools

In order to gather and analyze data personal interviews were conducted with the participating teachers. A semi-structured interview was employed in order to provide enough flexibility to the interviewer to ask open questions and follow the flow of the conversation without missing important issues related to the teachers' views on CLIL (Christensen, 2007). The interviews were carried out during the academic year 2022-23 in the educational area of Athens, Greece. Phone conversations were performed outside of school hours. All the participants volunteered to offer their knowledge and experience to this investigation.

### 5.5 Research Process

The participants of the study were nine in-service primary and secondary teachers. Semi-structured interviews were carried out in order to gather their opinions and perceptions regarding CLIL. Before data collection took place, all participants were fully informed about the purpose of the study and they gave their consent to take part in it. The interviews were audio recorded and subsequently transcribed verbally. By doing so, the researchers had the opportunity to go through the data carefully, sentence by sentence, and then by identifying some common themes, sub-themes and ideas relating to the participants' opinions about CLIL, key categories and codes were generated. In the end, the findings of this study will examine the net effect of CLIL in the Greek EFL classroom, as far as in-service teachers are concerned, and will see if they are ready to implement the CLIL approach in their classrooms.

## 6 Research findings

The present study attempted to transfer the theoretical assumptions of Content and Language Integrated Learning (CLIL) to Greek classrooms, where students with various linguistic and cultural backgrounds live together. Educational sufficiency and readiness for CLIL as well as teachers' attitudes towards this pedagogy were studied in isolation. The relationship of these variables was examined in order to shed light on the effects of CLIL in the Greek EFL classroom and in the educational system as a whole.

As far as teaching sufficiency and readiness are concerned, teachers reported diverse views concerning their own preparedness to teach CLIL and to exploit students' linguistic capital. Most of them believed that at least one of the two languages (L2) should be mastered. However, some teachers pointed at problems arising from students' multilingual background. Dictionaries, English as a mediator and stronger students helping each other are some of the strategies they used in order to face these problems.

Cooperation among teachers seems to be a fundamental principle for the implementation of CLIL. Collaboration between specialists (content and language teachers) is believed to be useful for the definition and achievement of language targets during content lessons. However, teachers indicated that the lack of systematic cooperation is due to curriculum constraints and the lack of support on the part of the Greek educational system.

Teachers' sufficiency in terms of new technologies for CLIL instruction was also explored. Most of the educators acknowledged the advantage of using technology in teaching but some of them reported further training needed in order to successfully incorporate new technologies in their lessons. Computers, projectors, interactive boards, video and audio materials seem to be useful for helping students visualize second language terminology.

Teachers reported diverse attitudes towards the systematic implementation of CLIL in their lessons. Some of them believed that CLIL teaching is good and students may benefit from it. However, other teachers underscored the demanding nature of this pedagogy and the fact that the Greek State does not support innovative teaching methods.

Overall, the present findings highlight the capabilities that CLIL may have to improve language learning and teaching in the Greek EFL classroom. Despite constraints related to multilingual background, educational sufficiency, teacher cooperation and new technologies, teachers believed in the importance of CLIL for preparing students to successfully participate in multilingual and multicultural societies. Further investment and support on the part of educational bodies are needed in order to exploit the effects of CLIL in the Greek educational system.

## **7 Interpretations and Limitations of the Research**

Regarding the first more specific research question, the present study contributes significant results showing that the majority of Greek teachers in Greek schools are not prepared for CLIL and they lack pedagogical competence to properly teach lessons based on the principles of the Content and Language Integrated Learning (CLIL) approach. This lack of preparedness manifests itself in many ways but the most critical one is the teachers' inability to exploit fully the linguistic potential of their students. Major challenges include dealing with the complexities of the students' mother tongue, the language and cognitive gap of the learners and the need for the acquisition of new techniques, such as collaborative learning environments and experiential learning models.

Moreover, it was revealed that the development of collaborative networks of teachers from different academic backgrounds encounters serious difficulties within the current framework of the Greek educational system. Productive exploitation of CLIL, however, depends on the active cooperation of subject-matter specialists and language specialists. The collaborative dimension should be expanded to include all actors involved in the school community such as the school principals, the educational advisors, the teachers, the parents and the students. Through cooperative approaches, existing gaps and shortcomings can be overcome and new collaborative forms of teaching can be developed to provide students with more integrated learning. In fact, by means of collaborative practices, the quality of education offered can be substantially improved and new goals in terms of content and language can be achieved.

Regarding the use of modern technologies, greater concerns have been revealed. It is clear that technology is already an established fact in the Greek classroom and teachers try to use it in order to facilitate the learning process. According to the survey, audio-visual equipment, presentation slides, music stimuli, image projection, computerized tools and interactive whiteboards were mentioned, while some teachers have even developed creative educational games and riddles to support the learning process. Despite the fact that modern technologies are already incorporated in teaching practices, teachers lack the necessary CLIL training to effectively integrate content and language forms in their lessons.

Finally, regarding the second research sub-question, it was confirmed that Greek teachers generally and to some extent, positively, perceive the practice of implementing CLIL in their classrooms. However, as the results of the survey show, CLIL is not unanimously accepted in the entire educational system, since a number of teachers appear to be reluctant and some others even express open concerns about the conditions of its implementation. Regarding the general impact of CLIL in the Greek English as a



Foreign Language (EFL) educational setting, teachers generally believe that this approach is feasible provided that certain conditions are fulfilled, such as the need for training on the appropriate use of CLIL procedures, the corresponding technological and educational support and the collaborative cooperation of all actors involved in the learning process.

In terms of limitations, some challenges were encountered during the research design and conduct, which necessitated a change in approach and methods. The major limiting factor was the domain of data collection. This was because of the time constraints outside class participation due to family responsibilities, health issues, secondary jobs, distance, in addition to demands competing for their teaching duties. Furthermore, some of the participants showed reluctance to meet for face-to-face interviews for personal reasons. A decision was, thus, made to conduct telephone interviews and outside class hours with minimum sample participation. The interviews were not face-to-face; however, teachers made every effort and in a collaborative manner to respond to questions and elicit their views and opinions to aid the inquiry.

Moreover, the participating teachers in this study are not fully representative in terms of the larger category of EFL teachers in Greece. Out of the nine teachers involved, only Teachers 2, 7 and 9 were foreign language teachers (English). The lack of diversity in the sample population limits the generality of the findings. Lastly, the participating teachers had different levels of familiarity and sharpness in implementing the CLIL approach. Some teachers had previous exposure and training in CLIL (Instructors 7 and 9) while they seemed to be newcomers to the process for others. The different levels of experience seemed to create difficulties in assessing the overall effectiveness of CLIL.

Despite the limitations, the study of CLIL in the Greek EFL classroom proved to be of invaluable knowledge regarding the use of the method in Greece. Relevant data were elicited, which if used effectively, can contribute to the larger category of CLIL research and yield more productive research results, taking into account the unique characteristics of the Greek educational system and culture.

## 8 Conclusions

It seems that the CLIL has strong potential for being implemented in the Greek (EFL) classroom, if some conditions are fulfilled. Although, as in any case, there were a lot of limitations (time shortage, poor representation, participants with different levels of experience, etc.), the implementation of CLIL activities in Greek EFL classroom gave valuable results concerning the students' attitudes towards the implementation of such an innovative method and also towards the connection of language and content. Despite the limitations, this research on CLIL in Greece, offers valuable results concerning its applicability, advantages and difficulties in the Greek educational context.

On the other hand, the present results could be a point of departure for further academic discussion and research which could help to exploit the potentials of this innovative method. For example, similar studies like the present one could be carried out in order to increase the sample size and offer more conclusive data concerning the implementation of CLIL in the Greek education system. Later, when CLIL is officially recognized and used, researchers could investigate students' performance, the pedagogical contribution of CLIL in Greece and its impact on parents and students etc. Finally, it could be highlighted that well- designed research will provide the groundwork for the use of bilingual programs like CLIL in the Greek educational system.

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