THE EFFECT OF INTENSITY OF CONTENT AND LANGUAGE INTEGRATED LEARNING PROGRAMMES ON STUDENTS' MULTILINGUAL WRITING

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The Effect of Intensity of Content and Language Integrated Learning Programmes on Students' Multilingual Writing

Memòria presentada per Irene Guzmán Alcón per a optar al grau de doctora per la Universitat Jaume I

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To my family

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LIST OF ABBREVIATIONS

ANOVA - ANalysis Of VAriance

CAF - Complexity, Accuracy and Fluency

CBI - Content-Based Instruction

CLIL - Content and Language Integrated Learning

EFL - English as a Foreign Language

FA - Functional Adequacy

FL - Foreign Language

H1 - Hypothesis 1

H2 - Hypothesis 2

H3 - Hypothesis 3

H4 - Hypothesis 4

ICT - Information Communication and Technology

L1 - First Language or mother tongue

L2 - Second Language

L3 - Third Language

N - Number

P - Probability

PE - Physical Education

PEPLI - Programa d'Educació Plurilingüe I Intercultural

PEPM - Programa experimental plurilingüe i Multicultural

PSHE - Physical Social Health and Education

RQ - Research Questions

RQ1 - Research Question 1

RQ2 - Research Question 2

SD - Standard Deviation

SLA - Second Language Acquisition

SPGA - Spelling, Grammar and Punctuation

SPSS - Statistical Package for the Social Sciences

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INTRODUCTION

INTRODUCTION

The effectiveness of Content and Language Integrated Learning (henceforth, CLIL) in promoting multilingualism and enhancing language and content learning has been a subject of intense scrutiny in recent years (Dalton-Puffer, 2017; Ruiz de Zarobe, 2017; Hüttner, 2020; Coyle & Meyer, 2021; Dalton-Puffer, Hüttner, & Llinares, 2022; Coyle, Meyer, & Staschen-Dielmann, 2023; Otto & Cortina-Pérez, 2023). However, there is still a lack of consensus regarding its effectiveness in different educational contexts and the challenges that it presents. To address the effectiveness of CLIL, the present study pursues two main objectives; (i) first, it explores the impact of different intensity of CLIL programme on primary students' communicative appropriateness in writing, considering all languages in the curriculum and (ii) secondly, it aims to examine the impact of out-of-school language exposure on students' writing in a CLIL context.

Previous research on CLIL has frequently focused on exploring CLIL versus non-CLIL (Agustín-Llach, 2017; San Isidro & Lasagabaster, 2018) rather than exploring the impact of intensity of CLIL programmes. Most studies have explored students' English language proficiency (Pladevall-Ballester & Vallbona, 2016; Agustín-Llach, 2017; Coral-Mateu, Lleixà-Arribas, & Ventura, 2018), but they have not taken into account the rest of the languages in the curriculum. Furthermore, despite the dual-focus of CLIL, research tends to explore learners' linguistic advancements (Anghel, Cabrales, & Carro, 2016; Agustín-Llach, 2017) and few studies have examined both linguistic and content gains (Sotoca-Sienes & Muñoz-Hueso, 2014; Mattheoudakis, Alexiou, & Laskaridou, 2014; Pladevall-Ballester & Vallbona, 2016; San Isidro & Lasagabaster, 2018).

Besides, considering the implementation of CLIL in different educational contexts, the multilingual educational context has not received much attention. From this perspective, the present study will focus on the sociolinguistic context of the Valencian Community and examine how different intensity of language programmes, which involve the use of English in CLIL sessions, plus the use of the two official languages (Catalan and Spanish) at school have an impact on students' communicative appropriateness in the three languages of the curriculum: English, Spanish and Catalan. Hence, the present study will contribute to shedding light on the possible benefits of implementing CLIL in the multilingual context of the Valencian Community.

Additionally, the present investigation aims to explore the impact of language exposure beyond the classroom. From previous research, we know that out of classroom activities such as watching TV (Van Den Poel & Leunis, 1999; Koolstra & Beentjes, 1999; Bunting & Lindstrom, 2013; Pujadas & Muñoz, 2020; Muñoz, Pujadas, & Pattemore, 2021; De Wilde, Brysbaert, & Eyckmans, 2021; Muñoz, 2022; Muñoz, Pattemore, & Avello, 2022), private tuition (Muñoz, 2014; Nightingale, 2016), language at home (Safont, 2005; Sanz, 2008; Arocena, 2017; Guzmán-Alcón & Portolés, 2021), and short period of time in the target language community (Llanes & Muñoz, 2009; Llanes & Muñoz, 2013; Llanes & Serrano, 2014; Llanes, Tragant, & Serrano, 2015; Llanes, Mora, & Serrano, 2017) play a determining role in language learning. Most of the studies have measured the impact of language exposure beyond the classroom in relation to general written performance (Llanes & Muñoz, 2013), vocabulary (De Wilde *et al.,* 2021), grammar (Muñoz, Cadierno, & Casas, 2018), and pragmatics (Alcón-Soler, 2015). However, within the field of pragmatics, no previous investigation has focused on the impact of language exposure beyond the classroom on students' communicative appropriateness in writing. An issue addressed in the present study by looking at the following variables: (i) watching TV, (ii) private tuition, (iii) short period of time in the target language community, and (iv) language at home.

The current study may contribute to the field of CLIL and pragmatics by addressing four research gaps. Firstly, it explores the impact of different intensities of CLIL programmes, an issue that has not been addressed in primary education. Secondly, this investigation explores CLIL primary students' communicative appropriateness in writing, accounting for all the languages in the curriculum, while previous studies have focused mainly on English. Thirdly, it analyses language and content outcomes in the CLIL primary education context of the Valencian Community, a context where new multilingual programmes are being implemented and there is a need to measure their effectiveness. Fourthly, the study looks at the impact of language exposure in and out-of-school, while previous research on CLIL has not examined the combination of input exposure in the classroom and beyond. Moreover, the study presents an in-depth account of students, teachers' and parents' concerns on the implementation of CLIL in multilingual settings. Therefore, the research findings of the present investigation may provide insights for ongoing CLIL studies, CLIL instructors, CLIL programmes directors, parents and the educational authorities.

To address the aforementioned aims, as well as to respond to the stated research gaps, the present Ph.D. dissertation is divided into two parts, which are made up of eight chapters in total. The first part (Chapters 1, 2, and 3) provides a review of the theoretical background that informs the study. The second part (Chapters 4, 5, 6, 7 and 8) presents the empirical study itself.

Chapter 1 situates the current study within the general field of CLIL as an educational approach. Section 1.1 starts defining CLIL as a flexible educational approach in which a non-L1 language is used to teach a non-language subject, and reviews the precedents of CLIL, that is to say, the French immersion programmes in Canada, and the Content-based Instruction approach developed in North America. Next, in Section 1.2, we explore the current perspectives on CLIL by examining Coyle's 4Cs (1999), CLIL Matrix (2005), along with Cenoz's (2009) Continua of Multilingual Education, and Cenoz and Gorter's (2011) "Focus on Multilingualism". Then, in Section 1.3, we focus on previous research on CLIL conducted in Europe (Section 1.3.1) and Spain (Section 1.3.2). Then, Section 1.4 pays close attention to CLIL research on writing and Section 1.5 closes the chapter end by indicating that research to date tends to focus on exploring CLIL versus non-CLIL writing performance, rather than exploring the impact of intensity of CLIL programmes on students' writing competence.

Chapter 2 deals with the concept of communicative appropriateness. Section 2.1 starts with the definition of pragmatic competence and reviews different models of communicative competence that include pragmatics as a core element. Section 2.2 concentrates more closely on our interest in pragmatics in multilingual settings, and presents the main findings from multilingual classroom pragmatics, an area to which the current study makes the most substantial contribution, addressing students' communicative appropriateness under the implementation of CLIL multilingual programmes. Thus, an overview of the main studies of CLIL and pragmatics, giving special attention to students' writing skills, is provided. In Section 2.3, a taxonomy adapted from Kuiken and Vedder (2017) and Jacobs *et al.* (1981) is proposed to examine multilingual students' communicative appropriateness in writing. The taxonomy includes three components: the pragmatic, textual and linguistic. The first dimension, we include content and comprehensibility, while coherence and cohesion are included in the textual component. Additionally, the linguistic component considers grammar, spelling and punctuation. In the final section, 2.4, we identify the research gaps that the suggested taxonomy aims to cover and conclude the chapter.

Chapter 3 addresses the effects of language exposure in the classroom and beyond. In Section 3.1, attention is given to some of the conditions for language learning, mainly opportunities for input and output. Furthermore, Section 3.2 provides a review of previous studies, conducted both in the context of Canada (Section 3.2.1) and Europe (Section 3.2.2), dealing with the impact of language exposure in the classroom, and 3.2.3 provides an overview of studies on the impact of input exposure and writing. The next Section (3.3) contains research on input beyond the classroom, focusing on the media (Section 3.3.1), students' language at home and the impact on their writing skills (Section 3.3.2), and short period of time in the target language community (Section 3.3.3). Chapter 3 concludes by reviewing the impact of extra tuition in private language schools (Section 3.3.4) and Section 3.5 summarises the whole chapter.

Moving to the second part of the present Ph.D. dissertation, it focuses on the empirical investigation itself, covering the rationale, methodology, results, and discussion, as well as the conclusion, limitations, and pedagogical implications. The chapters included in this part are outlined below:

Chapter 4 presents the study rationale and motivation, as well as detailing the objectives of the investigation (Section 4.1). Subsequently, Section 4.2 outlines the two research questions with the corresponding hypotheses that guided the present investigation.

Chapter 5 presents the methodology that was used to carry out the investigation. First, in Section 5.1, we refer to the sociolinguistic and educational context of the present study. Subsequently, Section 5.2 deals with the participants, and Section 5.3 presents the research instruments for data collection (Section 5.3.1 and 5.3.2 describes the quantitative and qualitative instruments respectively). Section 5.4 deals with the data collection procedure. Subsequently, Section 5.5 sets out the data coding and analysis, inducing the rating scale (Section 5.5.1) and the coding and operationalization of the variables (Section 5.5.2). The chapter ends with Section 5.6 summarising the method of the present study.

The study findings are reported in Chapters 6 and 7. Each chapter addresses a research question, and the corresponding hypotheses, mentioned in Chapter 4, by presenting quantitative and qualitative findings, followed by a discussion of these findings. In Chapter 6, Section 6.1 reports quantitative findings related to Hypothesis 1. Similarly, Section 6.2 reports results related to Hypothesis 2. In addition, this chapter also provides qualitative findings derived from semi-structured interviews in relation to the implementation of CLIL programmes (Section 6.3)

of students, teachers, and parents. Chapter 6 also provides a discussion of the findings related to Hypothesis 1 and Hypothesis 2 (Sections 6.4 and 6.5 respectively), and Section 6.6 ends the chapter with a summary of the main findings related to Research Question 1.

Chapter 7 reports the findings of Research Question 2, and its corresponding hypotheses, as well as the discussion of results related to Research Question 2. Section 7.1 reports findings related to Hypothesis 3, which deals with the impact of watching TV, private tuition and short period of time in the target language community on students' communicative appropriateness in English. Next, Section 7.2 presents results related to Hypothesis 4, focusing on the impact of watching TV and language at home on students' communicative appropriateness in Spanish and Catalan. Following this, Sections 7.3 and 7.4 present findings related to Hypothesis 3 and Hypothesis 4 respectively. Section 7.5 provides a summary of the main findings related to Research Question 2.

Chapter 8 brings this Ph.D. dissertation to a close. Section 8.1 presents a summary of the main findings relating to each of the two research questions considering the literature presented in Chapters 1, 2 and 3. Then, Section 8.2 outlines the limitations and directions for further research. Finally, Section 8.3 describes the pedagogical implications of the study. This section is followed by a list of references and appendices, which provide examples of the data collection instruments used.

PART I

THEORETICAL FRAMEWORK

CHAPTER 1. CLIL AS A EUROPEAN APPROACH TO LANGUAGE LEARNING

CHAPTER 1

CLIL AS A EUROPEAN APPROACH TO LANGUAGE LEARNING

Chapter 1 frames the current study within the general field of CLIL as an educational approach. Section 1.1 is devoted to reviewing the precedents of CLIL, that is to say, the French Immersion programmes in Canada, and the Content-based Instruction approach developed in North America. Next, Section 1.2 explores current views of CLIL, considering Coyle's 4Cs (1999) and Coyle's CLIL Matrix (2005), together with Cenoz's (2009) Continua of Multilingual Education, and Cenoz and Gorter's (2011) "Focus on Multilingualism" are examined in order to frame CLIL programmes in the context of the Valencian Community. Section 1.3 focuses on previous research on CLIL conducted in Europe (Section 1.3.1) and Spain (Section 1.3.2) as well as CLIL research on writing is analysed in Section 1.4, paying special attention to Third Language (henceforth, L3) multilingual writing performance. Finally, Section 1.5 provides a summary of the chapter.

1.1 Precedence of CLIL

The term Content and Language Integrated Learning (CLIL) was launched in Europe in the 1990s by a group of experts from different backgrounds (Coyle, 2008; Béliard & Gravérousseau, 2009; Coyle, Hood, & Marsh, 2010; Pérez-Cañado, 2012). CLIL is frequently referred to when we teach a subject matter in an additional language. In Spanish, the three main translations that have been suggested to refer to CLIL, according to Pérez-Vidal (2008), are *Aprendizaje Integrado de Contenidos y Lengua Extranjera* (AICLE), *Enfoque integrado de Contenidos y Lenguas Extranjeras* (EICLE) and *Semi Inmersión*.

Due to the great interest of many researchers on the CLIL approach, numerous definitions of CLIL have appeared since the term was coined. Some researchers have referred to CLIL as an umbrella term (Ruiz de Zarobe, 2008; Lasagabaster & Sierra, 2009; Lorenzo, Casal, & Moore, 2010; Ioannou-Georgiou, 2012; Cenoz, Genesee, & Gorter, 2014; Aguilar & Muñoz, 2014; García-Mayo & Lázaro-Ibarrola, 2015; Lasagabaster & Doiz, 2015; Banegas, 2016; Pladevall-Ballester & Vallbona, 2016; Dalton-Puffer, 2017; Merino & Lasagabaster, 2017; Alcaraz-Mármol, 2018; Otto & Estrada, 2019; Dalton-Puffer *et al.*, 2022) that enables learners to improve their communicative and cognitive skills, while they are building knowledge of norms and conventions specific to both the language and content.

CLIL has also been defined as dual-focused by other researchers (Ioannou-Georgiou, 2012; Ruiz de Zarobe, 2013; Sylvén, 2013; Soler, González-Davies, & Iñesta, 2017; Alcaraz-Mármol, 2018; Reitbauer, Fürstenberg, Kletzenbauer, & Marko, 2018) aiming to find a balance between language and content instruction. Nevertheless, the same authors mentioned that, in practice, it is neither easily conceived nor smoothly achieved. The authors also claim that the CLIL approach is characterised by the use of an additional language as a medium of instruction, and that the language can be any language other than the first language. This indicates that although, as reported by Dalton-Puffer, Nikula, and Smit (2010), CLIL is frequently associated with teaching through the medium of English, CLIL can be used to teach regional and minority languages and develop learners' multilingual competence, an issue relevant for the present investigation.

Additionally, CLIL has also been defined as a "flexible educational approach" (Merino & Lasagabaster, 2017, p. 19) in the European context, where multilingualism and language education are a crucial issue (Pérez-Cañado, 2012; Baker & Wright, 2017; Escobar-Artola, 2023). In fact, many schools have implemented CLIL programmes with the aim to foster students' multilingual competence. Some researchers consider CLIL a "pedagogic tool" (Coyle, 2002, p. 27), or as an "innovative methodological approach" (Eurydice, 2006, p.7). In other words, CLIL might be applied in isolated classes, or as a whole programme across the entire school. Moreover, each school can decide the number of hours dedicated to CLIL lessons, according to their region's law, and schools may offer different degrees of intensity in CLIL programmes. This is acknowledged by Pladevall-Ballester and Vallbona (2016, p. 38), who claim that CLIL "includes a variety of approaches to bilingual education or content-based language teaching differing in their intensity and frequency of exposure and continuity". In the same line, due to the wide range of contributing factors to multilingualism, Cenoz (2009) suggested the Continua of Multilingual Education that could also be used for explaining the wide variety of CLIL approaches (see Section 1.2).

Looking at the origin of CLIL, it is believed that the Canadian language immersion programmes and other North American bilingual projects influenced the birth of CLIL. In fact, it is commonly assumed that these programmes were the pioneers of CLIL in Europe. The immersion programmes first developed in Canada in the 60s aimed to offer English-speaking children high-level proficiency in French, which was essential to achieve high-status societal positions. Immersion programmes were described as "the quintessential model of content-

based L2 instruction" (Genesee & Lindholm-Leary, 2013, p. 3). The purpose of the Canadian language immersion programmes was to encourage bilingualism in the country. The programme's popularity can be attributed to a "simultaneous grassroots and top-down pressure" (Coyle *et al.,* 2010, p. 7). The language taught through content subjects was French with the aim of providing the English-speaking population an opportunity to learn French, the other official language of Canada (Lyster, 2007).

The term "immersion" typically refers to the programmes that use the additional language at least 50% of the time for instruction (Teddick, Christian, & Fortune, 2011). These programmes differed in two aspects: amount of instruction and starting age or grade (Genesee & Nicoladis, 2007; Lyster, 2007). The number of weekly hours of instruction in the target language (French) was progressively raised to achieve the objective, with approximately half of the school curriculum being conducted in French. Besides, immersion programmes are divided into early, middle or late immersion programmes. Early immersion programmes begin when students are in grade 1 (5 or 6 years old), middle immersion programmes start when learners are in grade 3 (9 or 10 years old); and late immersion programmes begin in grade 6. Furthermore, there are two types of immersion programmes: total and partial. Total programmes use the L2 language 100% of the time of instruction, while partial immersion is defined by the use of the L2 language 50% of the dedicated time of instruction (Lyster, 2007).

Research on learners' competence in the second language (henceforth, L2) in different types of immersion programmes was carried out. With the aim of improving the French oral skills of students in the mid-1990s, the former Ottawa Board of Education decided to implement language baths, which meant the shift from 120-hour French programmes, to 450 hours for one school year. In this context, researchers analysed the influence of exposure on language learning, or the effect called the "intensive doses" (Bournot-Trites & Reeder, 2001; Burmeister & Daniel, 2002). Burmeister and Daniel (2002) analysed the effect of partial immersion programmes. Their main focus was to examine the influence of input on the length of learners' contributions in terms of the number of clauses, the absolute frequency of cohesive elements, as well as their density. In relation to the partial immersion programmes, participants were exposed to the English language with 30%, which was an increase of about 15% compared to the regular curriculum. Findings reported that immersion students scored higher with respect to the number of clauses and the frequency of cohesive devices in interaction.

Similar findings were reported by Bournot-Trites and Reeder (2001), who investigated mathematics achievement in a French immersion context. The study compared one group that received 80% of the academic curriculum in English, with a group that had 50% of the subject in French and the other 50% in English, including mathematics. Findings reported a more positive effect in mathematics for the 80% group. These findings support the benefits of total immersion over partial immersion programmes. To conclude, findings from research pointed out that learners under immersion programmes outperformed the other groups. Furthermore, as MacFarlane and Wesche (1995) claimed, immersion programmes not only improved learners' speaking and listening skills, but also their self-confidence when using the language for interaction. Additionally, these results confirmed the value of intensive exposure towards the target language. Nevertheless, some studies have reported that through immersion programmes students reached higher levels of proficiency in listening, reading comprehension, and fluency in the L2 compared to the non-immersion students (Lyster, 2007; Harley, Futcher, & Greider, 1990; Swain & Lapkin, 1984). Other studies have found some gaps in students' grammatical and lexical development (Lyster & Ranta, 1997; Lyster, 2007).

Additionally, findings related to the benefits of French immersion programmes have inspired immersion models for Spanish speaking children. For instance, Cenoz *et al.* (2014) analysed the implementation of such programmes in the Basque Autonomous Community. In the Valencian Community, where the present study takes place, the curriculum frequently offers early, total or partial immersion, and some studies have examined the benefits of total or partial immersion in Catalan. However, few studies have examined the intensity of exposure to different languages in primary educational context.

Content-Based Instruction (henceforth, CBI), together with Immersion programmes, has influenced the spread of CLIL programmes. Brinton, Snow, and Wesche (1989, p.7) defined CBI as "the concurrent study of language and subject matter, with the form and sequence of language presentation dictated by content material". However, in order to fully understand CBI, we need to refer to the Input Hypothesis and the cognitive load theory. The Input Hypothesis (Krashen, 1985) proposed that language acquisition can only occur if the input does not exceed the knowledge already acquired of the learner, i+1. Additionally, the input has to be comprehensible, authentic, and not too easy or too difficult for the learner. Zhao and Dixon (2018) expanded Krashen's work by highlighting that i+1 not only should refer to language, but also to content. In other words, an effective CBI should not only target the acquisition of

language, but also comprehensible content. This suggests that classes should have a dual-focus: content and language learning.

Furthermore, Genesse and Lindholm-Leanry (2013) highlighted that, depending on the organisation of the curriculum, the relative emphasis on the language, content, and the educational level, there are different forms of CBI that have their individual characteristics. However, under all circumstances, as reported by Met (1999, p. 4), the goal of CBI combines the learning of curricular content and language learning, pointing out the most important features of content-driven and language-driven experiences (see Table 1).

Table 1

Content-driven and language-driven experiences (Met, 1999, p. 4)

Content-Driven	**Language-Driven**
Content is taught in L2	Content is used to learn L2
Content learning is the priority	Language learning is the priority
Language learning is secondary	Content learning is incidental
Content objectives determined by course goals or curriculum	Language objectives determined by L2 course goals or curriculum
Teachers must select language objectives	Students evaluated on content to be integrated
Students evaluated on content mastery	Students evaluated on language skills/proficiency

After mentioning the main features of CBI, it is worth mentioning the debate whether CBI and CLIL are identical terms. On the one hand, some researchers considered CBI and CLIL as two identical terms (Coyle *et al.,* 2010; Dalton-Puffer, 2007; Van de Craen, Mondt, Allan, & Gao, 2007). Ruiz de Zarobe (2008), even referred to CLIL and CBI as synonyms: CBI as a popular term in the United States of America and Canada, and CLIL in Europe. On the other hand, other researchers disagreed and considered that CLIL is different from CBI (Lasagabaster & Sierra, 2009; Pérez-Cañado, 2012). However, in line with Llinares and McCabe (2023) and Del Pozo and Llinares (2021), we call for exploring ways in which content and language are integrated rather than the differences between programmes.

One study worth mentioning is the one by Cenoz (2015) in which properties of both approaches, CLIL and CBI, are analysed. The author reported differences concerning the native versus the non-native teachers. It has been discussed that CLIL is different from CBI since CLIL teachers are frequently non-native speakers (Dalton-Puffer & Smit, 2013; Lasagabaster & Sierra, 2009). Also, the origin and the educational level in which the approaches are conducted are two differences worth mentioning. CBI was first introduced in Canada in the 1960s, whereas CLIL started in Europe in the 1990s. Additionally, CBI is frequently applied all throughout the educational levels, while CLIL may be introduced at any time at different educational levels. Moreover, Cenoz (2015) also reported similarities between the two approaches. Regarding the use of the target language, it has been shown that both programmes do not limit themselves to English as the target language, but also other languages can be considered. Having analysed the differences and similarities between CBI and CLIL, the author concluded that the categorical distinctions between CLIL and CBI are unsupported, a conclusion that this study shares. Besides, we agree with Cenoz *et al.* (2014), who emphasised the importance of analysing research that can be generalised to different contexts and to exchange pedagogical practices across contexts, instead of differentiating the same concept with two labels. This is the approach followed in the present study and Figure 1 illustrates a summary of CLIL, immersion programmes and CBI.

Figure 1

Summary of CLIL, immersion programmes and CBI
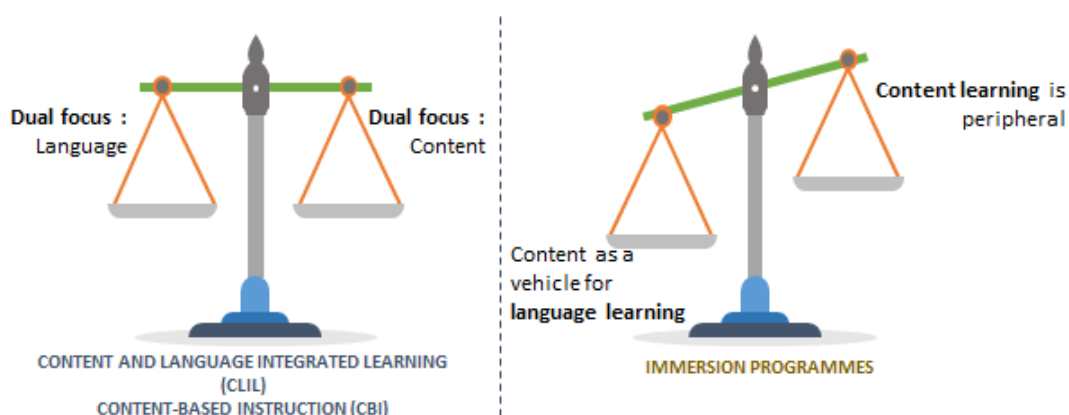
To sum up, in this section we have reviewed the concept of CLIL and the predecessors of CLIL, both French immersion programmes and CBI. After considering different definitions of CLIL, we agree with Cenoz (2015) that CLIL is not different from CBI, and it can be understood as a flexible educational approach in which a non-L1 language is used to teach a non-language subject. In other words, CLIL is not only used to learn a language, but also to teach a content subject. From this perspective, in the following section, current views of CLIL will be reviewed.

1.2 Current views of CLIL

As it was reported above, in the mid-1990s, CLIL programmes have been growing in many different contexts and experiencing exponential expansion (Juan-Garau & Salazar-Noguera, 2015; Merino & Lasagabaster, 2017). CLIL programmes have been applied in many countries due to several reasons. Among them, "The earlier the better" assumption (García-Mayo & Garcia-Lecumberri, 2003; Muñoz, 2006), alongside with the idea that all learning should be learnt as naturalistic as possible. This may explain why CLIL programmes implementations are one of the main concerns among the educational authorities to help students to improve their additional language competence.

Today, CLIL is a well-established approach throughout Europe, which can be adapted across educational contexts. Having said that, there are a number of characteristics that most forms of CLIL programmes share (Dalton-Puffer *et al.,* 2010; Cenoz *et al.,* 2014; Dalton-Puffer, Llinares, Lorenzo, & Nikula, 2014; Cenoz, 2015; Llinares & Dalton-Puffer, 2015; Pérez-Vidal, 2015; Nikula, Dalton-Puffer, Llinares, & Lorenzo, 2016; Escobar-Urmeneta, 2019). For instance, Dalton-Puffer and Smit (2013) refer to four parameters of CLIL when introducing CLIL programmes in the classrooms. According to these authors, CLIL is usually implemented once learners have acquired literacy skills in their mother tongue, and CLIL is taught through a non-L1 language. Additionally, CLIL lessons are usually timetabled as content lessons, while the target language normally continues as a subject and in its right. Teachers are normally non-native speakers of the target language. The parameters are better illustrated in the figure below (see Figure 2).

Figure 2

CLIL defining parameters (Dalton-Puffer & Smit, 2013, p. 546)

CLIL is about using a foreign language or lingua franca, not a second language …. It is not regularly used in the wider society they live in.

It is usually implemented once learners have already acquired literacy skills in their mother tongue

CLIL defining parameters

CLIL lessons are usually timetabled as content lessons … while the target language normally continues as a subject in its own right … taught by language specialists.

CLIL teachers are normally non-native speakers of the target language and are typically content rather than foreign language specialists.

Coyle *et al.* (2010) refer to CLIL programmes as pioneers in a time where education and societal expectations were revolutionised (Mehisto, Marsh, & Frigols, 2008, p. 10).

Besides, within the framework of multilingual education, Coyle's 4Cs (1999) and Coyle's Matrix (2005) are often used to explain CLIL programmes as an educational approach. According to Coyle (2007), the 4Cs need to be interrelated and integrated: content (the non-language subject), cognition (the thinking and learning processes), communication (language learning and the use of language) and culture (intercultural understanding and global citizenship). This holistic view of CLIL is represented in the 4Cs Framework (see Figure 3).

Figure 3

The 4Cs Framework (adapted from Coyle, 1999)
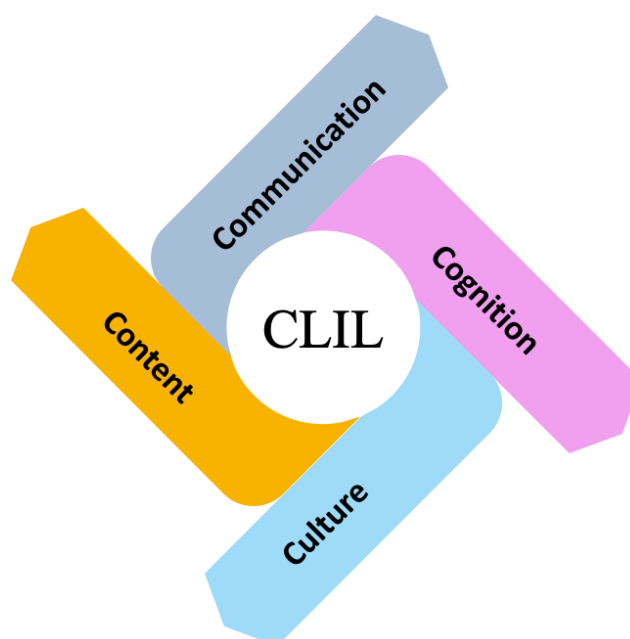
Content refers to the content covered on topics, tasks or projects (Coral-Mateu & Lleixà-Arribas, 2015; Verspoor, Bot, & Xu, 2015), and science has emerged as a popular subject choice for CLIL programmes (Rasulo, De Meo, & de Santo, 2017; Fernández-Sanjurjo, Férnadez-Costales, & Arias-Blanco, 2019). The teacher plans how the content is going to be covered through tasks, engaging students and motivating them. Content involves skills, understanding, and knowledge linked to a defined curriculum for a school year. The feature of Cognition is related to how content and cognition engage learners to think deeply over knowledge construction, while students regulate their own learning processes. In addition, learners are challenged and construct their knowledge from lower to higher thinking skills.

The last two elements are Communication and Culture. Communication refers to language competence, but this notion goes beyond grammar and vocabulary. Culture is a crucial variable to consider when planning a CLIL lesson, not only because it promotes learners' self-awareness, but also because it encourages learners to have positive attitudes towards languages. In fact, one of the principal concerns of European policy is to teach intercultural awareness. As Coyle (2006) reflects in her framework, studying a subject through the language of a different culture paves the way for understanding and tolerating different perspectives (Ruiz de Zarobe & Jiménez-Catalán, 2009, p. 50). This idea is also supported by Pavlović and Marković (2012,

p. 85) claiming that CLIL aims to "improve not only students' competence in the target language, but also inculcate a positive attitude to other languages and cultures".

To conclude, according to Coyle *et al*. (2010), effective CLIL programmes result from the following assumptions (see Table 2).

Table 2

Principles for effective CLIL programmes Coyle et al. (2010, p. 4)

Progression in knowledge, skills and understanding of the content;
Engagement in associated cognitive processing
Interaction in the communicative context
Development of appropriate language knowledge and skills
The acquisition of a deepening intercultural awareness, which is in turn brought about by the positioning of self and 'otherness

Additionally, since CLIL programmes may activate cognitive processes, Coyle (2005) adjusts the Cummins Matrix (Cummins, 1984) to include cognitive and linguistic aspects and to provide space for decision-making with regard to planning and learning. As reported by Coyle (2006) CLIL programmes need to be practised along a path which ranges from low linguistic and cognitive demands to high linguistic and cognitive demands, and it involves careful consideration of the types of tasks, choice of resources, planning and constant evaluation. Coyle's CLIL Matrix (2005) (see Figure 4), together with Bloom's Taxonomy (1956), are powerful instruments for targeting the linguistic and cognitive demands of CLIL contexts (Coral-Mateu & Lleixà-Arribas, 2015). In Coyle's Matrix (2005), CLIL programmes are located in quadrants 3 and 4 (see Figure 4).

Figure 4

The CLIL Matrix (Coyle, 2005)
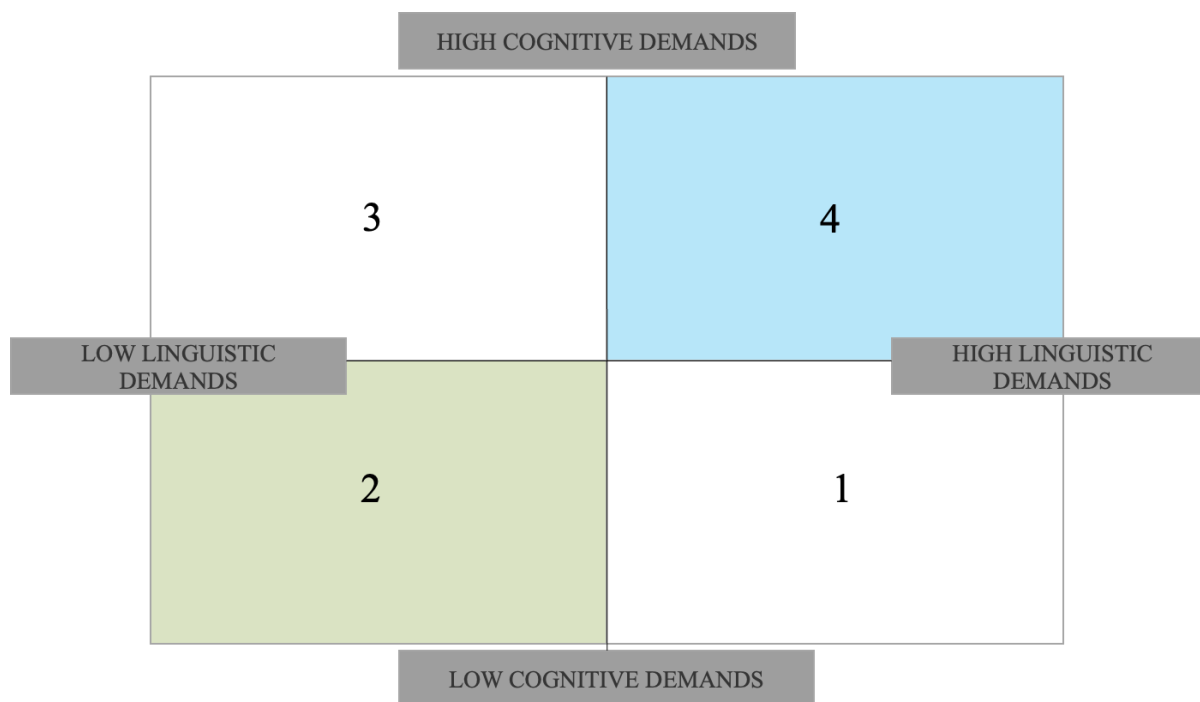
Moreover, considering cognitive and linguistic demands, another issue to take into account is teachers' level of content knowledge. For instance, it has been suggested that one of the flaws of CLIL programmes in primary schools is teachers' level of proficiency needed to teach content in an additional language (Portolés & Martí, 2020; Codó, 2022; Escobar-Artola, 2023). As we have already mentioned, the core feature of CLIL programmes is the integration of content and language, giving the same amount of attention to both components. Researchers have shown concerns among the balance and the planification of content and language classes claiming that it is complicated to accomplish an equal balance between content and language (Dalton-Puffer, 2007; Mehisto *et al.,* 2008; Pérez-Vidal & Juan-Garau, 2015; Nikula *et al.*, 2016; Llinares & Morton, 2017; Del Pozo & Llinares, 2021; Villabona & Cenoz, 2022; Escobar-Artola, 2023). It seems that while content teachers are concerned about limiting the cognitive complexity of the subject, due to the reduced linguistic competence of both students and teachers, language teachers prioritise language-related goals above content subject-related ones.

According to Coyle (2006), a fluid CLIL approach would ensure the appropriate environment to minimise possible tensions and guarantee successful content and language learning. From this perspective research has focused on assessing the integration of content and language learning in CLIL settings. For instance, Dalton-Puffer (2013; 2016) suggested a framework to assess this integration. In this framework, the Cognitive Discourse Functions are characterized as "verbal patterns that have developed in response to the recurring demands encountered while engaging with curricular content, items of knowledge, and abstract thinking" (Dalton-Puffer, 2016, p. 29). In other words, Cognitive Discourse Functions are linguistic structures that individuals frequently employ to convey and exchange their cognitive processes. For example, when explaining, categorizing, or hypothesizing, individuals are utilizing Cognitive Discourse Functions, which essentially serve as "observable counterparts" of cognition (Dalton-Puffer, 2013, p. 220), and, in turn, may form the basis of learning objectives in a competency-based curricula. In other words, Dalton-Puffer's (2013) construct is equally anchored in educational and linguistic theory and, as acknowledged by Lasagabaster (2021) and Morton and Nashaat-Sobhy (2023), may be used address the challenge of assessing content and language in educational contexts. In the same vein, different studies have applied the principles of Systemic Functional Linguistic to assess students' content and language learning in CLIL settings, both at the primary (Llinares & Nashaat-Sobhy, 2021; Llinares & Nikula, 2023) and the secondary school level (Del Pozo & Llinares, 2021), with a focus on the analysis of students' writing (Llinares & Nikula, 2023), and the combination of oral and writing skills (Llinares & Nashaat-Sobhy, 2021).

Furthermore, a new framework was developed by the research Graz Group (Meyer *et al.*, 2015; Coyle & Meyer, 2021), and known as the Pluriliteracies model (see Figure 5). Its primary goal was to raise teachers' awareness regarding the interplay between content and language. It also functions as an "idealized pathway into a discipline" (Meyer & Coyle, 2017, p. 201), and serves as a guide for refining pedagogical practices. In other words, this model visually represents how learners progressively enhance their ability to convey subject-specific conceptual knowledge and skills, using subject-specific language across different language proficiency levels within a plurilingual context like CLIL.

Figure 5

Mapping pluriliteracies development (Meyer et al., 2015, p. 49)
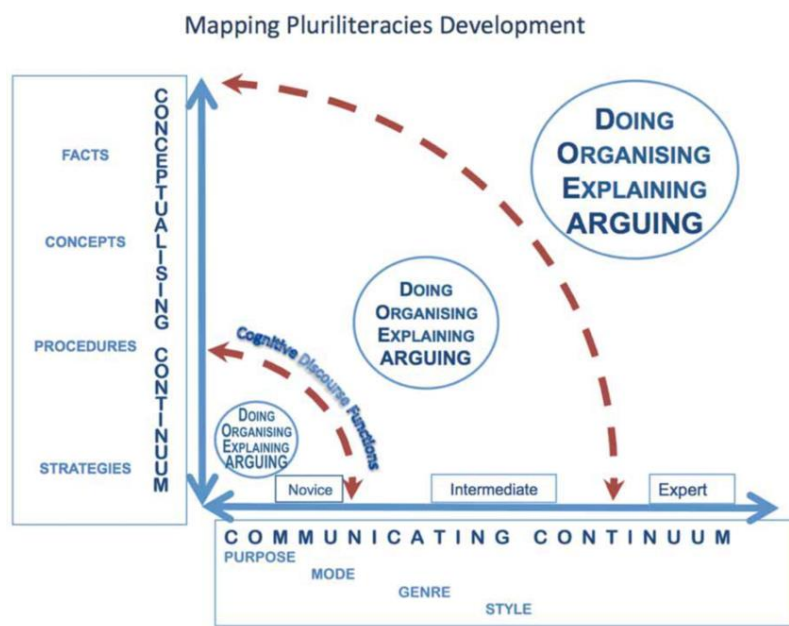
To sum up, an effective CLIL programme need to have a dual-focus approach, where both content and language are assessed and integrated into curriculum planning. From this perspective, "students are likely to learn more if they are not simply learning language for language's sake but using language to accomplish complete tasks and learn new content" (Mehisto *et al.*, 2008, p. 11). Furthermore, teachers need to enhance and assist in ensuring that the content is understood, employing scaffolding techniques to support student learning (Lo & Lin, 2019; Teddick & Lyster, 2020). In addition, CLIL programmes need to consider the multilingual context of most schools, where dominant and minority languages coexist, together with one or more other languages. This is the case of the Valencian Community, where the present study has been conducted. A setting where content is taught in Catalan, English, and Spanish, and where the intensity of exposure to these languages varies across school settings.

Thus, as suggested by Nikula and Marsh (1998), CLIL programmes provide opportunities for the development of multilingualism in Europe. In fact, the Resolution of the European Council (1995), mandated a change in how languages were taught and encouraged teaching subjects in additional languages. Similarly, the White paper on Education and training (Teaching and Learning-Towards the learning society 1995) notes the need to employ well prepared language teachers, in order to achieve the idea of 2+1, where all citizens should know their own language

plus two additional ones. At the same time, acquiring foreign languages was paramount to achieve a successful career in the new European Union (EU). These issues explain why the term of CLIL appeared as "The European Label for Bilingual Education" (Lorenzo, 2007, p. 28). In fact, within the CLIL approach one of the main reasons for its appearance was to help citizens become multilingual, while multilingualism was prioritised by the European Commission (2008, p. 6), defining multilingualism as "the ability of societies, institutions, groups, and individuals to engage, on a regular basis, with more than one language in their day-to-day lives".

Following the above citation, we can see that individual and group engagement are issues to consider. Therefore, individual and societal multilingualism are two terms worth explaining. We know that human language is a collective phenomenon (Andrews, 2014) and it is hardly possible to study individual multilingualism without considering the societal dimensions. Individual multilingualism refers to the use of language by a single human being. In contrast, the concept of societal multilingualism allocates the use of the language in different kinds of organisations, communities or groups. This term takes into account the contexts, the circumstances, and the routines of the use of the language. Thus, it is crucial to highlight that if a country or region identifies with societal multilingualism it does not imply that every person from that country or region is equally multilingual. In fact, while there are communities where multiple languages coexist side by side, some territories, or speakers may primarily use only one of the official languages of the country.

Moving to the area of education, Cenoz (2009) proposed the Continua of Multilingual Education to outline, assess, and contrast different types of multilingual education. This model includes particular educational variables (see Figure 6).

Figure 6

Continua of Multilingual Education (Cenoz, 2009, p.35)
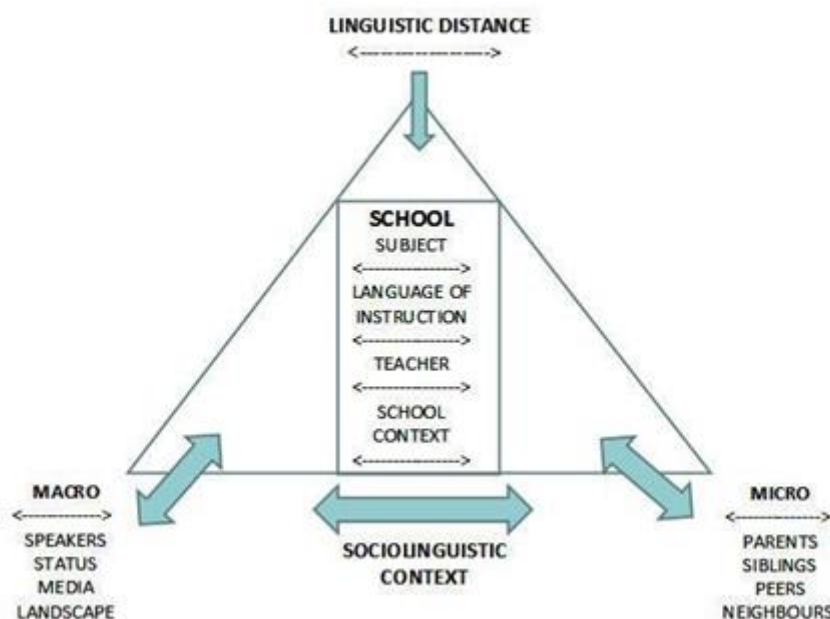
Cenoz (2009) suggests four variables that can be represented as a Continua: subject, language of instruction, teacher, and school context. In relation to the subject, a school may have one or more languages taught. In addition, different languages can be used as language of instruction, which requires teachers to have a certain language proficiency in different languages, and training in multilingual education. Besides, different languages may be used inside the school between teachers, students and staff.

Considering Cenoz's (2009) model, a CLIL programme can be viewed as an approach to foster multilingualism at school, accounting for differences in relation to the intensity of CLIL programmes. In the Valencian Community, we find schools where subjects are taught in Catalan, Spanish and English, that is to say, there is an integration of the three languages in the curriculum. However, the intensity of CLIL programme, language use inside the school or even teachers' language proficiency may vary across educational contexts.

Cenoz's (2009) model also shows that different factors play a role in the process of language learning. Among them, the distance between the language already known by the speaker and the target language can have an influence on the acquisition of the target language. It is also known that when languages are connected to each other learners have more resources for

learning the target language. For instance, a Spanish speaker will have greater aptitude towards French than a Japanese speaker. Moreover, languages are known to be in permanent interaction. Language learning is thought to be a complex and dynamic process (Cenoz & Gorter, 2011; Portolés & Martín-Laguna, 2012; Jessner, 2013; Portolés & Safont, 2018; Safont, 2021). Additionally, the sociolinguistic environment of the school plays a role, and factors such as the number of multilingual speakers, the status of the different languages, the linguistic landscape, the language use at home, or the language use outside school are factors to consider (Murphy, 2019). Cenoz (2009) refers to the influence of the wider social context, since learners also engage in multilingual practices outside school. This is relevant for the present investigation that aims to analyse the influence of out-school factors on students' writing in CLIL primary classrooms (see Chapter 3).

In addition, although CLIL is frequently referred to Content and English language learning, there is a trend to follow a holistic approach in multilingual contexts. In this sense, it is worth mentioning "Focus on Multilingualism" (Cenoz & Gorter, 2011), that aims to integrate the languages into the curriculum, while encouraging the use of all the resources that the multilingual students have at their disposal. This approach rejects the notion that languages are to be taught separately, and supports the fact that students can use different linguistic resources to learn more efficiently. In addition, Cenoz and Gorter (2015) reviewed Cummins' (2005; 2007) three assumptions that need to be reviewed from a multilingual approach: a) using exclusively the target language b) avoiding translation c) teaching languages as completely separate. According to the authors, learning English cannot be separated from the use of other languages in the curriculum and learners use their plurilingual resources and transfer their multilingual competence to other languages. The authors also claim that the boundaries between languages need to be more fluid. In other words, while the traditional approach separates languages, "Focus on Multilingualism" advocates for language integration, looks at the whole linguistic repertoire and creates a connection between languages (see Figure 7).

Figure 7

Traditional approach vs Focus on Multilingualism (Cenoz & Gorter, 2011, p. 6)

Finally, we acknowledge that there has been a change towards multilingualism (Cenoz & Gorter, 2011; Kramsch, 2012; Ortega, 2013; May, 2014), disregarding the reference to the monolingual speaker, and the notion that students are expected to become native speakers. Similarly, in the area of education, the monolingual paradigm, which is based on the traditional approach where languages are viewed separately, has been replaced by multilingual approaches. The reasons provided are: the separation of languages does not represent what goes on in the classroom (Cenoz & Gorter, 2017; Lin & He, 2017; San Isidro & Lasagabaster, 2019; Safont, 2021; Cenoz & Gorter, 2022) different language backgrounds coexisting within the same educational settings (Lin & He, 2017; Pavón-Vázquez, 2020), the possible connection between languages as well as the use of the translanguaging in the classroom (Serra & Feijóo, 2022; Orcasitas-Vicandi, 2022; Mañoso-Pacheco, 2023) and promoting the use of minority languages (Portolés, 2020; Portolés & Safont, 2020; Cenoz, Santos, & Gorter, 2022; Martí & Portolés, 2022; Orcasitas-Vicandi & Perales-Fernández-de-Gamboa, 2022). This new approach is relevant for the present investigation, since we aim to analyse students' writing in a CLIL multilingual setting, where English, Spanish and Catalan are the three languages of the curriculum.

In this section, first we have looked at CLIL defining parameters, together with shared assumptions, observing that it is complicated to accomplish a balance between language and content in CLIL programmes. Secondly, we have referred to CLIL programmes within the

framework of multilingual education. Cenoz's (2009) Continua of Multilingual Education and "Focus on Multilingualism" (Cenoz & Gorter, 2011) have been reported useful to frame CLIL programmes in the context of the Valencia Community. The next section reviews research on CLIL in the context of primary education.

1.3 Previous research on CLIL

Since the context of the present investigation is primary education, in this section we will examine studies carried out in the field of CLIL in Europe and Spain at primary school level.

1.3.1 CLIL in Europe

CLIL research in Europe will be reviewed first by looking at the research conducted in Northern Europe, with special attention to Finland, Estonia and Sweden. Investigations carried out in the Netherlands, Germany and Switzerland will also be reviewed. Next, we will focus on the investigations conducted in Eastern European countries, for example, Poland, and Southern European countries, such as Greece. Finally, research conducted in the south of Europe, especially in Italy, will be mentioned.

Starting with Northern Europe, Merisuo-Storm (2006) explored a total of 35 learners from year 1 and 2 L1 literacy skills of CLIL and non-CLIL students. The author took into consideration two variables: students' gender and school readiness. Findings from this study reported no difference with regards to gender. Furthermore, the study revealed that the implementation of CLIL did not show any negative effects on the participants' L1. Jäppiner (2005) provided qualitative data supporting the advantages of the CLIL approach in Finland. Both studies assessed learners' perspectives at primary school level, reporting overall satisfaction with the programme, positive attitudes towards languages and increased confidence in the students.

Mehisto and Asser (2007) provided a qualitative overview of CLIL practice through the use of lesson observation, questionnaires and semi-structured interviews in Estonia. A total of 48 participants were recruited from four different settings. Findings from the study favoured the CLIL approach in almost all aspects. Participants from the study, not only showed a positive attitude towards learning, but also an outstanding engagement in the learning process. However, scholars highlight that despite the positive results of the study, some aspects need to be reviewed to reinforce the CLIL approach. Specifically, teachers and parents expressed their

lack of communication and cooperation among them and teachers' lack of training on CLIL approach.

Concluding with the research conducted in Northern Europe, in Sweden, Sylvén (2004) and Sylvén and Sundqvist (2012) carried out research on CLIL programmes at primary school level. Sylvén (2004) analysed the correlation among students' language exposure outside the school and their learning outcomes. The focus of Sylvén's (2004) investigation was learners' incidental vocabulary acquisition over two years. A total of 363 students participated in the study. Participants were divided into two groups, CLIL ($n = 99$) and non-CLIL groups ($n = 264$). In relation to the instruments, background questions and vocabulary tests were used. Results from Sylvén (2004) showed that there was a correlation between the amount of contact with English outside the classroom and the students' level of proficiency.

More recently, Sylvén and Sundqvist (2012) examined the correlation between students' outcomes and students' exposure to the target language outside school. In their investigation, participants were 502 primary students enrolled in 5th-grade. Researchers used a mixed methodology with several instruments to gather data. Students had to complete a diary recording every contact they had with English outside the classroom. Furthermore, the students' language proficiency was measured via national testing. This English test assessed the four skills. Findings from the study reported that English learning is favourably affected by the use of the language outside school, where content and language are learned in combination in an informal context. Moreover, findings of the investigation showed a positive correlation between out-of-school activities and high marks on the tests. In spite of these results, the authors pointed the need for further investigation on the role of language contact outside the school and learning outcomes.

Moving into the research conducted in other European countries, it is worth pointing out the studies carried out in the Netherlands at primary school level. The Netherlands is considered one of the pioneer countries in the field of CLIL. For instance, Van der Leij, Bekebrede, and Kitterink (2010) carried out a study, with the aim of analysing student's L2 vocabulary, orthographic knowledge, and word reading fluency. Researchers took several variables into consideration: learners' Dutch origin, social-economic background, age, gender, and L1 skills. Participants were divided into two groups, receiving the same amount of English classes, but one of them received bilingual (Dutch and English-medium) instruction in reading. Research

outcomes not only showed a positive impact on reading ability in both languages, but also a significant difference favouring the CLIL group in vocabulary acquisition.

In Germany, Piesche, Jonkman, Fiege, and Kebler (2016) focused their investigation of CLIL primary learners around the science subject. A total of 722 learners were divided into two groups: CLIL and non-CLIL. Results showed that CLIL students performed adequate short vocabulary retention, but non-CLIL students obtained higher results in science. The authors call for further research in this area.

In Switzerland, Stotz and Meuter (2003) explored the receptive skills from a group of CLIL and non-CLIL students. Findings reported that CLIL students performed better than the non-CLIL. However, findings from Serra's (2007) longitudinal research differ from the ones reported by Stotz and Meuter (2003). Serra (2007) analysed German-speaking primary learners' oral production in Italian or Romansh as a L2. A total of 245 students participated in the study. Findings reported that CLIL and non-CLIL groups performed equally in Italian and Romansh languages. The author also reported that different variables, such as prior experience to CLIL, out-of-school conditions, prior knowledge of the content, age, and use of languages outside the classroom were factors worth considering.

Concerning Eastern European countries, in Poland, Czura, Papaja, and Urbaniak (2009) conducted a study in 19 CLIL schools. The investigation considered several variables and a mixed-method methodology, where classroom observation and interviews with students and staff were considered. Findings reported positive gains for students' learning under CLIL approach. However, researchers reported the urgent need for training teachers on the CLIL approach, and greater collaboration among educators.

In the context Southern European, in Greece, Mattheoudakis *et al.* (2014) conducted a study where the aim was to examine Greece's first attempt to introduce CLIL in public primary school. A total of 51 sixth-grade students (11-12 years old) took part in the study. The control group (non-CLIL) consisted of 25 learners, while the remaining 26 learners formed the experimental group (CLIL). After one year of CLIL instruction, researchers analysed primary students' English competence and their knowledge in Geography. Researchers applied an English language test that focused on receptive skills and three Geography tests as research tools. Regarding findings related to content gains, CLIL learners performed better in two out of the three Geography tests, confirming that content knowledge was not negatively affected

by the use of English as a medium of instruction. As far as the linguistics gains, no statistically significant difference was found between the students' performance in both language tests for either group, although both groups' scores improved from the first to the L2 test. Furthermore, it is worth mentioning that the authors reported both content and language gains for the CLIL students, and suggest CLIL programmes as a suitable approach to be implemented in primary schools in Greece.

Regarding the south of Europe, it is worth mentioning research conducted in Italy. Researchers, such as Mary-Coonan (2007) or Infante, Benvenuto, and Lastrucci (2008, 2009) pointed out the benefits of CLIL approach for learning and additional language by triggering motivation, fostering thinking skills and improving content learning.

To conclude this overview of studies conducted in European countries, it is necessary to point out the unique situation of the United Kingdom. Despite being a plurilingual society (Scotland and Wales) and speaking the most widely adopted language for CLIL implementation (English), the CLIL approach has not triggered interest in this country. In fact, it is believed that "educational policies do little to promote the learning of two or more languages: human capital does not extend to linguistic priorities in these contexts despite warnings of being left behind" (Nuffield Languages Enquiry, 2000, p. 14, in Coyle *et al*., 2010, p. 155). Besides, bilingual education is quite unheard of in the United Kingdom and this could be due to the fact that the term CLIL is frequently associated with teaching through the English language, as reported by Dalton-Puffer *et al.* (2010). In addition, it is commonly believed that the campaign and the results of the 'Brexit' referendum favouring the United Kingdom leaving the European Union may not have helped to promote positive attitudes towards multiculturalism or multilingualism.

So far, the most relevant CLIL studies in Europe at a primary school level have been mentioned. Additionally, the next section will analyse CLIL in Spain at primary school level, both in the monolingual and bilingual regions. Special attention will be paid to the Valencian Community, as is the setting where the present investigation takes place.

1.3.2 CLIL in Spain

Spain is one of the countries where CLIL programmes have grown exponentially. As it has been reported by Coyle "Spain is rapidly becoming one of the European leaders in CLIL

practice and research" (Coyle *et al*., 2010, p.8). In this section, we provide a description of the rapid growth of CLIL in Spain, paying attention to the scenario of our study: primary education.

First of all, Spain presents a considerable diversity of multilingual models, not only because of the decentralised educational system, but also due to the fact of having bilingual and monolingual regions. To fully understand CLIL in Spain, we need to mention the legislative framework: the Spanish Constitution (1978), the Organic Act on the Right to Education (LODE, 1978), and the Organic Law of Education 2/2006, (*Ley Orgánica de Educación* LOE 2006) establish the principles of the educational system of Spain. Furthermore, in December 2013, a new education law titled *Ley Orgánica de Mejora de la Calidad Educativa* (LOMCE) appeared as an alternative to the law of LOE. However, more recently a new educational law titled *Proyecto de Ley Orgánica de modificación de la LOE* (LOMLOE) was approved in November 2020. The principal features of (LOMLOE) were to reinforce multilingualism prioritising minority languages and support the need to learn two additional languages. Nonetheless, it is worth mentioning that despite the fact that the Organic Act of Education constitutes the educational structure for all the country, the educational system is in charge of each region. That is to say, each autonomous region creates its particular educational system.

In this context, CLIL programmes in Spain started back in 1996, where the Spanish Ministry of Education, Culture and Sports and the British Council signed a multilingual programme agreement, by means of which students were taught by combining the Spanish and British curriculum to educate a multilingual society. From that time, the amount of CLIL projects has been established by the different regions. As reported by Lasagabaster and Ruiz de Zarobe (2010), 36 public schools in the Basque Country have CLIL projects in schools, 518 primary and secondary schools in Andalusia, 135 primary and secondary schools in Catalonia, 20 schools in La Rioja, 200 in Galicia and 206 schools in Madrid. Most of the subjects which have been taught following the CLIL approach are: Physical Education (henceforth, PE), Natural Sciences, Social Sciences and Arts and Crafts. Nevertheless, the intensity of exposure of the target languages in each of the CLIL programmes will depend on each school and each autonomous region.

In addition, the implementations of CLIL programmes are applied in the monolingual and bilingual communities in Spain, choosing English as the preferred language. In fact, the presence in Spain of monolingual and bilingual communities results in different multilingual models within the country (Lasagabaster & Ruiz de Zarobe, 2010). In monolingual

communities, Spanish is the official language. In bilingual communities Spanish is the official language, but it coexists with another co-official regional language (Basque, Catalan, or Galician).

Bearing this in mind, CLIL has been given growing priority as the best way to foster multilingualism and language diversity, some of the aims of European policies in the last decade (Lasagabaster & Ruiz de Zarobe, 2010). Especially in bilingual communities, where the regional language is taught as a subject, CLIL stands as an ideal solution for incrementing exposure to the foreign language in an already packed curriculum.

Due to the scope of this thesis, only the most distinguished studies involved in CLIL programmes from different communities will be outlined by dividing them into monolingual or bilingual regions.

In what follows, we will first refer to CLIL research taking into account monolingual regions, such as the Comunidad Autónoma de Madrid, La Rioja, and Castilla-La Mancha. The Comunidad Autónoma de Madrid has been implementing CLIL since the late 1990s. Sotoca-Sienes and Muñoz-Hueso (2014) analysed primary students' achievements in the L1, the additional language, and content subjects. A total of 2,153 participants, recruited from CLIL and non-CLIL public schools, participated in the study. The authors took learners' end-of-year qualification and two external tests (the Diagnosis Test and CDI Test) as research tools. Students' grade was used in order to measure pupils' academic achievement for Spanish, English, Mathematics and Science or Environmental Studies (the CLIL Science subject), and the two external tests were used to measure learners' competence in Mathematics and Spanish. The analyses of the external tests indicated that the CLIL schools outperformed the non-CLIL ones in Spanish and Mathematics. Nevertheless, concerning students' end-of-year qualification, the non-bilingual schools obtained better results than the bilingual ones in Environmental Studies and English. The authors allud to the young age of the participants to explain the lack of statistically significant differences between groups, as well as to teachers' higher expectations on bilingual programmes to achieve content and language learning.

Anghel *et al.* (2016) compared students' exam results and reported different findings from those reported by Sotoca-Sienes and Muñoz-Hueso (2014). The authors examined a total of 324 sixth-grade primary school level pupils in 25 schools before and after they entered the bilingual programme, with a control group of non-CLIL schools. A standardised test was sat

by all students. The exam consisted of two parts: the first part included dictation, language, reading and general knowledge tests, and a second one comprised Mathematics exercises. It should be noted that the tests were conducted in Spanish for all pupils, regardless of school type. Anghel *et al's.* results (2016) indicated that the bilingual programme seemed to have negative effects in terms of content, although not on mathematical skills and reading in Spanish.

In the context of the community of La Rioja, Ojeda-Alba (2009) analysed the English vocabulary of 86 primary school learners in year six. Participants were divided into two groups: a CLIL group of 44 and another group of 42 students. Subjects were recruited from two semi-private schools in Logroño. Both groups had the same amount of exposure, but the CLIL group had studied in the foreign language for two years. In order to identify learners' competence in English vocabulary, participants were asked to carry out a lexical test. Contrary to expectations, the non-CLIL group outperformed the CLIL group, although the authors called for further investigation on the topic.

In response to this call for future research, Canga-Alonso (2015) also analysed students' vocabulary in CLIL and non-CLIL settings. The authors examined a total of three language tests. Results of the study showed that CLIL students scored slightly higher in terms of receptive vocabulary. However, the scholars did not take into account learners' contact with the target language outside the school, and they acknowledged that there is a need to further investigate this issue.

Additionally, Agustín-Llach and Canga-Alonso (2016) conducted a study in the same community, examining students' vocabulary over time. Participants from the study were recruited from 4th, 5th and 6th grade from the same school. Subjects were divided into two groups: one group ($n = 49$) who had only received English classes and the CLIL group ($n = 58$) who had been receiving extra exposure to English in natural science lessons for two hours a week since grade 1. Data for this study were collected using 10 minute vocabulary tests during class time in three consecutive school years. Findings from the study showed no significant gains in vocabulary. Additionally, although CLIL learners outperformed the non-CLIL group, similar patterns of lexical development were observed between the two groups. Finally, the authors pointed out that the amount of exposure to the language did not lead to lexical gains in young learners, but more benefit may be expected as they grow older.

The lexical side of writing has also been analysed at a primary school level by Agustín-Llach (2017). The author compared the lexical profiles of young learners. A total of 139 students participated in the study: 72 CLIL learners and 68 non-CLIL. Learners attended 4th of Primary, and had Spanish as their L1. CLIL learners had received 700 hours of English and traditional learners 419. Students' writing were analysed by frequency bands of words used, word origin, L1 influence in lexical production, phonetic spelling, and learners' vocabulary sizes. Findings from the study showed that despite the difference in amount and nature of the input received, very similar results were obtained.

More recently, Nieto-Moreno (2022), explored the effect of CLIL on L1 literacy development through a large-scale research project conducted in Castilla-La Mancha. The study compared the writing scores of two groups: CLIL and non-CLIL learners, aged 9-10. The results showed that CLIL did not hinder L1 literacy development, as there were no significant differences in overall writing between the two groups. However, differences in achievement were found depending on the type of instruction (CLIL vs non-CLIL) in certain areas. The CLIL students performed better in receptive vocabulary and spelling.

Up to here studies related to the CLIL approach in the Spanish monolingual regions have been laid out. Next, studies in the Spanish bilingual regions will be reviewed. Regarding the bilingual communities, five bilingual regions stand out for their research into the effects of CLIL on foreign language: The Basque Autonomous Community, Catalonia, Galicia, the Balearic Island and the Valencian Community.

The Basque Autonomous Community is ranked as one of the most active regions in integrating content and language in educational context. As a result, a multitude of studies in the past few years has examined the outcomes of the CLIL approach in the Basque Country. In this line, it is worth mentioning the results reported by the research group in English Applied Linguistics (REAL) in the Basque Autonomous Community, where well known researchers have investigated the outcomes of the CLIL approach in this bilingual community. Results from this research group showed not only the positive impact of CLIL in the improvement of general language skills and the acquisition of subject content, but also the effect that CLIL has on students' positive attitudes towards trilingualism (Pérez-Cañado, 2012).

One of the first studies conducted in the Basque Country, conducted by Jiménez-Catalan, Ruiz de Zarobe, and Cenoz (2006), examined the acquisition of the English language of primary

school children in CLIL programmes. Researchers examined the English language of participants by taking a Cloze test designed to measure lexical, grammatical and discursive competence. Also, a reading comprehension task, a receptive vocabulary test and a writing task was used to analyse the English language of primary learners. Findings from the study showed that CLIL students showed greater lexical richness than the non-CLIL group. Additionally, CLIL students used a larger number of lexical verbs, which is a synonym for lexical sophistication and higher language level.

More recently, in Catalonia, Coral-Mateu, Lleixà-Arribas, and Ventura (2018) focused on students' reading and listening competence, which was measured by means of a state test of English language competence. Participants were recruited from a subset of 85 primary schools which applied a CLIL programme integrating PE and English language learning. Outcomes from the study emphasised that CLIL students outperformed non-CLIL students, and confirmed that the implementation of CLIL approach in schools had a positive impact on students' learning. In the same region of Catalonia, other researchers have focused on the discourse patterns and the use of different methodologies. Pérez-Vidal (2007) contributed to this matter by analysing the incidence and relevance of focus on form in a small sample of CLIL lessons. The researcher recorded three CLIL lessons: a Geometry lesson in primary and Physics and Biology classes in secondary. The instruments of this research were an adaptation of the categorisation used by Bernhardt (1992) study of Canadian immersion programmes. Findings from the study showed that there was a significant concern for meaning, but that virtually no focus on form could be found in their interactions with CLIL students. In addition, the author raised the need for further investigation on this matter, especially at primary educational level.

In Catalonia, another study conducted by Pladevall-Ballester and Vallbona (2016) was carried out analysing the impact of CLIL in the receptive skills (reading and listening) of 5th and 6th primary learners. Participants were recruited from four state-funded private schools, and participants were divided into two groups: one group was exposed only to English as a Foreign Language (henceforth, EFL) sessions and the other one exposed to EFL sessions plus an additional CLIL hour session per week applying the CLIL approach to the science subject and the other two to the arts and crafts subject. The research method was based on Cambridge language tests at four different times during two academic years. To increase the reliability of the study, the total amount of exposure up to each testing time was kept the same among both

groups. Findings showed that the control group significantly outperformed the CLIL group in listening. However, no significant differences were noted regarding the reading skill among the groups. Researchers highlighted that results cannot be generalised, as some discrepancies among the content subjects were observed. The negative CLIL outcome for students' listening competence can be explained by the arts and crafts relying more on visual support than the science subject. Furthermore, the science subjects required more cognitive attention and complex vocabulary, while in the arts and crafts subjects did not. As a consequence, data regarding the listening skill needed further examination. Researchers concluded that the CLIL implementation was new to the teachers, which probably affected their instructional skills.

In the Galician context, the CLIL approach has been applied since the 90s. However, it has only gained popularity since 2007, when research substantiated the effectiveness of the CLIL approach. For instance, research conducted by San Isidro (2010) analysed primary learners' four linguistic skills reporting significant differences in all four skills in favour of CLIL students in Galicia. Furthermore, a longitudinal study, carried out by San Isidro and Lasagabaster (2018), examined a CLIL programme in the Galicia context. A total of 44 students' participated in the study. The study used qualitative and quantitative data to give insight into the effectiveness of CLIL approach. The investigation analysed students' competence in Galician, Spanish and English concerning content learning and stakeholders' attitudes towards Foreign Language (henceforth, FL) learning and CLIL. The analysis of the study regarding the three curricular languages showed that CLIL students outperformed their non-CLIL peers in English. Therefore, it was claimed that English had no negative impact on the two other official languages of the bilingual community: Galician and Spanish. Furthermore, outcomes on learners' attitudes towards the CLIL approach, favoured the CLIL group as well. Participants who were under the CLIL approach had a more positive attitude towards learning than the FL group. San Isidro and Lasagabaster's (2018) study made an important contribution to the effect of CLIL in the Galician context, taking into account the student's multilingual competence. However, San Isidro and Lasagabaster's (2018) study used CLIL and non-CLIL settings without considering the intensity of such programmes. Thus, the present study aims to cover this gap by analysing students' multilingual competence in different CLIL intensity programmes. Furthermore, research conducted in the Balearic Island and the Valencian Community are worth analysing because both communities use Catalan as minority languages. Regarding research on the Balearic setting, two studies conducted by Rallo-Fabra and Jacob (2015) and Prieto-Arranz, Rallo-Fabra, Calafat-Ripoll, and Catrain-González (2015)

are worth mentioning. The former explored learners' production, with a focus on oral skills, and the latter examined participants' receptive skills. Rallo-Fabra and Jacob (2015), in Majorca, examined a total of 43 subjects, 21 participated from the CLIL group and 22 from a non-CLIL group. The study aimed to analyse speaking skills, mainly learners' fluency and number of vowel errors in English, in two different groups. The first group not only received the three hours a week of English classes, but the subject of science was taught in English. On the other hand, the second group was taught under a non-CLIL approach. In order to identify and assess the role of CLIL on students' oral skills, data were collected at two points in time: at the beginning and two years after the CLIL approach started. To measure participants' oral production, Rallo-Fabra and Jacob (2015) used two tasks: (1) a reading aloud guided task and (2) telling a story. Findings from the study reported no significant differences in fluency, and students' pronunciations of English vowels were unaffected. As a consequence, Rallo-Fabra and Jacob (2015, p. 174) claimed that the "uniformity of both learner groups in terms of pronunciation achievement seriously questions the effectiveness of CLIL to enhance learners' oral skills". Finally, the authors mentioned that the quantity and quality of the spoken input that CLIL students received needed to be improved, for instance, by the media.

Prieto-Arranz *et al.* (2015) obtained similar results analysing 87 participants' receptive skills, who were under CLIL approach. Participants were recruited from six state schools, and the group were divided into two groups: a non-CLIL group, where 37 students were studying English in a non-CLIL setting, and a CLIL group of 50 students learning Science through English. To measure participants' receptive skills, two listening comprehension tests and two reading comprehension tests were used. Findings from the study reported that both groups showed linguistic gains, and the CLIL students did not outperform their mainstream peers, in all the tests.

Contrary to Rallo-Fabra and Jacob (2015) and Prieto-Arranz *et al.* (2015) findings, Menezes and Juan-Garau (2015) reported benefits from implementing the CLIL approach in the classroom. The authors analysed a total of 185 students' willingness to communicate in CLIL contexts. Participants were recruited from three semi-private schools that were classified into two groups: CLIL group, who received Science in English, and a non-CLIL group. Data were collected by means of two questionnaires, with a focus on students' willingness to communicate. Results confirmed that the CLIL approach foster participants' willingness to

communicate. Additionally, this study found a correlation between CLIL and non-CLIL students' willingness to communicate and their achievement.

The research reported above was conducted in CLIL primary schools in the Balearic Island share with the Valencian Community some similarities. Both governments have tried to encourage multilingualism by applying the CLIL approach to education. The plurilingual programmes in both communities introduced the CLIL approach in an attempt to develop knowledge of the regional languages plus knowledge of English as an additional language.

Focusing on the Valencian Community, since 1983, there has been a law (*Llei d'Ús i Ensenyament del Valencià*) to adjust the use and teaching of the Valencian language in the Valencian Community. This law details how the use of the Valencian language can be applied through different stages: as a compulsory subject, as a minority language, and in full immersion. Furthermore, since January 2018 there is a new Decree of Plurilingualism (Decret 9/2018, 27th of January). This new legislation has been applied at the primary stage from the year 2018 and it is expected to reach Baccalaureate by the year 2023. Currently within the "*Programa d'Educació Plurilingüe i Intercultural*" the choice between Spanish and Valencian language is no longer an option. In addition, the law includes different options and levels of CLIL to develop the three instructional languages: Spanish, Valencian and English.

Finally, to the best of our knowledge, intensity of CLIL programmes is an issue in need of further research. Although the role played by intensity of exposure has been analysed in EFL with adults (Serrano & Muñoz, 2007) and in CLIL secondary school context (Merino & Lasagabaster, 2017), we have no knowledge that the impact of intensity of exposure has been investigated at CLIL primary education. Serrano and Muñoz (2007) analysed three different types of EFL programmes in which the distribution of time was different. Findings of the study revealed that hours of instruction and their concentration was beneficial for students' learning. However, the study did not take into account several languages, a gap that the present study aims to cover.

Intensity of exposure is also addressed by Merino and Lasagabaster (2017), who conducted a study to examine the effect of CLIL sessions and their intensity on the learning of English. Participants were 393 secondary students enrolled in the different intensity of CLIL programme. Findings showed that there was a significant impact of the numbers of CLIL sessions on students' proficiency in English. Following Merino and Lasagabaster (2017), the

present study aims to explore the intensity of CLIL programmes in another population, that of young learners and in the Valencian school context.

To sum up, after reviewing CLIL research in Europe and Spain, we have acknowledged some research gaps that the present study aims to fulfil: First, there is a need to analyse CLIL outcomes at primary education level in Valencian Community. Secondly, at primary school level, linguistic gains have been measured on English proficiency, while proficiency in other languages has been ignored. Thirdly, despite the dual-focus on CLIL approach, few studies analyse gains in language and content, an issue that the present study will examine. Finally, most studies compare CLIL versus non-CLIL groups, without considering the intensity of exposure to languages within the school setting. An aspect that the present investigation will look at.

So far, we have provided an overview of CLIL research in primary education. However, since the present study examines students' writings in CLIL settings, the next section provides an overview of CLIL research on writing.

1.4 CLIL research on writing

Research on the benefits of CLIL in written development is uncertain. While some researchers have reported the existence of limited progress regarding writing in CLIL contexts (Dalton-Puffer, 2007; Llinares & Whittaker, 2010), others have found benefits of CLIL on written competence (Ruiz de Zarobe, 2011; Llinares, Morton, & Whittaker, 2012). Nevertheless, the existing body of research on students writing under the CLIL approach has been mainly conducted at secondary and tertiary levels, and only a few studies have been conducted in primary education (Merisuo-Storm & Soininen, 2014; Pérez-Vidal & Roquet, 2015) Furthermore, according to Graham and Eslami (2021), research on CLIL and writing has tended to focus more on language rather than on both content and language assessments. This is an issue that the current study addresses by examining both the content and language proficiency of primary school students' writing. Thus, this section, first provides an overview of research on written development in CLIL contexts and secondly, research taking into account learners' written competence in L3 will be reviewed.

Focusing on the research conducted in secondary education, Lasagabaster (2008) analysed writing skill together with the other linguistic skills. A total of 198 participants were distributed in three groups: one group of non-CLIL students in the fourth year of secondary education,

another group of CLIL students in the fourth year of secondary education and a third group composed of CLIL students in the third year of secondary education. Data were collected by the use of four English tests corresponding to four skills (grammar, listening, speaking and writing). Findings from the study showed that students in the CLIL groups significantly outperformed their non-CLIL peers in every single test, and in overall English competence. Results also revealed that participants from the CLIL group, who were in the third year, caught up with their fourth year non-CLIL peers, and scored significantly higher than the non-CLIL students in overall foreign language competence. These results are in line with Lorenzo *et al.* (2010) who also examined students' language proficiency, taking into account learners' language skills (reading, listening, speaking and writing) in CLIL and non-CLIL students.

In line with Lasagabaster (2008), similar results were obtained by Navés and Victori (2010), although the authors examined general language proficiency, looking at primary and secondary students' writings. A total of 378 subjects participated in the study. Participants were divided into two groups: CLIL versus non-CLIL. To determine students' language proficiency a listening test, a grammar test and a dictation in English were used. In addition, students' compositions were analysed for accuracy, fluency, syntactic complexity and lexical complexity. Findings from the study showed that CLIL students outperformed non-CLIL learners, both at secondary and primary educational level. The authors also found that CLIL students not only scored better in all the measures analysed, but they also outperformed students who were one or two grades ahead. This occurred both in primary and secondary students' writings.

Additionally, Basterrechea and García-Mayo (2014) also analysed secondary CLIL and non-CLIL students' writing skills. Researchers analysed the production of a specific morphological feature, the English 3rd person singular present tense marker -s. A total of 116 students participated in the study. Students had to complete two tasks: a collaborative and individual dictogloss. Findings revealed that those students in the CLIL group scored better when producing more instances of the 3rd person singular-s but not in a significant manner. Furthermore, results showed that those students working in pairs in the CLIL group obtained significantly better results.

Focusing especially on the skill of writing, several researchers have used analytical complexity measures to analyse the impact of the CLIL approach on students' written competence. For instance, Jexenflicker and Dalton-Puffer (2010) conducted a study to analyse the impact of the

CLIL approach on different aspects of written language competence. For this purpose, the authors compared a total of 156 students from CLIL and non-CLIL groups from two secondary schools in Austria. Findings from the study reported that CLIL students' writing included more complex structures, and in the area of lexico-grammar the CLIL students showed significant advantages throughout, as they did in vocabulary range and orthographic correctness. Similar results were obtained by Jävinen's (2005) investigations. The author examined 1st to 6th-grade students at a primary school level and examined the acquisition of subordination and relativization. Findings from the study showed that students from the CLIL group performed more accurate and complex sentences than the non-CLIL group.

Contrary to these findings, Jiménez-Catalán and Fernández-Fontecha (2015) carried out an investigation analysing the use of lexical phrases in written compositions by CLIL and non-CLIL students. The purpose of the study was to analyse students' fluency and proficiency in their writings. Participants from the study were recruited from two different primary schools; one CLIL group from the Basque country and a non-CLIL group from La Rioja, 30 participants from each community. Data were gathered through a language level test consisting of an eight-point cloze test and a written composition. Findings from the study showed that, both groups, CLIL and non-CLIL, revealed a positive correlation between the number of lexical phrases and the language level. Nevertheless, it was found that CLIL learners' language level was significantly higher. The authors acknowledged that these findings cannot be generalised. On the one hand, students' writing may have been influenced by the language level rather than having received a CLIL versus a non-CLIL instruction. The authors also mentioned that the increase of exposure to English rather than the CLIL approach may have influenced research outcomes. Considering exposure to the target language, Ruiz de Zarobe (2011) carried out a study with students who had English as a L3. Participants were divided into two groups: CLIL and non-CLIL. Findings revealed that CLIL students achieved higher scores than those in regular programmes when writing in English as a L3. Even though this study considers the L3 background of students, there is a need for further research on CLIL writing, taking into account proficiency in different languages.

So far, we have looked at CLIL research at primary and secondary school level without focusing especially on students' development of writing skills. However, longitudinal studies have addressed students' literacy skills. For instance, Whittaker, Llinares, and McCabe (2011) carried out a longitudinal study on CLIL contexts with secondary students. The aim of the study

was to analyse the linguistic resources used to create coherence and appropriate registers in the CLIL learners' written texts. Participants wrote a text in their history class at the age of 6 and 12. Findings from the study revealed that over the four years, students developed some complexity in their writings as well as the control of textual resources increased.

Another longitudinal study was conducted by Merisuo-Storm and Soininen (2014), who examined the impact of CLIL on the development of children's literacy skills. Participants were primary learners and data were collected from the beginning of the first grade to the end of sixth grade. Participants were distributed in two different groups. One group studied different school subjects in Finnish and in English from first grade, while the other group studied all school subjects in Finnish and started to learn English as a L2 in third grade. The researcher designed two tasks in order to determine the development of children's literacy skills: a writing dictation and a writing story. Findings from the study reported that after two study years, the reading and writing skills of the group who were instructed with more hours scored significantly better than those who received less hours. The authors also found that after four school years, students' creative writing skills improved from bilingual instruction.

Similarly, Pérez-Vidal and Roquet (2015) conducted a longitudinal study to investigate CLIL secondary education learners' linguistic progress over one year. A total of 100 subjects, 50 in the CLIL groups and 50 in non-CLIL groups participated in the study. Participants were distributed in two groups: one enrolled in a Science class with a CLIL approach and another with a Science class following a traditional approach. The authors used analytical complexity, accuracy and fluency (henceforth, CAF) measures to determine the impact of CLIL on writing development. Findings from this study showed that participants under the CLIL approach performed better in their writing.

Along the same line, Gené-Gil, Juan-Garau, and Salazar-Noguera (2015) analysed the impact of CLIL in students' writing development. Participants for the study were recruited from three public secondary schools, and divided into two groups: a CLIL group of 30 learners and another group of 15 non-CLIL learners. All students from both groups had three hours of English, but the CLIL group was exposed to three extra hours, where the subject of Science was taught through the English language. Data for this study were collected using written composition at four research times, and students' writings were analysed for CAF taxonomy. Results from the study showed that both groups produced more accurate writings over time, but it was the CLIL group who eventually wrote more complex and fluent compositions. The impact of CLIL on

students' fluency was also reported by Knoch, Rouhshad, Oon, and Storch (2015) study on secondary learners' written composition, analysed for accuracy, fluency, and complexity. The author reported that, although participants' essays did not improve significantly over time for accuracy, grammatical and lexical complexity, fluency improved significantly.

Moving to research on L3 learners' writing, it is argued that languages are also interconnected in writing, and that the more languages one knows, the better (Kobayashi & Rinnert, 2023). However, most attention has been given to secondary school level and less attention has been paid to primary school level.

For instance, Cenoz and Valencia (1994) analysed the influence of bilingualism on students writing in the third language in the Basque country. The aim of the study was to measure participants' writing skill in the English language of students' instructed through Spanish and Basque. A total of 320 students participated in the study. The researchers used the taxonomy created by Jacobs *et al.* (1981) to analyse students' writing compositions. The components to be rated are content (how well they understood and developed the topic), organisation (how organised, fluent and cohesive the text is), vocabulary (how sophisticated, effective and appropriate the vocabulary is), language use (how well complex constructions and grammar are) and mechanics (how effectively punctuation and spelling are used). Findings from the study revealed that bilingualism was a good predictor of students' written performance. The researchers concluded that immersion in the minority language for Spanish-speaking students and for Basque-speaking students had positive linguistic outcomes. This pioneer study suggests the need to explore the effects of bilingualism not only in English, but also in Basque and Spanish.

Similarly, Sanz (2008) examined L3 secondary students' written competence. Participants were recruited from two different contexts: 77 monolingual Spanish speakers and 124 bilingual (Spanish/Catalan) speakers. Findings revealed the positive effect of bilingualism on the acquisition of the L3 when comparing the writing skills of bilingual and monolingual learners of English. In the same line, Sagasta (2003) analysed the acquisition of L3 writing competence taking into account the variable of language used at home. A total of 155 participants participated in the study. Participants were recruited from a secondary school in the Basque Country. Although the language of instruction for all participants was Basque, half of them used Basque at home while the other half used Spanish. In order to analyse learners' writings, Sagasta (2003) asked the participants to write a letter to a host family in England. To analyse

students' writings, the taxonomy created by Jacobs *et al.* (1981) was used. Sagasta (2003) revealed that those students who used Basque at home outperformed their peers in writing in Basque. Nevertheless, results concerning students who used Spanish at home revealed that there were no differences among the students who spoke Basque at home and those who spoke Spanish at home (see also Cenoz, Arocena, & Gorter, 2013). Therefore, Sagasta (2003) noted that students transferred the writing skills acquired through instruction in the minority language when writing in the dominant language. In fact, those students who scored high in Basque and Spanish scored higher in English. Additionally, those learners who used Basque at home also performed better in English. Findings from this study confirm the influence of the level of language competence across languages. As reported by the author "Students who make active use of the minority language in the Basque Country are highly competent speakers of both Basque and Spanish, and it is probably this degree of bilingualism that gives them an advantage over their mainly Spanish-speaking peers when confronted with a third language (…) language use outside the curriculum plays an important role as results in this study" (p. 40). Finally, Sagasta (2003) found that all the measurements (fluency, grammatical complexity, lexical complexity and accuracy) in Basque, Spanish and English were highly correlated in the case of the students who used Basque at home, indicating that writing in each of the languages is not an independent process.

Findings reported in Sagasta (2003) were supported in another study by Arocena (2017), who analysed the assessment of writing skills in an educational context of the Basque country. A multilingual context, similar to the one of the present study, and in which Spanish, English and Basque are used as languages of instruction. The aim of the study was to analyse students' multilingual written performance. A total of 70 participants in the 3rd year of secondary education, recruited from three different schools, took part in the study. Data were collected by means of two types of instruments. On the one hand, a background information questionnaire to gather information about age, gender, school, and different aspects of their language. On the other hand, each student wrote three compositions, one in each of the languages of instruction, that is to say, Basque, Spanish and English. The students were given a different picture for each writing task, but the directions for task performance were exactly the same. Participants' writings were assessed following Jacobs *et al's*. (1981) taxonomy. The components to be rated were content (how well they understood and developed the topic), organisation (how organised, fluent and cohesive the text is), vocabulary (how sophisticated, effective and appropriate the vocabulary is), language use (how well complex constructions and grammar are) and

mechanics (how effectively punctuation and spelling are used points). Findings from the study reported that the students who used Basque with their parents obtained significantly higher scores in Basque and English than those that used Spanish with their parents. This demonstrated that the Basque speaking students were somewhat better in writing in Basque, as could be expected, but these students have similar skills in writing in Spanish compared to their Spanish speaking classmates (except for mechanics where the Spanish speakers do slightly better). With regards to writing skills in English, the Basque speaking students scored significantly better than the Spanish speakers on three of the five components on average. Additionally, the researcher analysed the correlation between participants' written performance in the three languages. The correlations between the languages were particularly significant for content and mechanics which means that a student who wrote the content well (or poorly) in one language, is more likely to do so as well (or poorly) in the other two languages; the same goes for mechanics, (spelling, etc.). The correlations for vocabulary between the languages are also significant. However, the correlations were weaker for language use and organisation, although there is a significant correlation between organisation in Spanish and English, as well as for language use between Basque and English, and between Spanish and English. To our knowledge, this is the first study analysing students' writing in three languages, but it is conducted in the context of secondary education and without considering some of the individual variables addressed in the present study (see Chapter 3).

In this section we have examined cross sectional and longitudinal studies on students' writing under the CLIL approach, both at secondary and primary school level, together with studies focusing on L3 writing. Studies conducted at tertiary level have not been reviewed since the characteristics of university context are different from the context of the present investigation. From the studies reviewed in this chapter we can claim that research to date tends to focus on exploring CLIL versus non-CLIL writing performance, rather than exploring the impact of intensity of CLIL programmes on students' writing competence. Moreover, most of the research has been conducted at secondary school level, and little attention has been paid to primary school level. Besides, we have found that: (i) few studies have analysed L3 multilingual writers, and (ii) as far as our knowledge, not a single study has analysed L3 multilingual writers in a CLIL context with different exposure to languages. These research gaps will be addressed in the present study.

1.5 Summary of the chapter

The aim of chapter 1 was to situate the present study within the CLIL approach in the multilingual context of the Valencian Community. First, several definitions of CLIL, together with the origins of it (Canadian immersion programmes and Content-based instruction) have been reviewed. We agree that CLIL is a flexible educational approach in which a non-L1 language is used to teach a non-language subject. In other words, under the CLIL approach students' not only learn a language, but also a content subject. As a flexible approach, although the CLIL approach shares the same parameters (Dalton-Puffer & Smit, 2013), it may be adapted to the context where it is implemented. Furthermore, we have referred to current views of CLIL. Specifically, Coyle's 4Cs (1999) and CLIL Matrix (2005), together with Cenoz's (2009) Continua of Multilingual Education, and Cenoz and Gorter's (2011) "Focus on Multilingualism" seem adequate to frame CLIL programmes in the context of the Valencian Community. A Community, where different intensity CLIL programmes are being implemented, and in need of exploring gains in students' multilingual competence.

Secondly, previous research on CLIL at primary school level, both in Europe and Spain, has been examined. After this revision we have acknowledged some research gaps that the present study aims to fulfil: First, there is a need to analyse CLIL outcomes at primary education level in Valencian Community. Secondly, as far as we know, linguistic gains have been measured on English proficiency, while proficiency in other languages has been ignored. Thirdly, in spite of the dual-focus on CLIL approach, few studies have analysed gains in language and content. Finally, most studies compare CLIL versus non-CLIL groups, without considering the intensity of exposure to languages within the school setting.

Thirdly, we have examined cross sectional and longitudinal studies on students' writing under the CLIL approach, both at secondary and primary school level, together with studies focusing on L3 writing. From the studies reviewed, we can claim that research to date tends to focus on exploring CLIL versus non-CLIL writing performance, rather than exploring the impact of intensity of CLIL programmes on students' writing competence. Moreover, most of the research has been conducted at secondary school level, and little attention has been paid to primary school level. Besides, as far as we know, although a few studies have examined students' L3 writing, there is no study that analyses learners' writing in all the school languages in a CLIL context.

Considering research gaps in previous investigations, the current study aims to analyse CLIL primary learners' written performance in the three languages of the Valencian Community: Catalan, Spanish and English. So far, writing has been mainly evaluated using the CAF dimensions, and little attention has been paid to pragmatics. In order to extend our knowledge of students' writing competence, the following chapter will deal with the pragmatic dimension in writing.

CHAPTER 2. COMMUNICATIVE APPROPRIATENESS

CHAPTER 2

COMMUNICATIVE APPROPRIATENESS

Chapter 2 deals with communicative appropriateness. Section 2.1 presents the definition of pragmatic competence and reviews different models of communicative competence that include pragmatics as a core element. In the following Section (Section 2.2), we narrow down our interest to pragmatics in multilingual settings and provide the main research findings from multilingual pragmatics with multilingual learners. In this section, we also explore pragmatics in CLIL, the area in which the current study makes the greatest contribution. This section is an overview of the main studies of CLIL and pragmatics, giving special attention to students' writing skills. Following this Section, 2.3 describes communicative appropriateness in writing, highlighting the main research conducted so far. In this Section, we also propose a taxonomy to assess students' communicative appropriateness while they engage in language use with a communicative goal in CLIL contexts, as well as previous research conducted considering the three components of the taxonomy (pragmatic, textual and linguistic). Finally, Section 2.4 is a summary of the main ideas discussed in the chapter.

2.1 Communicative competence

Hymes (1972) defined communicative competence as the ability to use appropriate language. This means not only grammatical knowledge but also sociolinguistic knowledge. From this perspective, the concept of communicative competence has been reviewed by several scholars. Thus, according to Canale and Swain (1980), communicative competence included three sub-components: grammatical, sociolinguistic and strategic. In addition, Savignon (1983) and Canale (1983) introduced the discourse component, which referred to the capacity to create meaningful units of written or oral texts. At the same time, Savignon (1983) suggested that the core element in the communicative competence was the context and claimed that the strategic competence should not be learned separately (see Figure 8).

Figure 8

Savignon's communicative competence model (Savignon, 1983, p. 46)
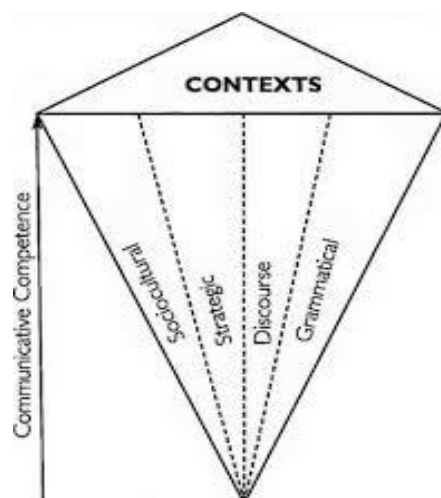
Drawing from the early definitions of communicative competence (Hymes, 1972; Canale & Swain, 1980; Canale, 1983), and especially from Canale (1983), Celce-Murcia, Dörney, and Thurrell (1995), proposed a more comprehensive communicative competence model. This model included five sub-components: linguistic, actional, discourse, strategic and socio-cultural. However, Dalton-Puffer (2007) reviewed Celce-Murcia *et al.* (1995) model and proposed a new framework illustrated in Figure 9. As illustrated in Figure 9, the core element of Celce-Murcia's (2007) model is the discourse competence (cohesion, deixis, coherence and generic structure), while the other components of the communicative competence are socio-cultural, linguistic, formulaic, interactional and strategic. Regarding linguistic competence, it refers to morphological, syntactic, lexical and phonological knowledge. While the linguistic competence balances the formulaic competence, the interactional competence focuses on the body language and the opening and closing of conversations. Finally, the two other components, the socio-cultural and strategic, are also worth pointing out. The former refers to the capability to formulate effective sentences, taking into consideration the context where the conversation is taking place. Concerning the latter, it is associated with the behaviours that help to transmit the message, such as self-monitoring and memory-related strategies.

Figure 9

Schematic representation of Communicative Competence (adapted from Celce-Murcia, 2007, p. 45)
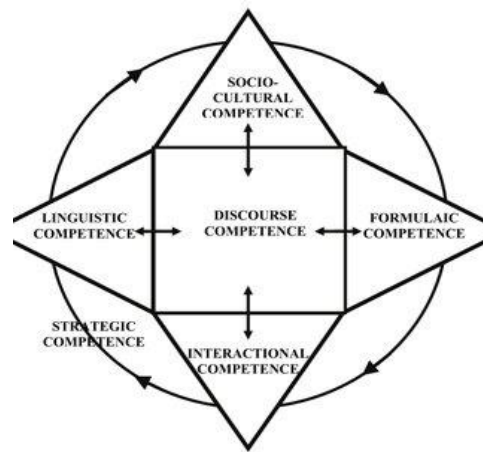
The idea of implementing discourse competence as the core element of the communicative competence (Celce-Murcia *et al.,*1995; Celce-Murcia, 2007) triggered the interest of other researchers. For instance, Alcón-Soler (2000) proposed a model consisting of three main components, (i) discourse competence, (ii) psychomotor abilities and competencies and (iii) strategic competence. The author highlighted that these components should be viewed as a whole component and not as separate sub-components. In the framework proposed by Alcón-Soler (2000), pragmatic competence is a sub-component alongside linguistic and textual sub-components of discourse competence, as observed in Table 3.

Table 3

Alcón-Soler's model of communicative competence (adapted from Alcón-Soler, 2000)

Discourse Competence	Linguistic Competence
	Textual Competence
	Pragmatic Competence
Psychomotor skills and competencies	Listening
	Speaking
	Reading
	Writing
Strategic Competence	Communication Strategies
	Competence Learning Strategies

Taking into consideration Alcón-Soler's (2000) model of communicative competence, Martínez-Flor and Usó-Juan (2006) proposed a new model including the four language skills and adding a sub-component: intercultural competence (see Figure 10).

Figure 10

Martínez-Flor & Usó-Juan's communicative competence model (adapted from Martínez-Flor & Usó-Juan, 2006, p. 16)
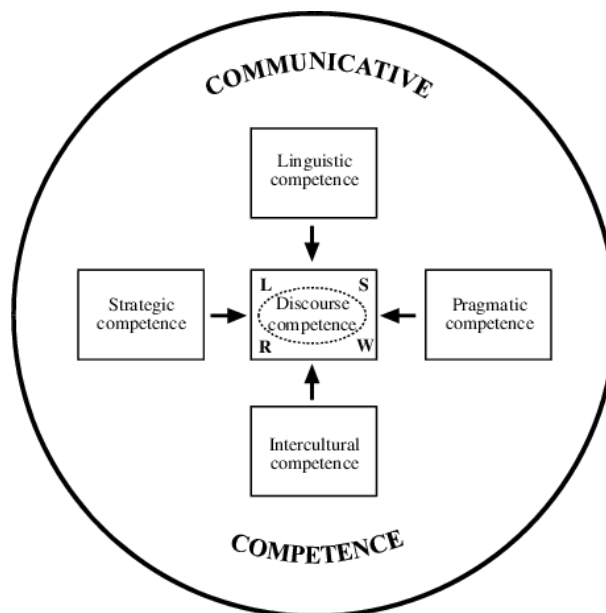
As it can be observed in the above models, the notion of Communicative competence is part of the concept of pragmatics. Looking at the origins of pragmatics, Langford-Morris (1938) defined the term pragmatics by exploring the relationship between signs and interpreters. Nevertheless, for more than three decades, language was considered to be a group of isolated words, and utterances were analysed as sets of clearly differentiated modules, which were classified at different linguistic levels such as phonemes, morphemes and verb phrases. In addition, structural paradigms (Saussure, 1959) and generative-transformational grammar (Chomsky, 1965) influenced the way language was taught, leaving aside the influence of social and contextual factors.

In order to fully comprehend the concept of pragmatics, Speech Act Theory (Austin, 1962) and Logic of Conversation (Grice, 1975) are worth mentioning. Speech Act Theory (Austin, 1962) refers to the actions that speakers perform when speaking to someone and the impact that the speaker provokes on the other person. With regards to the Logic of Conversation, Grice (1975)

deals with the interaction among speakers and suggests the following maxims of conversation: Maxims of Quantity, Quality, Relation and Manner.

Another important contribution to the field of pragmatics are the concepts of pragmalinguistics and sociopragmatics suggested by Leech (1983) and Thomas (1983). While pragmalinguistics refers to the linguistic production for transmitting communicative acts, sociopragmatics alludes to the cultural and social factors and its impact on language use. These two constituents have been used for defining pragmatics. For instance, Levinson (1983, p. 24) defined pragmatics as "the study of the ability of language users to pair sentences with the contexts in which they would be appropriate". Crystal (1985, p. 301) referred to pragmatics as "the study of language from the point of view of users, especially of the choices they make, the constraints they encounter in using language in social interaction and the effects their use of language has on other participants in the act of communication". Similarly, Rose (1999) defined pragmatics as "the ability to use available linguistic resources (pragmalinguistics) in a contextually appropriate fashion (sociopragmatics), that is, how to do things appropriately with words" (p. 173). Likewise, Kasper, and Roever (2005) defined the concept of pragmatics by distinguishing between the two constituents. According to this, pragmatics was defined as "the process of establishing sociopragmatic and pragmalinguistic competence and the increasing ability to understand and produce sociopragmatic meaning with pragmalinguistic conventions" (p. 318).

Archer and Grundy (2011) claimed that pragmatics comprises the rules of a language in given contexts. In the same line, Alcón-Soler (2012) refers to pragmatics as the combination of the use of language in specific social contexts, considering the factors in specific contexts that affect the interlocutors' language choices. More recently the term pragmatics was defined by Taguchi (2019) as "the connection between a linguistic form and a context, where that form is used, and how this connection is perceived and realised in a social interaction (p. 1).

After reviewing different models of communicative competence, as well as the concept of pragmatics, it is worth pointing out that pragmatics learning has been explored across educational settings (Cenoz, 2003; Safont, 2005; Safont & Alcón-Soler, 2012; Alcón-Soler, 2012; Portolés, 2015; Safont & Portolés, 2016; Martín-Laguna & Alcón-Soler, 2018; Portolés & Safont, 2018; Martín-Laguna, 2020). Some of these studies have been conducted in Second Language Acquisition (henceforth, SLA) classrooms and others in multilingual classrooms. Since the present study was conducted in the multilingual context of the Valencian Community, in what follows we will refer to pragmatics in multilingual educational settings.

2.2 Pragmatic competence in multilingual contexts

Most of the investigation to date in the field of pragmatic learning have followed a SLA paradigm with a focus on speech acts, such as requests (Alcón-Soler & Codina, 2002; Usó-Juan & Martínez-Flor, 2008; Safont, 2023), suggestions (Martínez-Flor & Usó-Juan, 2006), compliments (Reynolds & Kamphaus, 2003) or refusals (Kondo, 2001; Cenoz, 2003). In addition, most of the investigations have explored specific pragmatic issues, without adopting a more holistic view to assess pragmatic appropriateness. In addition, few investigations have investigated students' pragmatic learning in multilingual instructional settings (Cenoz, 2003; Safont, 2005; Safont & Alcón-Soler, 2012; Alcón-Soler, 2012; Portolés, 2015; Safont & Portolés, 2016; Martín-Laguna & Alcón-Soler, 2018; Portolés & Safont, 2018; Martín-Laguna, 2020). In what follows we will refer to research in multilingual contexts and in CLIL contexts.

Research in multilingual contexts indicates that there seems to be benefits and interactions between the students' language repertoire. For instance, Cenoz (2003) analysed the performance of students' requests in English at university level. A total of 69 students participated in the study. The participants' L1 were Spanish and Basque and were divided into two different groups: one group of 49 fluent participants in English, and another group of 20 non-fluent participants. Data were collected by means of discourse completion task, and findings from the study showed similarities between requests performed in Spanish and English by the fluent group. In the same manner, Safont (2005) examined the pragmatic competence and pragmatic awareness of monolingual and bilingual learners of English at university level. A total of 160 students participated in the study, in which monolingual students had Spanish as their L1 and bilingual students had Catalan and Spanish. The aim of the study was not only to examine the production of students' requests in oral and written, but also the correlation of requests by monolingual and bilingual, together with the impact of the level of proficiency and pragmatic instruction over time. Findings from the study showed that bilingual learners outperformed monolingual learners showing a higher pragmatic awareness and better formulation of requests.

Similar results were obtained by Safont and Alcón-Soler (2012) who analysed bilingualism and the impact of instruction on third learners' use of request modifiers. A total of 140 participants took part in the study. Participants were divided into two groups, according to their L1, regular use of the language, and language of instruction at school. Finding from the study showed that bilingual students outperformed monolingual learners. Similarly, Alcón-Soler (2012)

investigated the benefits of teaching the speech act of refusal from a discourse perspective on third language learners' pragmatics. Additionally, the investigation also analysed whether receptive and productive bilinguals responded to pragmalinguistic, sociopragmatic, and linguistic information in different ways during the planning and execution of refusals in English. A total of 92 students of English participated in the study: 52 receptive bilingual students and another group of 40 productive bilingual learners of Catalan and Spanish learners were recruited for the study. The investigation was carried out following a pre-test and a post-test research design. Data which was collected by means of retrospective verbal reports, was gathered before and after receiving instruction on refusals. Findings from the study showed that both groups increased their pragmalinguistic awareness of refusals in English. However, the productive bilingual group seemed to display a higher degree of metapragmatic awareness.

Focusing on classroom discourse, and considering infant and primary students, Portolés (2015) conducted a study focusing on awareness and comprehension of requests. A total of 402 students who were learning English as a third language participated in the study. Data were collected by means of an audiovisual pragmatic test, where learners had to decide the appropriate request move in the three official languages of the Valencian Community (Spanish, Catalan and English). Findings from the study showed that those learners who had the three languages in their repertoire showed more awareness in L3 English. In the same line, taking into consideration early pragmatic multilingualism, Safont and Portolés (2016) analysed multilingual classroom discourse and formulaic speech in two multilingual classrooms. A total of 184 participants participated in the study. The subjects were recruited from two different schools from the infant and primary education system. One school had Catalan as the main language of instruction while the other had Spanish. The investigation took into consideration the educational level and the language programme adopted in the school. Data collection was based by means of transcripts from eight 45-minute sessions and was explored using a discourse-pragmatic approach. Additionally, formulas produced in three languages (Catalan, Spanish, and English) were analysed. Findings from the study showed that students from the Catalan-based school showed more practices of multilingual classroom discourse than the Spanish-based school. Similarly, Portolés and Safont (2018) examined participants' requests in a multilingual classroom setting. The sample consisted of 127 learners. The researchers examined the comprehension and production of requests in the three languages of the Valencian Community, by combining elicited and authentic data, and accounting for the impact of the language programmes adopted by the schools. Findings from the study provided new

evidence on the dynamism and complexity of L3 pragmatics, and confirmed the idea that we may best describe multilingual speakers' requestee behaviour by including all learners' languages.

Finally, Martín-Laguna (2020) analysed discourse-pragmatic markers, exploring students' pragmatic transfer and learning trajectories. A total of 313 students participated in the study from ten different secondary schools. Data were collected by means of a pragmatic-focused task involving written production and learning guided diaries. Students had to write three argumentative essays over one academic year in the three official languages of the Valencian Community: English, Catalan and Spanish. Findings from the study showed variations in learning trajectories. Learning trajectories in the minority language (Catalan) and the L3 (English) were more fluctuating with the patterns interacted with each other. This contrasted with the linear development found in the majority language (Spanish).

So far, we have reviewed some studies conducted in multilingual classrooms. These studies reveal that bilingual students do better than monolinguals and that pragmatic skills may be transferred between languages. Furthermore, from the studies that we have examined in this section we have acknowledged that most of the research has been conducted at tertiary level (Alcón-Soler, 2012; Cenoz, 2003; Safont, 2005) or secondary school level (Martín-Laguna, 2020). The few studies conducted at infant and primary education have focused on oral production and comprehension (Portolés, 2015; Safont & Portolés, 2016; 2018). Most of the studies have focused on specific pragmatic features rather than adopting a more holistic analysis. Finally, to the best of our knowledge, there is a need to analyse the communicative appropriateness of primary multilingual writers in a CLIL setting (Setting where the present investigation takes place).

Up to now, we have explored research in multilingual contexts. In what follows we will look at previous studies on pragmatics conducted in CLIL classrooms. In the context of CLIL, most of the research revealed that students are generally at an advantage in receptive skills (Ruiz de Zarobe & Jiménez-Catalán, 2009), fluency (Ruiz de Zarobe, 2008), lexico-grammar (Ackerl, 2007) and lexical variation and complexity (Jiménez-Catalán *et al.,* 2006). Nevertheless, the pragmatic dimension within CLIL settings has been ignored, and the impact of CLIL on students' pragmatic competence as a learning outcome is either absent or unknown (Dalton-Puffer *et al.,* 2010; Ruiz de Zarobe, 2011). The present study aims to shed some light within the field of pragmatics research in CLIL contexts from a multilingual perspective.

In spite of the few studies on pragmatics in multilingual CLIL contexts, it seems that the conditions for language learning are provided in CLIL contexts, since learners are exposed to a considerable amount of language input and therefore the pragmatic competence is promoted. Furthermore, CLIL researchers claim that within the CLIL classrooms, the language learning process takes place in a naturalistic manner since the process of the learning content becomes more meaningful (Nikula, 2008).

Although the field of pragmatics in CLIL is under-investigated, some studies have examined pragmatics mainly at secondary and university level. For instance, Dalton-Puffer (2005) examined the use of directives in CLIL settings as a dimension of interpersonal discourse management. The aim of her study was to investigate what levels of directions could be observed in the performance of directiveness, with reference to the use of discourse modification. A total of 79 learners from university level participated in the study. Data were collected by means of audio-recorded videos. A total of six different teachers were recorded from content classes such as History, Music, Tourism, Business and Accounting. Findings from the study showed that learners incorporated indirectness and variability in their language when producing directives. Additionally, the speech act of requesting also showed a difference in terms of the classroom purpose and register.

In the same line, Gassner and Mailat (2006) conducted a study aiming to explore whether students' pragmatic competence and discursive competence improved under CLIL programmes. Participants from a secondary Biology class took part in the study. Results from the study showed that students performed skilful management of overlaps and collaborative construction of turns, and several discursive strategies to get the message across were needed. Additionally, the authors reported that a multi-pared collaborative turn occurred where learners and teachers solved a case of interference between L1 and L2.

In the same manner, Dalton-Puffer and Nikula (2006) conducted a study aiming to compare German and Finnish lessons in CLIL contexts by analysing teachers and students' oral production. A total of 9 German lessons and 8 Finnish lessons were recorded for the study. Findings showed that more indirect requests for action were made in the German classrooms than in the Finnish contexts. Students' oral productions in CLIL contexts have also been analysed by Nikula (2008). The author aimed to analyse instances of classroom interaction from Finnish CLIL secondary physics classrooms. Data were collected focusing on face-threatening acts like disagreements and misunderstandings. Additionally, exchanges with the

teachers and students were also analysed. Findings from the study showed that learners used hesitations, disagreement among their peers, but a more formulaic and preparatory language when they addressed their teacher.

Focusing on both primary and secondary education, Llinares and Pastrana (2013) analysed students' talk during different activities in the CLIL classroom. Participants were recruited from primary and secondary education. A total of 75 seven-year-old learners from primary education and a total of 81 fifteen-years-old students participated in the study. Data were collected by means of an updated version of Halliday's functional model (1975). Findings from the study showed that, within group-class discussion, learners seemed to produce more interpersonal language and regulatory talk in the L2 than when activities were performed as a whole-class.

More recently, Herraiz-Martínez and Sánchez-Hernández (2019) analysed the production of pragmatic markers by multilingual students in CLIL contexts. A total of 19 Spanish students took part in the study where learners were in contact with three languages, namely English, Catalan and Spanish. Data were collected by means of a language background questionnaire and comparable oral decision-making tasks carried out in pairs. Data were analysed by frequency and type of production markers. Findings from the study showed significant differences in the frequency and type of both interpersonal and textual production markers across the three languages. Authors claimed that students in CLIL settings used more production markers in their L3 than in their L1.

Thus far we have looked at research with a focus on pragmatic oral skills in CLIL settings. Regarding writing, which is the main focus of the present study, Llinares and Whittaker (2007) analysed secondary students' written performance in English and compared learners' written and spoken productions in English. A total of 23 students participated in the study. The subjects were recruited from two state schools which have just started introducing CLIL. Data were collected by means of oral interaction in a class led by the teacher and a short composition written by the students on the same topic. Data were analysed using the Systemic-Functional Model as a framework. The aim of the analysis is on the language used by students, types of processes, circumstances and clause complexes, and on the interventions of the speaker or writer by using expressions of modality. Additionally, the researchers examined the register, comparing the learners' spoken and written productions. Findings showed that a significant share of the texts produced remained off target on a number of criteria, ranging from fulfilment

of the required discourse function, via cohesion and coherence to grammar and appropriate style. Similar results were obtained through another investigation conducted by Nashaat-Sobhy (2018). The author aimed to investigate if students modify their requests, which were elicited by means of a written discourse completion task. Participants were recruited from two groups of learners, CLIL and non-CLIL learners. Data were analysed by means of earlier request taxonomies (Alcón-Soler *et al.*, 2005) and included new pragmatic features that appeared in learners' data. Findings from the study showed that pragmatic differences among the groups are not necessarily related to studying in the CLIL programme in particular, but they could be the result of cumulative exposure to English in general. The results of the study showed that both groups of students had some similarities in their ability to make requests in a foreign language. However, the statistical analysis found significant differences between the CLIL group and the traditional mainstream group, with the CLIL group having a wider range of strategies to modify their requests. Despite this, the study raises questions about the socio-pragmatic knowledge of the CLIL group in this area.

Another study carried out by Pérez and Basse (2015) obtained different results. The aim of the study was to investigate to what extent the density and types of errors made by primary CLIL students differ from those of non-CLIL learners of the same academic year. Participants were divided into two groups: a total of 43 were under the CLIL approach and 34 were non-CLIL students. In addition, students completed an English language test to determine their proficiency level. Data were collected from the writing part of students assessment. Findings from the study showed that grammar was the area of English in which learners found more difficulties. Furthermore, results indicated that CLIL students performed better in writing than non-CLIL students, as they made significantly more errors than CLIL learners in the written texts.

In this section, we have explored pragmatics oriented research within the CLIL context. We have focused on pragmatics since it is a key dimension within the concept of communicative competence. From the studies reviewed in this section we can claim that CLIL research has examined classroom discourse (Dalton-Puffer & Nikula 2006) and writing (Pérez & Basse, 2015; Nashaat-Sobhy, 2018), but most of the studies have investigated specific pragmatic features. Moreover, we have acknowledged that most of the existing research does not consider students' language repertoire. To the extent of our current knowledge, only Herraiz-Martínez and Sánchez-Hernández's (2019) study took into account students' language repertoire in CLIL

settings. Besides, most of the investigations have focused on oral performance, while written performance has not been examined. Therefore, the present investigation attempts to cover these gaps and give insights to the field by analysing multilingual students' writing performance, and considering the three official languages of the Valencian Community. As suggested by Nashaat-Sobhy (2018), there is a need for studies that support or refuse whether the CLIL approach helps students communicate more appropriately. Thus, in the next section, previous research on communicative appropriateness in writing will be reviewed.

2.3 Communicative appropriateness in writing

Different perspectives have inspired research on writing in additional languages. For decades, the CAF dimensions have been used to examine students' written production. These three principal dimensions were originally approached separately to assess students' written performance, and a distinction was made between fluent and accurate language use. Regarding complexity, it includes two main divisions: cognitive and linguistic complexity. The former refers to the mental effort a linguistic item requires to be processed and acquired during L2 learning and it is thus a synonym to difficulty, while the latter refers to the absolute number of components a language feature or a language system consists of, as well as the number of relations between them (Bulté & Housen, 2012; Housen & Simoens, 2016). On the other hand, accuracy is defined as appropriateness and acceptability, considering that there are different types of deviations from a target-L2, some of which are more tolerable than others (Housen *et al.,* 2012). With regards to fluency, it refers to a person's general language proficiency. According to Skehan (2009), fluency can be defined as "the capacity to produce speech at normal rate and without interruption" (p. 511). Ellis and Barkhuizen (2014, p. 139) also refers to fluency as "the production of language in real time without undue pausing or hesitation".

In addition, Jacobs *et al's.* (1981) taxonomy, which was further developed by Connor-Linton and Polio (2014) and Orcasitas-Vicandi (2022), has also been used for the evaluation of written compositions on a five-component scale, rating students' writing on content (how well topics are understood and developed); organisation (how organised, fluent and cohesive the text is); vocabulary (how sophisticated, effective and appropriate the vocabulary is); language use (how well complex constructions and grammar are used), and mechanics (how effectively punctuation and spelling are used).

More recently, attention has been paid to the Functional Adequacy (henceforth, FA) construct (Kuiken & Vedder, 2017, 2018, & 2022). The construct of FA has been defined by Fragai (2003) as communicative functionally. Other scholars, such as and McNamara and Roever (2007), defined FA as communicative competence, or even as an intercultural competence (Hismanoglu, 2011). Moreover, Pallotti (2009, p. 596) reported that FA is "the degree to which a learner's performance is more or less successful in achieving the tasks goals effectively". In the same line, Kuiken, Vedder, and Gilabert (2010) defined FA as communicative adequacy, and Knoch (2011) includes in FA adequate syntax, lexicon of the language, and coherence and cohesion of text. In other words, the author focuses on the written production rather than on the content. Sato (2012) referred to FA as communicative effectiveness, an idea which goes in line with Kuiken and Vedder's (2017, p. 3), who suggested that "FA is viewed as a task-related, interpersonal construct, involving two participants (the writer A and the reader B)". These authors proposed a four scale dimension (content, task requirement, comprehensibility and coherence and cohesion) that has a relationship with the four Maxims of Grice (1975).

As mentioned in Section 2.1, the Maxims of Grice (1975) dealt with the quantity, quality, manner, and adequacy of the message that a writer transmits to the reader. The Content dimension of the FA rating scale developed by Kuiken and Vedder (2017, 2022) is related to Grice's Maxim of Quantity (1975). It refers to information presented in the text, and it does not only take into account the number and type of information units in the text, but also their consistency and relevance, independently from the specific requirements of the language task carried out. Concerning the second dimension, which is related to the maxim of quality of Grice (1975), it refers to the completion of the specific instructions and requirements of the task provided, together with the adequacy of the message transmitted to the reader. The dimension of comprehensibility is related to Grice's Maxims of manners (1975). By comprehensibility, we understand the effort required by the reader to understand the purpose of the written assignment and the ideas expressed. Finally, the last dimension, coherence and cohesion, refers to the use of conjunctions, deictic elements, and coherence. This last dimension is related to Grice's (1975) maxim of adequacy of the message.

Looking at the research conducted so far on FA, most of the research has examined different dimensions of FA in written production, mostly at secondary educational level (Kuiken *et al.,* 2010; Kuiken & Vedder, 2014, 2017, 2018, 2022; Herraiz-Martínez & Alcón-Soler, 2019). For instance, Kuiken *et al.* (2010) carried out a study focusing on written production. A total of 94

students of Dutch, Italian and Spanish had to complete two open-ended decision making tasks, which were rated by non-native speakers and L2 teachers of the corresponding target language. They rated FA and linguistic complexity by using a six-point global Likert scale in order to measure each writer's ability to fulfil the communicative goal of the task, as well as the impact of the task on the reader. Results, which were obtained both holistically and by using standardised measures, indicated that FA and linguistic complexity seemed to develop at an equal pace, and that higher correlations tended to come from more advanced learners.

In the same line, another study conducted by Kuiken and Vedder (2014) examined the relationship in L2 writing between raters' judgments of communicative adequacy and linguistic complexity. A total of 39 Italian learners and 32 Dutch learners participated in the study. Data were collected by means of two short argumentative essays and analysed using a six-point Likert scale, and general measures of linguistic performance. During a panel discussion, raters' were asked to verbalise the reasons why they assigned a particular rating level for a test. Findings from the study showed that, although raters' judgements of communicative adequacy largely corresponded to their judgments of linguistic complexity, the findings for L2 and L1 turned out to be different. On the one hand, L2 overall ratings of linguistic complexity were correlated with lexical diversity and accuracy, but not with syntactic complexity. On the other hand, in L1 hardly any correlations between raters' judgements and general measures of syntactic complexity and lexical diversity were found. Furthermore, raters used different strategies when assessing high and low proficiency L2 writers or native writers, and seemed to attach more importance to textual features connected to communicative adequacy than to linguistic complexity and accuracy.

With a more pragmatic oriented approach, FA has been the focus of recent studies. Kuiken and Vedder (2017) explored Dutch and Italian students' FA who produced a corpus of argumentative texts. Data were analysed using Kuiken and Vedder's (2017) scale previously mentioned, which referred to content, task requirement, task completing and coherence and cohesion. Findings from the study showed that FA in L2 writing can be reliably measured by a rating scale comprising the above mentioned four subscales. On the other hand, Herraiz-Martínez and Alcón-Soler (2019) carried out a longitudinal study in the context of the Valencian Community. The aim of the study was to examine 306 university learners' pragmatic development in the English medium instruction setting. With the aim to investigate whether the intensity of English medium instruction influenced students' FA in L2 (English) writing,

participants were asked to write three motivation letters over one academic year. Data were analysed using Kuiken and Vedders' (2017) scale and findings from the study showed that the intensity of instruction may exert an influence on students' FA.

Looking at the research up to date on FA, we can claim that most of the studies have been conducted at secondary and university level, and no study has examined FA in writing at primary education. Thus, in the present study, Kuiker and Vedder's (2017) taxonomy, will be adapted to examine primary students' writing communicative appropriateness. Considering the different components included in previous models of communicative competence, we will examine students' communicative appropriateness in writing by looking at the pragmatic, textual and linguistic aspects of their writing texts. On the other hand, in line with Kuiken and Vedder (2017), we agree that looking at pragmatics involves, among other aspects, the dimension of relevant content and comprehensibility of the message, while at the textual level coherence and cohesion are aspects to consider. Finally, bearing in mind what goes on in CLIL classrooms at this educational level, where students engage in language use for achieving a particular communicative goal, we will also look at the linguistic component (grammar, spelling and punctuation) of students' writings.

Thus, the taxonomy proposed to examine holistically students' communicative appropriateness in writing consists of the following three components: the pragmatic component, the linguistic component and the textual component (see Figure 11).

Figure 11

Overview of the three components and their dimensions within the taxonomy proposed for analysing communicative appropriateness in writing
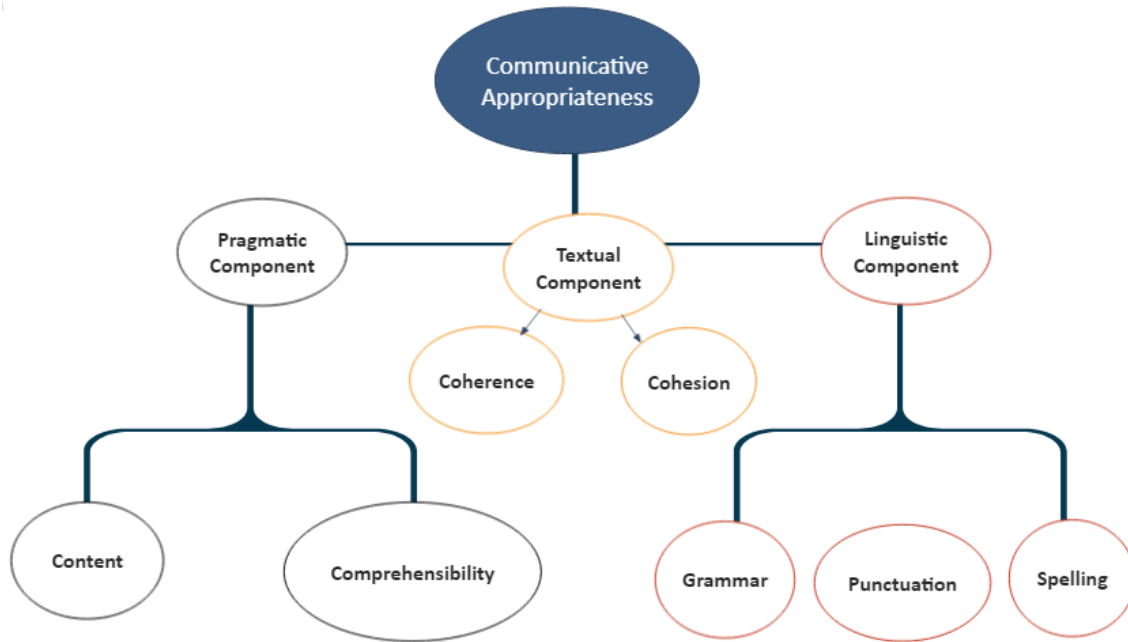
Concerning the pragmatic component, two dimensions are considered; content and comprehensibility. Regarding the former, it refers to the number and the relevance of the ideas expressed in the text. In other words, it assesses whether the number of information units provided in students' text are adequate and relevant. Thus, the text would be extremely good in terms of content if students' writing shows adequate and sufficient ideas, and these are relevant for the writing task. Concerning the latter, it focuses on the effort required by the reader in order to understand the text's purpose and ideas.

As for the textual component, it includes the dimension of coherence and cohesion. Regarding the former, it refers to whether the writer integrates new ideas in the text with connectives or connectives phases. In relation to the latter, it is assessed by skilful use of connectors such as linking words (and, but, or even because) or connectors (however, besides...). In this dimension, the use of connective adverbs such as first, then, secondly and next are also considered.

Regarding the linguistic component, grammar, spelling and punctuation (hencefonth, SPAG) will be considered. In relation to grammar, we will take into account whether the text is correct, scarcely, somewhat or not at all grammatically correct. For instance, we will consider verb

tenses, phrasal verbs, modal verbs and syntax. Considering the two last dimensions within the linguistic component, spelling and punctuation are also worth mentioning. With regards to the former, we will examine whether the text shows none, a few or some spelling errors, such as missing words, wrong spellings, word endings etc. Finally, within the punctuation will take into account: question marks, full stops, comma, colon or even semicolon.

As it can be observed, in contrast to Kuiker and Vedder's (2017) taxonomy, the dimension of task requirement has not been considered due to the level of proficiency of primary students. However, in our taxonomy we have considered the linguistic aspect, since, in our opinion, at this educational level, it is difficult to assess students' writing holistically without considering the three components mentioned above.

In what follows, previous research on the three components mentioned above will be outlined. Regarding the pragmatic component, which includes content and comprehensibility, despite the fact that has been explored for decades, research outcomes are not conclusive. For instance, Stoller (2006) carried out a study aiming to analyse whether students' knowledge of content was acquired when being taught in German or French in Switzerland. A total of 56 students participated in the study. Findings from the study showed no significant differences in the acquisition of content when students were taught in their L1or in a foreign language. In the context of Finland, similar results were obtained by Seikkula-Leino (2007), who investigated students' gains in mathematics. A total of 217 participants took part in the study. Findings from the study showed that there were no statistically significant differences between the students who were taught mathematics through their L1 or those who were taught in the foreign language.

In contrast, other studies have suggested a negative effect on content learning through the CLIL approach. For instance, Kuiker, Vedder, and Gilabert (2010) compared lecture comprehension between English and Norwegian (students' L1). A total of 130 participants participated in the study. Findings from the study showed that there were no significant differences between participants' L1 and English. Besides, the study found that most of the students had problems following the English lessons, especially, meaning of words and unfamiliar vocabulary.

The above reported studies showed that the benefits of CLIL on content are not conclusive. However, most of the studies have compared CLIL and non-CLIL learners and, to the best of

our knowledge, none have explored intensity of CLIL programme and its impact on content learning, an issue that the present study aims to cover.

Concerning the textual component, which includes the coherence and cohesion of the text, research has examined the writer's ability to provide clear and correct signals to allow the reader to distinguish between new and already-introduced information. Research on the textual components has been explored by several researchers. For instance, Murphy (2001) analysed the role of nominal demonstratives of this, that, these, and those in written texts. A total of 109 Japanese students participated in the study. Data were collected by means of a written task and coding according to five dimensions: genres of description, illustration, process, and persuasion. Findings from the study showed that low-level interlanguage texts are distinguished by their relative lack of cohesion. In the same line, Chiang (2003) analysed the effect of grammatical and discourse features on rater perceptions of writing quality. A total of 60 native and non-native speakers participated in the study. Data were collected by means of a writing task and evaluated by 15 native-speaking professors of English and 15 Chinese professors of English. Students' compositions were analysed on 10 discourse and 10 grammatical features. Findings from the study showed that all, except three of the 30 raters based their perceptions of "overall quality" primarily on either of the two discourse features: coherence and cohesion. Also, regression analyses showed that cohesion was the best predictor of writing quality of all the four areas of evaluation, namely coherence, cohesion, syntax, and morphology.

Whittaker *et al*. (2012) examined students' written development in English in CLIL settings. Data were collected from history classes over the four-year period in secondary education in Spain. Data were analysed with regards to the ability to produce coherent texts and the appropriate management of the nominal group, or noun phrase, to create disciplinary registers. With the purpose of identifying the linguistic resources used to create coherence and appropriate register in CLIL students' writings, all the nominal groups in the corpus were analysed in terms of recoverability of the elements they referred to, and the structure of the nominal groups was analysed for pre- and post-modification. Findings from the study showed development in the control of textual resources, as well as some increase in nominal group complexity over the four years. The study suggests that CLIL settings, which focus primarily on the learning of content, provide a suitable context to develop writing skills.

Although, as illustrated above, CLIL setting has explored the advantages of CLIL settings to develop the ability to create coherence and cohesion texts at secondary and tertiary level, there is a need to explore the impact of CLIL on the textual component at primary school level. An issue that the present study will cover.

Additionally, the linguistic component, which includes grammar, spelling and punctuation, has also been examined by several researchers. For instance, Aguilar and Muñoz (2014) investigated university students' improvements in listening and grammar after a CLIL course in English for a semester. In particular, the authors analysed whether students' listening and grammar were similarly affected and whether participants' proficiency level played a role. A total of 120 participants took part in the study and data were coded by means of Paired-samples t-tests. Findings from the study showed that the difference between the mean scores in the pre- and post-listening test was significant, but it was not for the pre-and post-grammar tests. In the same line, Martínez-Adrián and Gutiérrez-Mangado (2015) analysed the general proficiency and specific linguistic features of a group of learners of L3 English in a CLIL programme and in a EFL group. A total of 130 subjects participated in the study, and data were collected by means of writing tasks and a Cambridge Key English Test to determine their proficiency level. Findings show that the benefits of CLIL in general competence do not extend to the acquisition of specific linguistic features. Therefore, since the best results were obtained by EFL learners, the study suggests that CLIL benefits do not extend to the acquisition of grammar.

Different results in relation to linguistic gains were obtained by Ruiz de Zarobe (2010) who explored the written competence attained by two groups of bilingual students that follow two different CLIL programmes, and another group enrolled in a traditional EFL programme. Data were coded using the five categories suggested by Jacobs *et al.* 1981 (analysis of written texts: content, organisation, vocabulary, language usage and mechanic). Findings from the study showed that the CLIL groups scored better in relation to the five categories analysed, suggesting that there was a positive relationship between the amount of exposure through English and written proficiency. Furthermore, the longitudinal evaluation of the results showed that the students who enrolled in CLIL programmes outperformed students from the EFL programmes. This advantage increased with grade, confirming the effectiveness of the CLIL approach on students' written production.

Similar results were obtained by Juan-Garau and Salazar-Noguera (2015), who examined the lexico-grammatical accuracy in CLIL learners. A total of 105 Catalan-Spanish bilinguals from

the Balearic Islands enrolled in the second year of secondary school level participated in the study. Participants were divided into two groups: 70 CLIL students learning either science or social science through English and 35 non-CLIL students. Data were collected by means of a cloze test and a fill-in-the-blanks tense-and-aspect test. Findings from the study show that the CLIL context appears to accelerate lexico-grammatical learning. In the same line, Martínez-Lahuerta (2017) explored students' written competence at secondary educational level. A total of 400 participants were divided into two groups: one group enrolled on a CLIL programme and another group enrolled on a non-CLIL programme. Data were collected by means of a written composition task that was analysed with regards to fluency, accuracy, grammatical complexity and lexical complexity. Findings from the study showed that CLIL programmes exerted a positive influence on all the language aspects analysed.

In spite of the research that we have reviewed above, results on the different dimensions of writing in CLIL settings are still inconclusive. Most of the research has been conducted at secondary and tertiary level, and further studies are needed to be conducted at primary setting, whether CLIL programmes are implemented with different levels of intensity of exposure to English. This study intends to make a contribution in this respect by analysing primary students' communicative appropriateness in English holistically, that is to say analysing the pragmatic, textual and linguistic component of students' writing, and considering the intensity of CLIL programmes in the Valencian Community. A setting where students use and receive instruction in at least three languages: Catalan, Spanish and English. As a result, analysing students' written performance in the three official languages of the Valencian Community is relevant in our study to understand CLIL students' multiliteracy in multilingual settings.

2.4 Summary of the chapter

Chapter 2 have looked at the concept of communicative competence as a framework to assess students' communicative appropriateness in writing. Thus, several models of communicative competence have been reviewed, together with different definitions of pragmatic competence. Furthermore, we have examined studies on multilingual classroom pragmatics. Previous studies have been conducted at tertiary (Cenoz, 2003; Safont, 2005; Alcón-Soler, 2012), secondary (Martín-Laguna & Alcón-Soler, 2018; Martín-Laguna, 2020), and primary educational level (Portolés, 2015; Safont & Portolés, 2016; Portolés & Safont, 2018), but further research is needed to explore students' communicative appropriateness under the implementation of CLIL programmes.

Besides, from the studies reviewed in this chapter, we can claim that most of the studies on communicative appropriateness have ignored students' language repertoire. Given the multilingual context where the present study has been conducted, students' communicative appropriateness in Catalan, Spanish and English will be analysed. Previous investigations have focused on specific features and on students' oral production. In contrast, the present study focuses on writing and it aims to analyse holistically the communicative appropriateness of students' writing. We acknowledge that the construct of CAF, together with Jacob *el al's* (1981) taxonomy, developed later by Connor-Linton and Polio (2014) and Orcasitas-Vicandi (2022), have been used to examine students' writing. Additionally, the construct of FA (Kuiken & Vedder, 2017) was created in an attempt to analyse students' writing from a more oriented pragmatic approach. Bearing in mind the context of the present investigation, we have proposed a taxonomy adapted from Kuiken and Vedder (2017) and Jacob's *et al.* (1981) to examine multilingual students' communicative appropriateness in writing. The taxonomy includes three components: the pragmatic, textual and linguistic. Within the first one, the dimensions of content and comprehensibility will be analysed. Then, while coherence and cohesion are the dimensions included in the textual component, grammar, spelling and punctuation are considered in the linguistic component.

Considering previous research on the above-mentioned components, we have identified the following research gaps that the present study aims to fulfil; First, within the pragmatic component (content and comprehensibility), there is a need to shed some light on student's content learning. While some studies have reported positive effects of CLIL on students' content learnings (Stohler, 2006; Seikkula-Leino, 2007), other studies do not support content gains (Hellekjer, 2010). We will examine the impact of CLIL in text comprehensibility, an issue that, as far as we know, has not been investigated so far in primary education. Secondly, regarding the textual component (coherence and cohesion), although previous studies in CLIL contexts have been conducted with students at secondary (Whittaker *et al.,* 2012) and tertiary level (Murphy, 2001; Herraiz-Martínez & Sánchez-Hernández, 2019), there is a need to examine the dimension of cohesion and coherence at primary school level. Thirdly, in relation to the linguistic component (grammar, spelling and punctuation), although the benefits of CLIL seem to be positive for grammar (Ruiz de Zarobe, 2010; Juan-Garau & Salazar-Noguera, 2015), only a few studies are conducted at primary school level (Pérez & Basse, 2015), and none of them have considered aspects included in our taxonomy, such as mechanics and punctuation.

The present investigation will consider the above research gaps, by looking at how different degrees of CLIL exposure (high, medium and low), together with the impact of language exposure outside the classroom, may influence students' communicative appropriateness in writing. Thus, the next chapter will focus on the issue of language exposure in the classroom and beyond.

CHAPTER 3. LANGUAGE EXPOSURE IN THE CLASSROOM AND BEYOND

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Chapter 3 addresses the effects of language exposure in the classroom and beyond. Section 3.1 introduces the chapter giving attention to some of the conditions for language learning, mainly opportunities for input and output. Additionally, we explain implicit learning and how it differs from explicit learning and knowledge. Next, Section 3.2 introduces the notion of the intensity of language exposure within the classroom, pointing out studies that have taken into account the amount of intensity of exposure in the classroom and the impact on students' writing skills. Section 3.3 is devoted to input beyond the classroom, paying special attention to the media focusing on watching TV, listening to music, and social media (Subsection 3.3.1). Next, subsection 3.3.2 focuses on students' language use at home and the impact on their writing skills. Subsection 3.3.3 narrows our interest by reviewing studies dealing with short periods of time in the target language community pointing out the relationship between in-school and out-of-school language exposure which are relevant to the aim of the present study, and Section 3.3.4 deals with exposure to language through extra tuition in private language school. Section 3.4 closes the chapter with a summary of the main ideas presented and the research gaps addressed in the present study.

3.1 Conditions for language learning

Learning a language can be especially difficult in settings where the target language is not frequently used, as it is the case with English in Spain. In this context, chances to learn English are mainly restricted to formal education. However, not all settings facilitate the same degree of exposure. It is known that language exposure within the classroom has an impact on students' language acquisition (Pattemore & Muñoz, 2020), and especially on students' written performance (Muñoz, 2011). However, at this point, according to García-Mayo and Pica (2000), there are three conditions for language learning, that is to say, opportunities for input and output and feedback. Considering these theoretical conditions for language learning, it seems that as opportunities for input and output increase, the opportunities for language learning also rises (Alcón-Soler & García-Mayo, 2008).

From the earliest days of language teaching and learning, the significance of input and output opportunities has been recognised. Initially, the emphasis was on finding the perfect method, but subsequently, attention has shifted towards creating classroom tasks and activities that

stimulate opportunities for input and output. From this perspective, the communicative approach, inspired by Hymes' (1972) notion of communicative competence, has been implemented.

The framework of the communicative approach pays special attention to the role of the linguistic environment and the nature of the input. From a language acquisition perspective, Krashen, (1982, 1985), proposed the Input Hypothesis, which evolved from Krashen's Monitor Model (1977). This Model tried to explain how learners acquire a language and include five basic hypotheses; 1) the Acquisition-Learning Hypothesis, 2) the Natural Order Hypothesis, 3) the Monitor Hypothesis, 4) the Input Hypothesis and 5) the Affective Filter Hypothesis. Nevertheless, we will focus on the Input Hypothesis for its relevance to the present study.

The Input Hypothesis claimed that exposure to "Comprehensible Input" is a necessary and sufficient condition for language acquisition. Comprehensible Input can be defined as the language (in both spoken and written form) learners are exposed to and whether it is one level ahead of their current competence. According to Krashen (1985, p. 2), we move from our current level to i+1, the next level along with the natural order. Krashen (1985) also explained that modifications in the speech directed to learners are crucial as long as they increase input comprehensibility, which can be made comprehensible by means of linguistic and extralinguistic information.

In addition, Hatch's (1978) contribution is worth mentioning, as it may explain the crucial role of interaction for language learning. According to this author, students learn how to converse, how to interact verbally, and out of this interaction, systematic structures are developed. Following Hatch (1978), the Interaction Hypothesis (Long, 1980, 1983) has influenced the design of communicative tasks that potentially trigger opportunities for input and output and, in turn, opportunities for language learning.

The second condition for language learning is output. Swain (1985, p. 249) argued that when a learner is required to produce "pushed output", this may force the learners to move from semantic processing to systematic processing. This assumption led Swain (1985) to suggest the "Comprehensible Output Hypothesis". The author pointed out that, although comprehensible input was fundamental, the role of "comprehensible output" (1985, p. 236) was equally important. According to Swain (1985), comprehensible output concerns the need for learners

to be "pushed towards the delivery of a message that is not only conveyed but that is conveyed precisely, coherently and appropriately" (p. 249).

The evidence of Swain's (1985) Hypothesis was provided by studies in Canadian immersion programmes where English-speaking children were taught all or part of the school curriculum in French. Findings from the studies conducted in Canada suggested that although immersion students were fluent in French, they were not accurate in their writing and speaking abilities. One possible interpretation was that, whereas immersion programmes ensured enough exposure to comprehensible input, they failed to provide enough opportunities that would develop accuracy in learners. In subsequent studies, Swain (1995) identified three potential language-learning functions of output: the noticing-triggering function, the hypothesis-testing function, and the metalinguistic (reflective) function.

The noticing function consisted of learners becoming conscious of not knowing how to say (or write) exactly the meaning they want to communicate when attempting to produce the target language. The hypothesis testing function referred to the learning optimization of the learner's interlanguage in order to try out new language forms and structures and see whether their hypotheses are successful or not (Swain, 1998). Finally, the output could serve as a source for metalinguistic reflections. In this case, learners use language to show consciousness of their own or other speakers' use of language.

Up to now, we have mentioned two conditions for language learning: opportunities for input and output, both of which are crucial regarding students' written performance. These opportunities for input and output can be found both in the classroom and beyond the classroom. It is well established that learning is not confined to the classroom, and that external factors can significantly impact students' acquisition of knowledge. Additionally, it is known the difference between explicit learning, which frequently occurs in classroom settings, and implicit learning, which is frequently linked to naturalistic settings. Whereas the former involves language awareness, such as memorising facts and results, the other alludes to spontaneous learning, which typically entails unexpected input from the environment and causes subsymbolic knowledge. As Ellis (2009) pointed out, in implicit learning, although learners cannot verbalise what they have learned, the fact that learning has taken place is evident in the behavioural choices they make.

The next sections will explore these conditions in the classroom and beyond. We will look at studies that have previously analysed the intensity of exposure in educational contexts and students' incidental learning beyond the school. A review of these studies is relevant for the present study since we aim to explore the impact of input exposure in the classroom and beyond on students' multilingual writing.

3.2 Intensity of language exposure in the classroom

In the present study, we deal not only with input as a condition for language learning, but we also consider the amount of language exposure in the classroom. There is growing evidence that the length of instruction and amount of instruction (hours per week) are determinant factors in language learning (Muñoz, 2011, 2014; Graham, Coutney, Marinis, & Tonkyn, 2017). As reported by Martinsen, Baker, Bown, and Johnson (2011), students need to immerse themselves in order to learn a language, whether at home, at school, or abroad. Therefore, input limitations in both quality and quantity have been seen as determinants of the slow learner's rate observed in typical classroom settings (Muñoz, 2006). These limitations may also explain that the resulting knowledge is predominantly explicit, rather than implicit (Dekeyser, 2012).

Applied linguists have long been concerned about the scarcity and limited opportunities of input in formal language classrooms. These concerns started in Canada in the 60s, where the intensity of language exposure programmes offered English-speaking children high-level proficiency in French, which was essential to achieve high societal positions (Jäppinen, 2005). In the same line, this line of research has been developed in Europe, and we will refer to them in the following sections.

3.2.1 Studies in the Canadian context

With the aim of improving the French oral skills of students in the mid-1990s, the former Ottawa Board of Education decided to implement "language baths". This meant the shift from a 120-hour French programme to 450 hours for one school year. The purpose of the Canadian language intensity exposure programmes was to reinforce bilingualism in the country and its popularity can be attributed to a "simultaneous grassroots and top-down pressure" (Coyle *et al.*, 2010, p. 7). The language taught through content subjects was French with the aim of providing the English-speaking population with an opportunity to learn French, the other official language of the country (Lyster, 2007). The overall objectives of the intensity of

language exposure programmes have been examined by Baker (1988, p. 96) and could be outlined as; (i) intensity of language exposure programmes are optional, (ii) all or most school subjects are taught in the L2, (iii) the use of L1 is allowed for up to one year and a half in the classroom and is not discouraged in other school areas, (iv) teachers are bilingual but initially appear unable to speak the target language, (v) students enrolled in intensity of language exposure programmes and non-students enrolled in such programmes experience the same syllabus, (vi) classroom communication in the L2 must be meaningful, authentic, as opposed to contrived.

In the Canadian context, researchers also explored the influence of exposure to language, or the effect of the "intensive doses" of French (Lyster & Ranta, 1997; Spada & Lightbown, 1999; Collins *et al.*, 1999; Bournot-Trites & Reeder, 2001; Burmeister & Daniel, 2002; White & Turner, 2005; Collins & White, 2011) reporting positive findings towards language exposure programmes. For instance, Spada and Lightbown (1999) examined L2 development of primary school learners. A total of 120 learners took part in the study and they were divided into two groups: intensive programmes and groups with learners in regular English language programmes. Participants were compared in relation to listening and reading and oral performance. Results from the study showed that participants from the intensive programmes outperformed their peers in all dimensions. Along the same line, Collins *et al.* (1999) investigated three types of intensive English programmes, which included around 400 hours of English instruction spread over 10 months (distributed 236), five months (324), or five months and out-of-school factors (149). Data were collected by means of a yes/no vocabulary test, a listening test, and a written test. Findings from the study showed that those participants who were exposed to more hours performed better in all dimensions. However, the research acknowledged the need for further investigation into this issue.

Another study in the context of Canada was conducted by Bournot-Trites and Reeder (2001) who investigated mathematics achievement in a French immersion context. The study compared one group that received 80% of the academic curriculum in English, with a group that had 50% of the subject in French and the other 50% in English, including mathematics. Findings reported a positive effect in mathematics for the 80% group. These findings supported the benefits of total immersion over partial immersion programmes. The same findings were reported by Burmeister and Daniel (2002), who analysed the effect of partial intensity of language exposure programmes. Their main focus was to examine the influence of input

measured by the length of the number of hours, the absolute frequency of cohesive elements, as well as their density. In relation to the partial intensity of language exposure programmes, participants were exposed to the English language by 30%, which was an increase of about 15% compared to the regular curriculum. Findings reported that immersion students scored higher with respect to the number of clauses and the frequency of cohesive devices in interaction. Also, in the same line, White and Turner (2005) compared the oral programmes of two different groups. One group enrolled in regular English class and the other group received intensive instruction. A total of 152 participants took part in the study. Data were collected by means of tasks (Audi-Pal, Info-Gap and Story Retell), and the study showed that in the three tasks, students enrolled in the intensive programmes outperformed their peers. Finally, Collins and White (2011) also analysed the time distribution in intensive English courses but obtained different results. The researchers compared two different intensive programmes, concentrated ($n = 137$) and distributed ($n = 107$), measuring students' English language proficiency after instruction. The findings from the study did not show better performance by the concentrated group.

In general, research conducted in Canada reported that, through intensity of language exposure programmes, students reached higher levels of proficiency in listening, reading comprehension, and fluency (Lyster, 2007; Harley, Futcher, & Greider, 1990; Swain & Lapkin, 1984), but some gaps in students' grammatical and lexical development are observed (Lyster & Ranta, 1997; Lyster, 2007). An issue that the present study will consider since we will analyse students' communicative appropriateness, which includes the three components; linguistic, pragmatic and textual.

3.2.2 Studies in Europe

The concern of the potential influence of exposure to language and learning outcomes have also been explored in Europe (Serrano & Muñoz, 2007; Muñoz, 2011, 2014; Llanes & Muñoz, 2013; Muñoz *et al.,* 2018; Muñoz & Cadierno, 2021). In this context, the intensive distribution of input demonstrated remarkable benefits for learners. For instance, Serrano and Muñoz (2007) analysed the performance of adult students enrolled in three types of English language programmes in which the distribution of time varied. A total of 114 participants were distributed in three different programmes ('extensive', 'semi-intensive', and 'intensive'). Data were collected by means of a test at the beginning of the course and at the end of the course. Findings from the study showed that concentrating the hours of English instruction in shorter

periods of time was more beneficial for the student's learning than distributing them over many months.

The impact of input exposure on students' written performance was also explored by Muñoz (2011). The researcher examined the written proficiency of 190 bilingual Catalan-Spanish upper-intermediate learners of English. Data were collected by means of language tests, and extensive written questionnaires and semi-structured interviews that gathered information related to students' past and present target language use. A number of input-related measures were derived from this information, such as instruction hours, different educational stages, length of stays abroad and current language use. Findings from the study showed that input exposure measures were crucial for students' writing performance.

Llanes and Muñoz (2013) conducted a study to investigate how learning context and age influence the development of L2 proficiency. The researchers compared language gains, which were measured in terms of oral and written fluency, lexical and syntactic complexity, and accuracy, of Spanish children (aged 10 years) and adults (aged 19-33) learning English in two different settings: an abroad programme and a domestic programme. The participants were divided into four groups: children in an abroad programme, children in a domestic programme, adults in an abroad programme, and adults in a domestic programme. The study results revealed that the abroad context was superior to the domestic programme context, and that it was more advantageous for children than for adults in terms of comparative gains, although adults performed better than children in absolute gains. Furthermore, the interaction between learning context and age indicated that studying abroad was particularly beneficial for children, who also had greater opportunities to practise their oral language skills.

In the same line, Muñoz (2014) conducted a study examining the effects of age of acquisition and input exposure on foreign language learning. The study compared early starters in instructional settings with late starters in terms of long-term achievement. It also investigated the impact of different types of input exposure, such as years of instruction, hours of curricular and extracurricular lessons, time spent abroad in an English-speaking country, and current contact with the target language. 160 English learners participated in the study, and their oral performance was measured in terms of fluency, lexical diversity, and syntactic complexity. The results showed that input exposure had a stronger correlation with measures of oral performance than age of acquisition. Therefore, the study suggests that exposure to varied and

extensive input may be more important for developing oral proficiency in a foreign language than starting to learn the language at an early age.

Besides, research has also explored the potential relationship between in-school exposure and out-of-school factors (Muñoz *et al.,* 2018; Muñoz & Cadierno, 2021). For instance, Muñoz *et al.* (2018) analysed the influence of two context language-related factors on general grammar and two context-related factors (amount of formal instruction and frequency of exposure to English outside school) on English grammar skills. A total of 120 participants took part in the study: two groups of 7-and 9-year-old Danish children at the beginning of L2 instruction in English, and two groups of Spanish/Catalan children of the same age after several years of instruction. Findings from the study showed that the amount of formal instruction had a lesser role in the children's receptive grammar knowledge than cognate linguistic distance and out-of-school contact with English, particularly with audiovisual material.

In the same line, Muñoz and Cadierno (2021) analysed whether potential differences in the weight of out-of-school and in-school learning environments affect the acquisition of L2 English by teenagers in two geographical contexts: Denmark and Spain. Participants were two groups of 14-15-year-olds. Language measures included a listening comprehension test, a metalinguistic knowledge test, and a grammaticality judgement test. Data about out-of-classroom exposure was elicited via a questionnaire. Findings from the study showed that the Danish group attained a significantly higher level in all language tests except for the metalinguistic knowledge test. The Danish group engaged longer in out-of-school activities, although the preference for some activities over others was similar in the two groups; and the types of associations between out-of-school activities and language measures were different between the two groups.

All in all, previous research has examined the combination of input exposure in the classroom and beyond. Likewise, the present investigation aims to shed light on the impact of input exposure in the Valencian Community and the impact on students' communicative appropriateness. Therefore, the next section will review studies on input exposure and writing.

3.2.3 Studies on input exposure and writing

In comparison to the studies reviewed so far, few studies have explored the acquisition of literacy and writing considering the amount of language exposure (Celaya, Torras, & Pérez-

Vidal, 2001; Navés, Torras, & Celaya, 2003; Sasaki, 2007; Pérez-Vidal & Juan-Garau, 2009; Serrano *et al.,* 2011). An issue that the present study aims to cover. Celaya *et al.* (2001) investigated the effects of starting age (8 versus 11) on the acquisition of English as a foreign language in a school context, with specific reference to written production. A total of 77 participants participated in the study. Data were analysed after 200 and 416 hours of instruction, that is when learners were 10 and 12, and 12 and 14 respectively. Findings from the study suggested that an earlier start did not have clear benefits in the acquisition of English writing.

In the same line, in a formal instructional setting, Navés *et al.* (2003) investigated the development of written production among six groups of learners (*n* = 520), and examined the impact of onset and age on writing performance. The study measured the learners' writing production after 200, 416, and 726 hours of instruction, and conducted both intragroup and intergroup analyses to explore the long-term effects of an early start in L2 writing, and the patterns of development among the four writing components, depending on learners' age. Moreover, the study aimed to test whether the relationships found between the writing component measures differed depending on learners' age group. Results showed that there were two distinct patterns of writing performance based on learners' age, and correlations between the writing component indicators varied depending on the age group of the learners. Interestingly, early starters did not show better performance than late starters.

The effect of input exposure has also been investigated by Sasaki (2007) and Pérez-Vidal & Juan-Garau (2009). On the one hand, Sasaki (2007) compared the changes in English writing behaviour of 7 Japanese university students, (the study-abroad group) who spent 4 to 9 months in English-speaking countries with those of 6 counterparts majoring in British and American studies (the at-home group) who remained in Japan.

On the other hand, Pérez-Vidal and Juan-Garau (2009) analysed input exposure in a study abroad context in contrast with input exposure during formal instruction. Subjects were a sample of Catalan/Spanish undergraduates who spent a compulsory three-month sojourn in an English-speaking university and were analysed longitudinally over a period of three years. Intensive testing of the learners' oral and written abilities was carried out, and both global and fine-grained measurements were applied to the data. Findings from the study showed that learners who were exposed to more hours of input outperformed their peers.

Similarly, Serrano *et al.* (2011) examined whether students' L2 written and oral performance was influenced by different intensity language exposure. A total of 131 university learners participated from two different settings: At-home setting (receiving intensive instruction in Spain *(n* = 106) and study abroad setting in the United Kingdom (*n* = 25). Students' L2 written and oral production were analysed at different time points and explored in relation to fluency, syntactic and lexical complexity, and accuracy. Findings from the study showed that students abroad outperformed the learners in the at-home setting programme.

To sum up, after reviewing the research on the effects of intensity of language exposure and language learning we have to acknowledge some research gaps that the present study aims to fulfil. First, there seems to be a need to analyse different degrees of intensity of language exposure in the classroom, as few studies have investigated that issue (Serrano & Muñoz, 2007). Secondly, most of the studies have been conducted at university (Serrano & Muñoz, 2007; Pérez-Vidal & Juan-Garau, 2011; Serrano *et al.,* 2011; Muñoz, 2014) and secondary school level (Muñoz, 2011; Muñoz & Cadierno, 2021), or combining primary and adults learners (Llanes & Muñoz, 2013), and only a few have been conducted at primary school level (Celaya *et al.*, 2003, Muñoz *et al.,* 2018). Thirdly, most of the studies have analysed oral proficiency or specific features of oral performance (Serrano *et al.,* 2011), general English learning (Celaya *et al.*, 2003; Serrano & Muñoz, 2007; Muñoz & Cadierno, 2021) and grammar (Muñoz *et al.*, 2018). Fourthly, most of the studies have explored oral proficiency or specific features of oral performance (Serrano *et al.,* 2011), vocabulary (De Wilde *et al.*, 2021) and grammar (Muñoz *et al.,* 2018). Finally, as reported above, some studies have focused on written performance (Serrano *et al.,* 2011; Muñoz, 2011; Llanes & Muñoz, 2013), but not a single study has analysed primary students' communicative appropriateness in writing. Moreover, few studies have examined the combination of input in the classroom and out-of-school factors (Muñoz *et al.,* 2018; De Wilde *et al.,* 2021; Muñoz & Cadierno, 2021), but they have not addressed the impact on students' multilingual writing. So far, most of the investigations have focused on English outcomes ignoring other languages. To the best of our knowledge, Nightingale (2016) is the only study dealing with students' language repertoire. Given that in many countries, classrooms illustrate a rich diversity of linguistic backgrounds, there is a need to explore how the intensity of exposure to different languages in the classroom and beyond influence language learning.

3.3 Input beyond the classroom

Research has increasingly focused on the characteristics of learners and how out-of-school factors influence language learning (Sundqvist & Sylvén, 2016). In this respect, it seems that out-of-school factors are crucial when learning a language, since it seems that just in-class learning is not enough (Benson, 2003; Olsson & Sylvén, 2015; Sundqvist & Sylvén, 2016; Vallejos & Sanz, 2021).

Before going any further, it is crucial to define what 'out-of-school factors' mean. The term 'out-of-school' refers to any action related to learning outside the classroom including naturalistic language acquisition to self-learning. In the present study: watching TV, language at home and extracurricular opportunities for language contact will be considered as potential factors that may influence language learning.

3.3.1 Media

Media, such as watching TV, listening to music, or the use of social networks can be critical factors for implicit language learning. These media have increasingly found their way into students' daily life. Additionally, the rapid emergence of online streaming platforms in the past years has now endorsed quick and easy access to a seemingly endless supply of language learning.

According to Webb (2015), television is already an integral part of people's daily life. Viewing television may be an effective way to increase exposure to languages and be exposed to meaning-focused input. In fact, research has reported positive effects of watching TV on vocabulary (Pujadas & Muñoz, 2020; De Wilde *et al.*, 2021; Muñoz, 2022; Muñoz *et al.*, 2022), grammar (Pujadas & Muñoz, 2020; Pattemore & Muñoz, 2020; Muñoz *et al.*, 2021) general competence (Koolstra & Beentjes, 1999; Van Den Poel & Leunis, 1999; Bunting & Lindström, 2013), and language attitudes (Nightingale, 2016).

Starting in the context of primary education, Van Den Poel and Leunis (1999) explored whether watching subtitled television programmes in the target language had an impact on language acquisition. A total of 327 Dutch-speaking Belgium children (8-12 years old) participated in the study. Data were collected by means of a short video using Dutch (participants L1), Danish (participants target language) either in the soundtrack or in the subtitle. In addition, three proficiency language tests were administered to assess students' vocabulary, syntax and

morphology. Findings from the study showed significant acquisition effects in the auditory part of the Danish vocabulary test when Danish was the soundtrack language. The same findings were obtained by Koolstra and Beentjes (1999). The researchers explored whether English words could be acquired through watching a television programme with an English soundtrack and Dutch subtitles. A total of 246 in grades four and six at the primary school level participated in the study. Participants were divided into three groups: (i) watching an English television programme with Dutch subtitles, (ii) watching the same English programme without subtitles, and (iii) watching a Dutch television programme (control). Data were collected by means of a 15-min documentary about grizzly bears and vocabulary acquisition tests. Findings from the study showed that students' recognition of English words were highest in the subtitled condition. This indicates that Dutch elementary school children can acquire vocabulary by watching subtitled television programmes.

In Sweden, Bunting and Lindström (2013) also examined the outcomes of English language learning by watching TV among primary students. A total of 47 students (aged 11 years old) participated in the study. Data were collected with the help of a questionnaire and a one-week language diary and interviews. Findings from the study showed that those participants who frequently watched TV reached higher linguistic competence than those who did not. Watching TV, especially with the use of captions, had a positive impact on language learning at the primary school level.

Also with young learners', De Wilde *et al.* (2021) looked at how well 107 young learners knew English vocabulary and could speak it before and after they started taking English classes. They also looked at some things that might affect how well they did, like how much English they heard outside of school, how long they were in English classes, how well they could think logically, how good their memory was, and how much they already knew of a L2. They found that the students got much better at English over time, and that going to school for English and hearing it outside of school helped them improve even more. The biggest factor in how well they did at the end was how much English they already knew before they started school. Other things that helped them improve included hearing English outside of school and being in English classes for a longer time, while things like their memory and how good they were at their first language did not matter as much.

In the context of secondary education, Pattemore and Muñoz (2020) explored L2 grammar learning from a constructionist perspective of language. A total of 90 participants engaged in

the study and were divided into two groups: watching TV series with or without captions. Data were collected by means of pre- and post-tests of the target constructions consisting of productive grammar exercises, such as sentence transformation or filling in the gaps with a correct form of a given word. Findings from the study showed that extensive exposure to TV led to significant gains in the target construction learning. Furthermore, the group that watched the materials with captions significantly outperformed the non-captions group, demonstrating the value of captions for grammar learning.

Similarly, Muñoz *et al.* (2021) investigated the benefits of using audio-visual input for learning a L2 particularly for vocabulary and grammar acquisition. Two longitudinal studies were conducted, one focusing on vocabulary acquisition in adolescents with an elementary proficiency level, and the other on grammar acquisition in university students with an intermediate proficiency level. Results showed that language gains were significantly correlated with the frequency of input, but the size of the effect depended on the type of on-screen text support provided. The studies also revealed that captions had a significant advantage over no captions for grammar learning, but no significant advantage for vocabulary learning at this proficiency level. Proficiency level was found to play a significant role in language gains. The study concluded that audio-visual material can enhance L2 learning and help learners prepare for study abroad experiences.

Music's influence in language and literacy development has long been demonstrated (Israel, 2013). Previous research has shown that listening to music has proved to facilitate the acquisition of vocabulary (Milton, 2009; Nightingale, 2016; Pavia, Webb, & Faez, 2019; Degrave, 2019; Morini & Blair, 2021) considering sometimes the combination of watching TV and listening to music (Sundquist & Wikström, 2015; Jensen, 2017). For instance, Sundqvist and Wikström (2015) analysed the effect of different English medium sources available outside of the classroom and the impact of oral and vocabulary knowledge. A total of 80 students aged fifteen participated in the study. Data were collected by means of a questionnaire, language diaries, and five speaking tests. Out-of-school factors were measured in regard to the following activities: watching TV, listening to music and playing video games. Findings from the study showed a correlation between out-of-school factors and learners' oral and vocabulary acquisition.

In the same line, Kuppens (2010) also investigated oral performance in a primary context. The aim of the study was to analyse to what extent watching TV, listening to music and video games

influenced students' oral performance. A total of 374 primary school learners took part in the study. Data were collected by means of a questionnaire and oral interviews. Findings from the study showed that those participants who reported watching TV, listening to music and playing video games outperformed those who did not.

Finally, also in primary education, Jensen (2017) analysed the impact of out-of-school activities (gaming, listening to music, reading, talking, watching television, writing) and their impact on learning vocabulary. A total of 107 primary learners aged 8-10 years old participated in the study. Data were collected by means of diaries (reporting time spent doing the activities outside school) and vocabulary tests. Findings from the study revealed that students who consistently participated in out-of-school activities demonstrated a more significant impact on their vocabulary acquisition.

So far, we have explored previous research on the variables of watching TV and listening to music, and the use of social networks has also motivated research on their impact on language learning. The use of social networks is closely connected to being exposed to language outside of the classroom. With the advent of new technologies, opportunities for input exposure and interaction are available, which can indirectly facilitate language learning. Considering that intensity of exposure to the language outside the classroom is a crucial issue (Muñoz, 2011; Sheela & Ravikumar, 2016), the area of Information and Communication Technology (henceforth, ICT) is worth considering.

The term ICT is a thriving area of study in applied linguistics both with regard to research and to practical application. ICT provides us with the opportunity of language contact outside the school. The fact that the majority of citizens have access to technology has provided new and countless opportunities for language learning. From this perspective, social media fosters online interaction with different degrees of multilingualism (Depew, 2011), and helps to share knowledge among students (Williams *et al.*, 2012), who may use social media to interact and share ideas related to lectures (Sudha & Kavitha, 2016).

In spite of the general advantages reported above, there seems to be no consensus on the benefits of social media in research. While some studies have reported positive effects, (Luarn, Lin, & Chiu, 2015; Vikneswaran & Krish, 2016; Khanam, 2020; Ekpe *et al.*, 2021) others seem to suggest some negative effects of the use of social media (Malaney, 2004; Alwagait, Shahzad, & Alim, 2015).

Regarding the studies that support the positive effects of social media, Luarn *et al.* (2015) carried out a study on the impact of Facebook on students' learning outcomes. A total of *n* = 1,030 participants from university level took part in the study and data were obtained by means of posts from the home pages of the participants. The researchers analysed the different posts by measuring the linking words, commenting, and sharing behaviour that participants had. Results from the study showed that social media was one of the most important factors that affected students' academic performance and the use of linking words. The researchers found that Facebook usage contributed to students' ability to participate socially and culturally in their new environment.

In the same line, Vikneswaran and Krish (2015) also explored the written performance on Facebook of 10 secondary Chinese students. The study aimed to analyse what motivated students to write in English on Facebook and whether the use of social networks improved students' written performance. Data were collected by means of a written test and student interviews, reporting that the use of technology in writing tasks made students write better in English. Similarly, Khanam (2020) analysed the impact of the use of social media on 213 students' academic performance. Data were analysed by means of a questionnaire. Results showed that the use of social media is significantly associated with students' grades. Similar results were obtained by Ekpe *et al.* (2021), who conducted a study analysing the effect of social media on the academic performance among Malaysian students. A total of 191 students took part in the study. Researchers used questionnaires and administered them to three public universities from Malaysia. Findings emphasised the significant influence of social media on students' academic endeavors, emphasising the importance of reasonable usage and awareness of its potential impact on leaning outcomes.

Contrary to these findings, negative learning results from spending a high amount of time with social media have been reported. For instance, Malaney (2004) investigated the use of social networks on students' language learning. A total of 490 university learners took part in the study, and data were collected by means of an English test, a questionnaire, and semi-structured interviews. Results from the study showed that students spend most of their online time using social networks and email, surfing the Web, doing coursework and downloading things. The researchers pointed out that students' grades suffered as a consequence of spending too much time on the media.

Likewise, Alwagait *et al.* (2015) conducted a study aiming to analyse the use of social media and students' academic grades. A total of 108 participants took part in the study. Data were analysed by means of a questionnaire and semi-structured interviews. The questionnaire gathered data in relation to the usage of social networks. Results from the study showed that the use of social media had a negative impact on students' grades.

In this section, we have examined some studies on the impact of watching TV, listening to music and the use of social networks on students' language learning outcomes. From the studies reviewed, we acknowledged that most of the studies have been conducted at university level and fewer at the primary school level. In this case, general English proficiency, grammar, and vocabulary have been analysed. In addition, the above-mentioned studies have mainly focused on English as a language and they have ignored students' language repertoire. It seems that there is a need to explore the impact of out-of-school factors from a multilingual perspective. As far as we know, Nightingale (2014) is the only study that addressed the impact of out-of-school factors from this perspective. Nightingale (2014) examined gains in pragmatic competence considering the potential advantage of the use of out-of-school materials. A total of 120 participants participated in the study. Data were collected by means of two episodes of the children's cartoons *Peppa Pig* and *Charlie and Lola*. Findings from the study showed that media, specifically watching animated cartoons, facilitate the pragmatic development of young emergent multilingualism. The study also highlighted the importance of not dubbing the original version since it has the effect of removing the provision of pragmalinguistic resources, which, in turn, obstructs multilingual pragmatic development.

In line with Nightingale (2014), the present study explores the impact of media, focusing on watching TV, on students' multilingual communicative appropriateness in writing and in the context of primary education. A context that is scarcely explored.

3.3.2 Language use at home

Language at home is relevant for the present study since in our study we analyse the effect of language exposure outside the classroom. As reported by Hoff (2006), children acquire their home language by frequent exposure and language offers a means for children to communicate with and learn from others through interaction. Along with this idea, research has analysed the

positive impact of language at home on learning additional languages (Safont, 2005; Guzmán-Alcón & Portolés, 2021).

Focusing on the aim of the present study, the impact of family language, or language use at home, on students' writing skills, has motivated previous research (Sagasta, 2003; Sanz, 2008; Cenoz *et al*., 2013; Arocena, 2017). For instance, Sagasta (2003) analysed students' third language writing competence, given the variable, language used at home. Participants were recruited from a secondary school in the Basque Country. Although the language of instruction for all participants was Basque, half of them used Basque at home while the other half used Spanish. In order to analyse learners' writings, Sagasta (2003), asked the participants to write a letter to a host family in England. To analyse students' writings, the taxonomy designed by Jacobs *et al's.* (1981) was used. Sagasta (2003) revealed that those students who used Basque at home outperformed their peers in writing in English. Nevertheless, results concerning students who used Spanish at home revealed that there were no differences among the students who spoke Basque at home and those who spoke Spanish at home. Therefore, Sagasta (2003) noted that students transferred the writing skills acquired through instruction in the minority language when writing in the dominant language. In fact, those students who scored high in Basque and Spanish scored higher in English. Additionally, those learners who used Basque at home also performed better in English. Findings from this study confirmed the influence of the level of language competence across languages.

In the same line, findings reported in Sagasta (2003) were supported by a similar study by Arocena (2017), who examined the assessment of writing skills in the Basque country, a multilingual context, where Spanish, English and Basque are used as languages of instruction. The study included 70 participants in the third year of secondary education, from three different schools. Data were collected by means of two types of instruments. First, a background information questionnaire, and secondly each student wrote three compositions (one in each of the languages of instruction). Jacobs *et al.*'s (1981) taxonomy was employed to assess the participants writing, focusing on content, organization, vocabulary, language use and mechanics. Findings from the study, revealed that the students who used Basque with their parents obtained significantly higher scores in Basque and English than those that used Spanish with their parents. Additionally, the researcher analysed the correlation between participants' written performance in the three languages. To our knowledge, this is the only study analysing students' writing in three languages, but it is conducted in the context of secondary education.

Similarly, Sanz (2008) examined L3 secondary students' written skills. A total of 120 participants were recruited from two different contexts: 77 monolingual Spanish speakers and 124 bilingual (Spanish/Catalan) speakers. Data were collected by means of a written text and semi-structured interview, and findings revealed the positive effect of language at home on the acquisition of the L3 when comparing the writing skills of bilingual and monolingual learners of English.

In this section, we have looked at previous research on language at home as a potential measure of input exposure and its impact on multilingual students' writing. From the studies reviewed, it seems that being exposed to a minority language at home improves students' L3 writing (Sagasta, 2003; Sanz, 2008; Arocena, 2017). However, there is a need to explore the variable language at home and its impact in different educational settings. Thus, the present study will address this out-of-school input measure in another multilingual context: the Valencian Community in the educational context of primary education.

3.3.3 Short period of time in the target language community

In relation to the opportunity of visiting an English-speaking country for a short period of time, different studies have reported the benefits of this experience (Mitchell, Tracy-Ventura, & McManus, 2017), but the same attention has not been given to all linguistic areas. Several studies have focused on the impact on oral skills (Llanes & Muñoz, 2009; Llanes, Tragant, & Serrano, 2015; Llanes, Mora, & Serrano, 2017), others on the impact of vocabulary gains (Ife, Vives-Boix, & Meara, 2000; Pérez-Vidal & Barquin, 2014; Zaytseva, 2016), and other on the influence on reading (Borràs & Llanes, 2020) or pronunciation (Llanes *et al.,* 2017).

Regarding research with a focus on writing and contact with the target community for a short period of time, some studies have been conducted, but not in the context of primary education. For instance, Llanes and Muñoz (2009) explored whether students' oral and written language learning can be significantly improved during a summer stay of 3 and 4 weeks. A total of 139 participants from 13 to 22 years took part in the study. Learners' linguistics gains were analysed through oral fluency, accuracy measures, and by means of a listening comprehension task. Learners' oral fluency was examined in terms of syllables per minute, other language word ratio, filled pauses per minute, silent pauses per minute, articulation rate, and length of the longest fluent run. The accuracy of learners' oral production was measured by means of the ratio of error-free clauses and the average number of errors per clause. In addition, learners'

errors were classified into 4 categories: morphological errors, syntactic errors, lexical errors, and covered errors. Results from the study showed that short stays produced significant gains both in oral and written proficiency gains.

In the same line, Llanes and Serrano (2014) reported the advantage of a short period of time in the target language community outperforming their peers in all dimensions considered in the writing skill. In this study, a total of 197 participants from the university completed several tests before and after their respective programmes and development of oral and written skills were also examined in terms of fluency, lexical, syntactic complexity, and accuracy.

Also at the university level, Strobl and Baten (2021) explored writing from a total of 30 Belgian students that participated in a semester abroad. The study followed a pre and post-test design and writing samples were analysed using linguistic and task-related assessment criteria. Results from the study indicated a correlation between writing gains, language contact, and social networks. Although the study by Strobl and Baten (2021) was conducted in the context of university, the study is relevant for our study since the variables language contact and social networks are also considered in the present study.

Looking at studies conducted at primary school level, Evans and Fisher (2005) examined the impact that a short period of time (6-11 days) had on students' writing skills. Participants were from the last year of primary education and were learning French as a target language. A total of 150 participants took part in the study. 82 students were exposed to the language during a short period of time and 68 did not. Data were collected by means of pre-test and post-test written tests, in which subjects had to write about their own home background (before going) and host family and experiences (after going). Data were coded based on accuracy, fluency and content. Additionally, semi-structured interviews were conducted and recorded with all participants. Findings from the study showed that students' writing improved more in fluency and accuracy than it did in content. According to the author, the most visible difference between the pre and post-tests was the length of students' compositions, concluding that a short period of time may provide significant gains in writing skills. In contrast, Llanes, (2012) found that after spending 3 months abroad, participants experienced significant gains in oral skills but not in writing. This study was also carried out in the context of primary education.

In the same line, Llanes *et al.* (2015) explored the effect of a short period of time in the target language on primary students. A total of 64 learners of English participated in the present study.

Participants were 12 -13 years old and they spent 3-weeks in the target language community. Data were collected by means of a written task and a questionnaire that elicited some biodata twice (pre-test and post-test). Participants' written texts were analysed considering fluency, lexical, grammar complexity, and accuracy. Finding from the study showed that participants significantly improved after having had a short period of time in the target language.

Considering the above-mentioned studies on the effects of a short period of time in the target language community on students' writing, some researchers have confirmed the positive impact (Evans & Fisher, 2005; Llanes & Muñoz 2009; Llanes & Serrano, 2014; Llanes *et al.,* 2015), while others have reported lack of effectiveness (Llanes, 2012). However, most of the studies have analysed writing in terms of fluency, accuracy, and complexity, without considering the communicative appropriateness of students' writing, which involves the analysis of linguistic, textual, and pragmatic aspects of the text. An approach that we will follow in the present study. Additionally, all the studies mentioned above have ignored students' language repertoire.

Besides, to the best of our knowledge, Strobl and Baten (2021) is the only study that has explored the impact of language contact, in terms of short periods of time in the target language community, together with the use of social networks on students' writing. However, the study was conducted at the university level. On the contrary, the present study was conducted in the context of primary education, and the input exposure measures examined are those that occur in the educational context where the study was conducted: use of media (including watching TV), language at home, and other sources of input exposure, mainly a short period of time in the target language community and extra tuition in language school.

3.3.4 Extra tuition in private language schools

With regards to extra tuition in private language schools, this can be understood as extra-curricular opportunities for language contact outside the school. In spite of being conducted in a classroom, at this age, students enrol in private tuition to be in contact with the target language and they are likely to engage in activities that trigger extra contact with English as an additional language. So far, previous research has considered extracurricular lessons as an input measure. For instance, Muñoz, (2014) examined and compared the impact of different input measures: number of years of instruction, number of hours of curricular and extracurricular lessons, number of hours spent abroad in an English-speaking setting, and current contact with the target

language. A total of 160 learners of English participated in the study. Data from 160 learners of English were analysed in terms of fluency, lexical diversity, and syntactic complexity, reporting that input exposure rather than starting age had a stronger association with oral performance. Findings revealed that having a short period of time in the target language had a positive effect on language learning.

Other studies include extra tuition in private language schools as one of the out-of-school factors in the immediate environment. For instance, Nightingale (2016) examined private tuition together with linguistic landscape or study abroad periods. In his study, the author investigated the influence of short period of time in the target language, out-of-school factors, including private tuition, on students' language attitudes. A total of 152 secondary learners took part in the study and data were collected by means of questionnaires and oral interviews. The author reported that parents' attitudes play a crucial role in the extent to which they encourage participation in extracurricular activities such as private tuition, exchange programmes, or family holidays to English-speaking countries.

To sum up, in the context of the present study, exposure to language during extra tuition in private language schools and short period of time in the target language community will be considered as potential measures of input exposure beyond the classroom. We recognise that in other European countries, people have more opportunities to use the additional language in real-life social situations. However, in the context of the present study, most input exposure to the additional language takes place in the classrooms, through TV, during a short period of time in the target language community, or extra tuition in private language school are the only sources of input exposure beyond the classroom. Thus, the present study will look at the use of media, language use at home, short study abroad periods, and extra tuition in private language schools as measures of out-of-school language exposure. In addition, considering the multilingual environment where the study was conducted, we will consider input exposure considering students' language repertoire, that is to say, Catalan, Spanish, English and other languages.

3.4 Summary of the chapter

As reported above, previous research conducted both in Canada (Spada & Lightbown 1999; Collins *et al.,* 1999; Bournot-Trites & Reeder, 2001; Burmeister & Daniel, 2002; White & Turner, 2005; Collins & White, 2011) and Europe (Serrano & Muñoz, 2007; Serrano *et al.,*

2011; Muñoz, 2011, 2014; Llanes & Muñoz, 2013) has examined the effects of intensity of language exposure on language learning. Besides, the combination of intensity of language exposure at school and beyond the classroom has also been examined (Muñoz *et al.,* 2018; De Wilde *et al.,* 2021; Muñoz & Cadierno, 2021).

Considering the research conducted so far, we have acknowledged some research gaps that the present study aims to fulfil. First, there seems to be a need to analyse different degrees of the intensity of language exposure in the classroom, as few studies have analysed that issue (Serrano & Muñoz, 2007). Secondly, most of the studies have been conducted at university (Serrano & Muñoz, 2007; Pérez-Vidal & Juan-Garau, 2011; Serrano *et al.,* 2011; Muñoz, 2014) and secondary school level (Muñoz, 2011; Muñoz & Cadierno, 2021), or combining primary and adults learners (Llanes & Muñoz, 2013), and only a few have been conducted at primary school level (Celaya *et al.*, 2003; Muñoz *et al.,* 2018; De Wilde *et al.*, 2021). Thirdly, most of the studies have examined oral proficiency or specific features of oral performance (Serrano *et al.,* 2011), general English learning (Celaya *et al.*, 2003; Serrano & Muñoz, 2007; Muñoz & Cadierno, 2021) and grammar (Muñoz *et al.*, 2018), but to the extent of our knowledge, not a single study has explored primary students' communicative appropriateness in writing.

However, most of the research has ignored students' language repertoire. Nightingale (2014) is the only study that has analysed the impact of out-of-school factors considering students' language repertoire. In line with Nightingale (2014), we also look at the impact of out-of-school factors in a multilingual context. In the present study, we will consider media, including watching TV (Van Den Poel & Leunis, 1999; Koolstra & Beentjes, 1999; Bunting & Lindstrom, 2013; Pujadas & Muñoz, 2020; Pattemore & Muñoz, 2020; Muñoz *et al.,* 2021; De Wilde *et al.*, 2021; Muñoz, 2022; Muñoz *et al.*, 2022), as input exposure beyond the classroom.

Other out-of-school factors, such as language at home, time in the target language community, and extra tuition in private language will also be considered, since they may play a role in the multilingual context where the present study was conducted. Previous research has reported that having different languages in students' repertoire improves students' writing (Sagasta, 2003; Sanz, 2008; Arocena, 2017). Besides, although there seems to be no conclusive results on the impact of language contact outside the school during a short period of time (Evans & Fisher, 2005; Llanes & Muñoz 2009; Llanes, 2012; Llanes & Muñoz, 2013; Llanes & Serrano, 2014; Llanes *et al.*, 2015), in our context some students have the opportunity of being exposed

to the language in the target language community, while others do not. Similarly, some students have private tuition increasing the amount of exposure to English, while others do not.

Thus, to shed light on the influence of input beyond the classroom, the impact of media, language at home, short period of time in the target language community and private tuition will be examined in the present study. To our knowledge, Strobl and Baten (2021) is the only study that has investigated the influence of input beyond the classroom on students' writing, considering the variables of short periods of time in the target language community, students' language contact, and social networks. However, this study was conducted at the university context and explored FA in students' writing, while our study examines students' communicative appropriateness and was conducted in the multilingual educational context of primary education.

To sum up, the present investigation aims to shed light on the impact of input exposure in the different intensity language programmes in the Valencian Community, which involve the use of two official languages (Catalan and Spanish) and English as an additional language, on students' communicative appropriateness in writing. In addition, we take into account the impact of input beyond the classroom, considering watching TV, language at home, in this case; Catalan, Spanish, English and another language, short period of time in the target language community and private tuition.

PART II. THE STUDY

CHAPTER 4. THE PRESENT STUDY

CHAPTER 4
THE PRESENT STUDY

The present study addresses whether the intensity of exposure to different languages in the classroom affects students' communicative appropriateness at the primary school level. In particular, it explores varying intensity language programmes in the Valencian Community, which involve the use of two official languages (Catalan and Spanish) and English as an additional language in CLIL settings. In addition, we take into account the impact of input exposure beyond the classroom, with a focus on the variables: watching TV, private tuition, short period of time in the target language community and language at home.

Chapters 1, 2 and 3 reviewed previous research on how the intensity of exposure in the classroom and beyond affected language learning, revealing some inconclusive results that the present study will attempt to shed light on. Section 4.1 articulates the aims of the present investigation and Section 4.2 introduces the research questions and hypotheses to be examined.

4.1 Rationale for the study

Three ideas encouraged this research project. Firstly, the researcher's interest is to investigate the benefits of CLIL in the multilingual context of the Valencian Community. Secondly, as a member of the LAELA (*Applied Linguistics to the Teaching of the English Language)* research group, whose interests focused on learning pragmatics across contexts and ages, I was interested in exploring young learners' communicative appropriateness. Previous research conducted by the LAELA research group has investigated pragmatics in a variety of contexts such as the EFL (Alcón-Soler, 2005), English for specific purposes (Martínez-Flor & Usó-Juan, 2006), the study abroad (Alcón-Soler, 2015; Sánchez-Hernández & Alcón-Soler, 2019) or the multilingual context, in this case at tertiary (Safont, 2005), secondary (Martín-Laguna & Alcón-Soler, 2018; Martín-Laguna, 2020), and primary education (Portolés, 2015; Safont & Portolés, 2016; Portolés & Safont, 2018). Furthermore, the LAELA research group also conducted research on CLIL at the university level (Martí & Portolés, 2019; Herraiz-Martínez & Sánchez-Hernández, 2019). In addition, most of the research conducted by this group has focused on speech acts (Safont, 2005; Martínez-Flor & Usó-Juan, 2006; Portolés, 2015), pragmatic routines (Sánchez-Hernández, 2018), and discourse markers (Martín-Laguna & Alcón-Soler, 2018; Martín-Laguna, 2020), while the present study explores students'

communicative appropriateness in writing. Thirdly, although research on CLIL has attracted attention, studies to date tend to focus on exploring CLIL versus non-CLIL (Jiménez-Catalán & Ruiz de Zarobe, 2009; Mattheoudakis *et al.,* 2014; Sotoca-Sienes & Muñoz-Hueso, 2014; Anghel *et al.,* 2016; Piesche *et al.,* 2016; Agustín-Llach & Canga-Alonso, 2016; Agustín-Llach, 2017; San Isidro & Lasagabaster, 2018) rather than exploring the impact of intensity of CLIL programmes. As far as we know, Merino and Lasagabaster (2017) is the only study that analysed the intensity of CLIL programmes at the secondary school level, with singular focus on one language in the curriculum. In the present study, we will address the intensity of CLIL programmes in another population, that of young learners, in the multilingual context of the Valencian Community. This involves focusing on the three languages of the curriculum: Catalan, Spanish and English.

Considering the motivation of the present study, below we summarise the aims by pointing out the research gaps that the current investigation aims to cover.

First aim: *to explore the impact of different intensity of CLIL programmes on primary students' communicative appropriateness in writing, considering all languages in the curriculum CLIL.* Most of the investigations, regarding writing, have used the CAF dimension (Strobl & Baten, 2021), or have not examined pragmatics (Cenoz & Valencia, 1994; Sagasta, 2003; Sanz, 2008; Arocena, 2017; Orcasitas-Vicandi, 2022). Martín-Laguna (2020) is the only study that focused on pragmatics by looking at multilingual learners' use of discourse markers in writing. However, the study was conducted at the secondary school level, while the present study analyses primary students' communicative appropriateness holistically.

In addition, most of the studies have analysed students' advancements in the English language (Mattheoudakis *et al.,* 2014; Sundqvist & Sylvén, 2015; Agustín-Llach & Canga-Alonso, 2016; Pladevall-Ballester & Vallbona, 2016; Agustín-Llach, 2017; Coral-Mateu, Lleixà-Arribas, & Ventura, 2018), but they have not taken into account the rest of the languages in the curriculum. As far as we know, San Isidro and Lasagabaster (2018) is the only study that takes into account student language repertoire (Spanish, Galician and English) under CLIL versus non-CLIL programmes, without considering different types of input exposure in CLIL programmes. An issue that the present study will cover.

Additionally, despite the dual-focus of CLIL, most of the investigations have explored learners' linguistic progress (Van der Leij *et al.,* 2010; Prieto-Arranz *et al.,* 2015; Menezes & Juan-

Garau, 2015; Sundqvist & Sylvén, 2015; Anghel *et al.,* 2016; Agustín-Llach, 2017) and few studies have examined both linguistic and content improvements (Sotoca-Sienes & Muñoz-Hueso, 2014; Mattheoudakis *et al.,* 2014; Pladevall-Ballester & Vallbona, 2016; San Isidro & Lasagabaster, 2018). The present investigation will explore the progress in language (cohesion coherence, spelling, punctuation and grammar), comprehensibility, and content at the primary school level by considering the topic of the water cycle within the Science subject.

Second aim: *to explore the impact of language exposure beyond the classroom on students' communicative appropriateness in writing.* As reported in Chapter 3, the impact of exposure beyond the classroom has motivated previous research. For instance, studies have investigated the impact of watching TV (Pattemore & Muñoz, 2020; Muñoz *et al*., 2021), listening to music (Jensen, 2017) and the use of social networks (Luarn *et al.,* 2015; Ekpe *et al.,* 2021; De Wilde *et al.,* 2021) on language learning. However, most of the studies have measured the impact of out-of-school exposure in relation to general written performance (Celaya *et al.*, 2003; Serrano & Muñoz, 2007; Muñoz & Cadierno, 2021) vocabulary (Llanes & Muñoz, 2013; Pujadas & Muñoz, 2020) and grammar (Muñoz *et al.*, 2018), but none of them have focused on communicative appropriateness, combining language exposure at school and beyond. An issue addressed in the present investigation.

Section 4.2 Research Questions and Hypotheses

Considering the existing literature and the aforementioned aims two research questions and their hypotheses are outlined below.

Research Question 1 (RQ1): Are there any differences in students' communicative appropriateness in English considering the intensity of CLIL programmes? If so, are differences observed in all the languages of the curriculum?

On the one hand, previous research on intensity of input exposure has shown that amount of exposure promotes students' language learning (Serrano & Muñoz, 2007; Merino & Lasagabaster, 2017). However, as far as we know, only two studies have addressed written performance in CLIL settings (Merino & Lasagabaster, 2017; San Isidro & Lasagabaster, 2018). The main focus of interest in these studies is different from our main focus. The study by San Isidro and Lasagabaster (2018) was conducted in a CLIL versus non-CLIL setting and explored all the languages in students' repertoire. In contrast, the study by Merino and

Lasagabaster (2017) took into account the intensity of CLIL programmes and focused only on the English language.

On the other hand, despite the dual-focus of CLIL, most of the investigations have explored learners' linguistic gains (Van der Leij *et al.,* 2010; Prieto-Arranz *et al.,* 2015; Menezes & Juan-Garau, 2015; Sundqvist & Sylvén, 2015; Anghel *et al.,* 2016; Agustín-Llach, 2017) and few studies have examined both linguistic and content gains (Sotoca-Sienes & Muñoz-Hueso, 2014; Mattheoudakis *et al.,* 2014; Pladevall-Ballester & Vallbona, 2016; San Isidro & Lasagabaster, 2018; Graham & Eslami, 2021). The present investigation will investigate gains in language and content at the primary school level by considering the topic of the Water cycle in the science curriculum. Considering our first research question, we formulated the following two hypotheses:

Hypothesis 1 (H1): The degree of exposure to English in CLIL programmes will affect students' communicative appropriateness in writing (Serrano & Muñoz, 2007; Serrano *et al.*, 2011; Merino & Lasagabaster, 2017).

Hypothesis 2 (H2): The degree of exposure to Catalan and Spanish will affect students' communicative appropriateness in writing (Cenoz *et al.,* 2013; Arocena, 2017; San Isidro & Lasagabaster, 2018; Orcasitas-Vicandi, 2022).

The present investigation also explores whether exposure to all the languages of the curriculum beyond the classroom impacts students' communicative appropriateness in writing. We formulated Research Question 2 as follows:

Research Question 2 (RQ2): Does exposure to English, Catalan and Spanish beyond the school have an impact on students' communicative appropriateness in writing in all school languages (Catalan, Spanish and English)?

With regards to English, we will focus on the variables: exposure to TV, a short period of time in the target language and private tuition. In this regard, research has shown that watching TV (Bunting & Lindstrom, 2013; Pujadas & Muñoz, 2020; Pattemore & Muñoz, 2020; Muñoz *et al.*, 2021), has a positive impact on language learning. Additionally, extracurricular exposure to the English language through private tuition, are all strong indicators of language progress of learning (Evans & Fisher, 2005; Llanes & Muñoz, 2009; Llanes & Serrano, 2014; Muñoz, 2014; Llanes *et al.,* 2015; Strobl & Baten, 2021).

Furthermore, as far as we know, only one study (Nightingale, 2016) has explored the impact of input exposure outside the school on all the languages in the curriculum. However, Nightingale's (2016) study did not consider primary school learners.

Considering our second research question, we formulated the following two hypotheses:

Hypothesis 3 (H3): English exposure beyond the school plays a role in students' communicative appropriateness in writing (Pujadas & Muñoz, 2020; Pattemore & Muñoz, 2020; De Wilde *et al.,* 2021).

Hypothesis 4 (H4): Spanish and Catalan exposure beyond the school plays a role in students' communicative appropriateness in writing (Cenoz & Valencia, 1994; Sagasta, 2003; Arocena, 2017; Strobl & Baten, 2021; Orcasitas-Vicandi, 2022).

CHAPTER 5. METHOD

CHAPTER 5

METHOD

Following the previous chapters, which referred to the literature review, and the purpose and research questions of the current study, Chapter 5 deals with the method that was used to carry out the investigation. More specifically, in this chapter, we explain the research methodology used to conduct the present investigation. In Section 5.1, we explain the sociolinguistic and educational context of the present study. Section 5.2 presents the participants, with detailed information regarding their characteristics, and Section 5.3 focuses on the data collection instruments. Section 5.3.1 presents the quantitative instruments (see Sections 5.3.1.1 for the written task and 5.3.1.2 for the questionnaires). Section 5.3.2 gives a description of the qualitative instruments, where the semi-structured interviews of the present study are outlined (Section 5.3.2.1). Next, Section 5.4 provides the data collection procedure, followed by the rating scale in Section 5.5. Section 5.6 reviews the data coding and analysis. Section 5.7 concludes with a brief summary of the chapter.

5.1 The sociolinguistic and educational context of the Valencian Community

The Valencian Community is a region where Catalan and Spanish coexist. This is also the case of Galicia, Catalonia, the Basque Country, Eastern Aragon, and Asturias, where different languages, apart from Spanish, are spoken (see Figure 12).

Figure 12

Geographical location of the Valencian Community and the three provinces
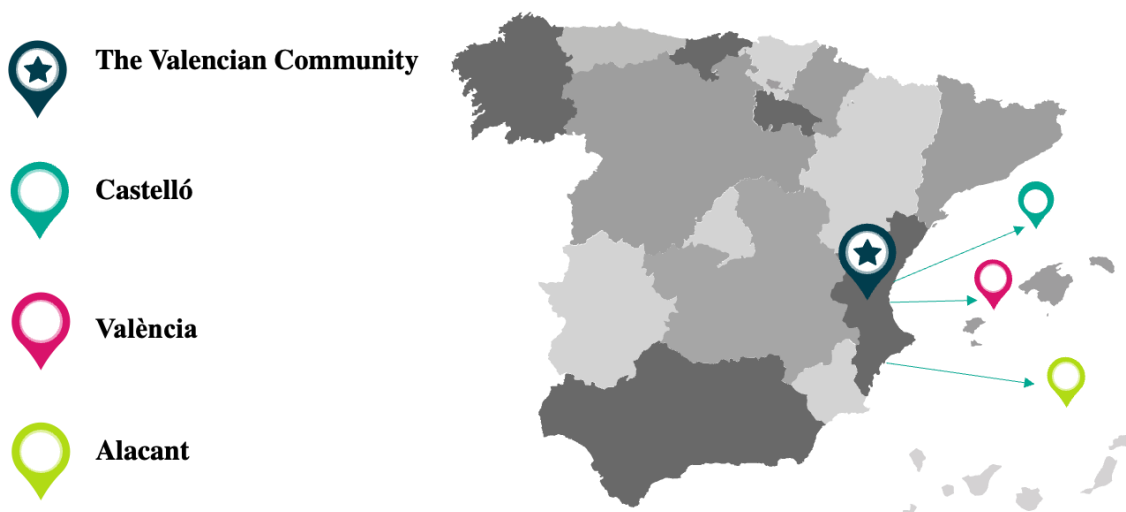
The Valencian Community is located in the east of Spain and is composed of three provinces: Castelló, València and Alacant. In June 2022 the population of the Valencian Community was recorded as 5.106.228 (Generalitat Valenciana, 2022).

As previously stated, in the Valencian Community, Spanish is the official language, but it coexists with the Catalan language, since it was recognised as the official language in accordance with the Autonomous Statute of 1982. However, this has not always been the case for Catalan. During the 40 years of Franco's dictatorship, the Catalan was not officially acknowledged. It was not until Franco's death in 1975 that the Catalan language became accepted. In 1978, the Spanish constitution was approved and Catalan was elevated to a national position. Both Catalan and Spanish were acknowledged as the two official languages of the Valencian Community, encouraging respect and protection for the cultural aspects of both languages.

Nevertheless, the status of both languages presents some differences. Catalan is largely a minority language, whereas Spanish is the majority language with a higher social prestige. The following report presented by the Valencian government (2021) highlights the level of fluency in the Catalan language among the residents of the Valencian Community (see Table 4).

Table 4

Knowledge of the Catalan language among the inhabitants of the Valencian Community, in Catalan-speaking and Spanish-speaking regions (adapted from Generalitat Valenciana, 2021, p. 6)

	Catalan-speaking region	Spanish-speaking region
Understands		
Nothing	5.8%	14.9%
A little	14.7%	31%
Quite well	26.1%	32.8%
Perfectly	53.3%	21.2%
Can speak		
Nothing	28.2%	50.6%
A little	16.7%	25.2%
Quite well	22.8%	16.6%
Perfectly	32.1%	7.6%
Can read		
Nothing	30.9%	53.2%
A little	8.1%	11.2%
Quite well	23.8%	22%
Perfectly	37%	13%
Can write		
Nothing	39.3%	62.9%
A little	16%	17.5%
Quite well	26.4%	14.8%
Perfectly	18%	4.7%

Table 4 illustrates the knowledge of the Catalan language among the inhabitants of the Catalan and Spanish regions of the Valencian Community. As seen in Table 4, the knowledge of Catalan from the Spanish-speaking regions is not very high, as not a single competence is above 65% in any skill. However, in the case of the Catalan-speaking regions, the situation is slightly different where 53.3% of the population reported understating the Catalan language. Considering the province of Castelló (context of the present study, and a Catalan-speaking region), 53.3% of the population completely understands the Catalan language, 32.1% can

speak it, and 18% can write it perfectly. In comparison to the other provinces of the Valencian Community, like Alicante (considered a Spanish-speaking region), it seems that the competence in Catalan is lower, as reported in Table 4. However, the Catalan language is a minority language, and most of the inhabitants in this region have a higher competence in Spanish, compared to their competence in Catalan. Differences with regard to the status of languages are also observed in the history of education in the Valencian Community, as schools vary in the percentage of hours of instruction in Catalan, Spanish and English.

From a historical point of view, with the aim of preserving and elevating the Catalan language, several linguistic programmes have been developed and applied since 1983. Back to 1997, the following programmes appeared: *Programa d'Ensenyament en Valencià* (Valencian Teaching Programme), *Programa d'Immersió Lingüística* (Linguistic Immersion Programme) or *Programa d'Incorporació Progressiva* (Progressive Incorporation Programme). All these programmes aimed to foster knowledge of the two official languages. In addition, due to the great interest in the English language in the Valencian Community, the linguistic programmes were modified by applying several measures, one of them was the implementation of CLIL programmes that have been gradually incorporated at schools, and with varying degree of exposure to the different languages in the curriculum (Spanish, Catalan and English). Later, due to the pressure of society and the need to educate in English, a new optional programme appeared in 2008 (*Resolución de 30 julio de 2008*); *Programa experimental plurilingüe i Multicultural (*henceforth, PEPM*).* Under this programme, which was applied from the year 2008-2009, the language of instruction for infant education is a maximum of 80% in English, a minimum of 10% in Spanish, as well as a minimum of 10% in Catalan.

Similarly, in primary education, all the curricular areas listed in Decree 108/2014 were taught in English, with a maximum of 80% of instruction in English and minimum of 10% in Spanish and Catalan. The percentages established in the Resolución de 30 julio de 2008 can be adjusted in accordance with students' needs and paying attention to the sociolinguistic context of the school. Therefore, nowadays, schools follow the PEPM programme with different exposure to the languages of the curriculum.

Currently, due to the need to increase the multilingual and intercultural competence of learners, a new programme; *Programa d'Educació Plurilingüe I Intercultural* (henceforth, PEPLI) appeared based on Law 4/2018, which regulated and promoted multilingualism in the Valencian education system. This law aimed to balance the knowledge of the three languages

(Spanish, Catalan and English). Secondary school teachers were complaining that students from the Plurilingual experimental programme (with a maximum of 80% of the hours of instruction in English) did not have good competence in the Catalan language, and the objectives of PEPLI is to ensure that students acquire plurilingual competence: oral and written fluency in Catalan and Spanish, and functional fluency in one or more foreign languages.

This law also established the minimum time allocated to each language (Valencian, Spanish and English) in the curriculum: a minimum of 25% of hours of instruction in Valencian and Spanish, and between 15% and 25% in English for primary education. In addition, based on the percentages established in the law, each school should specify the percentages given to each language, accounting for the socio-educational and linguistic context of the school.

However, in spite of the Law 4/2018 that regulated the PEPLI Programme, some schools asked permission to continue with the PEPM programme: with a maximum of 80% content subjects taught in English, and a minimum of 10% for Catalan language and 10% for the Spanish language). As a result, nowadays some primary schools follow the PEPM with a maximum of 80% content subjects taught in English, and a minimum of 10% for Catalan language and 10% for the Spanish language, and others have started with PEPLI *(*a minimum of 25% of hours of instruction in Valencian and Spanish and between 15% and 25% in English). Thus, due to this flexibility in the time allocated to each language, primary schools in the Valencian Community differ according to the hours of instruction in each language, and therefore differences are observed in relation to the intensity of input exposure in the three languages of the curriculum.

Considering the characteristics of language and educational programmes in the Valencian Community, the participants that took part in the present study were selected from three primary schools. The three schools were located in the province of Castelló and had incorporated the CLIL approach, together with different degrees of exposure to the three languages of the curriculum.

The different multilingual education programmes allow each educational project to determine the time dedicated to the three languages in the curriculum, always giving due regard to the maximum and minimum requirements of the law. This has resulted in a great diversity in the exposure to the three languages across schools. For this research, three representative types of schools were selected to reflect what happens in the Valencian Community, and they were coded based on the percentage of language exposure. It should be noted that the 3 hours of

English as a Foreign Language were not taken into consideration, as the main focus was on CLIL. School A and C had 30 sessions of 45 minutes each, with a total of 22h30' teaching hours per week. As for School B, it had 22.30 sessions of 60 minutes each, with a total of 22h30' teaching hours per week. The fact that each school had different session durations was not an issue, as in terms of total teaching hours per week, all schools had a total of 1350 minutes of teaching (teaching hours).

Regarding School A, it followed the PEPM programme, which has been running in the school since 2009, and had 14 sessions per week of CLIL, representing 46.67% of the time dedicated to language and content instruction. More specifically, subjects of Math, Science, PE, English, and Arts and Crafts were taught in English. This school was selected to represent the type of school with the highest percentage of time dedicated to CLIL.

School C, followed the PEPLI programme, which has been running in the school since 2018, dedicated 2 sessions per week to teaching Science and Arts and Crafts in English, representing 6.6% of CLIL in relation to the 22h30' teaching hours they had. In this case, School C was selected to represent the type of schools with the lowest percentage of time dedicated to CLIL.

In the case of School B, it offered the PEPM since 2009, and had 4 CLIL sessions per week of Science and PE (21.1% of the total teaching hours). This school was selected as it represents an intensity level between the aforementioned categories, although not necessarily an intermediate point.

Figure 13 shows the time devoted to CLIL sessions in hours, minutes and the percentage in relation to the total teaching hours per week in each of the schools.

Figure 13

Total teaching hours per week of CLIL in each of the schools
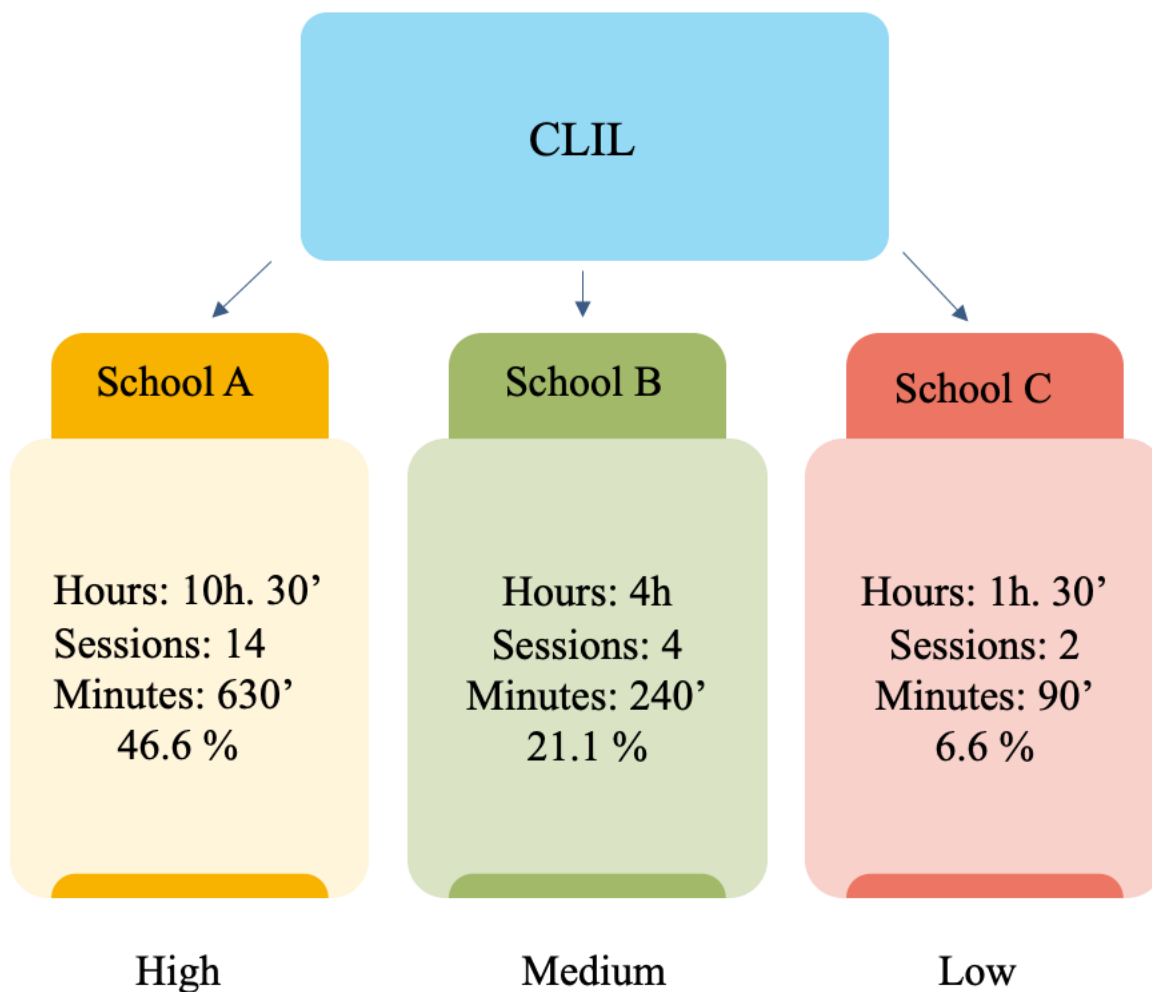
The schools also represent diversity in relation to intensity of exposure to the official languages, Catalan and Spanish, and they are representative of what happens in the educational context of the Valencian Community.

In the case of School A, students were exposed to Spanish in 5 teaching sessions, in which reading and the subject of Spanish were in Spanish, representing 16.6% of the teaching hours per week. School A represents the type of schools with low exposure to Spanish in the Valencian Community and thus it was coded as a school with low intensity exposure.

In the case of School B, students were exposed to Spanish in the subject of Spanish and Personal Social Health and Education (henceforth, PSHE) (20% of the teaching hours per

week). School B represents the type of schools with low exposure to Spanish in the Valencian Community, and thus it was coded as a school with low intensity exposure. In School C dedicated 30% of the teaching hours, to teach the subjects PSHE and PE in Spanish. School C represents the type of schools with medium exposure to Spanish in the Valencian Community, and thus it was coded as a school with medium intensity exposure.

As for Catalan, in School A, 26.6% of the total teaching hours per week were in Catalan. The school offered Catalan, Music and Reading in Catalan, and it represented the type of school with medium exposure to Catalan, and thus coded as medium exposure. Schools B and C had 48.8% and 53.3% of the total teaching sessions in Catalan and were representative of schools with high exposure to Catalan. School B offered Social Science, Math, and Arts and Crafts in Catalan, and Catalan as a subject. School C offered Math, Natural Science, Social science, Music, and Catalan as a subject in Catalan. Both of them were coded as high exposure to Catalan.

A brief overview of language exposure to all the languages in each school is provided in Figure 14, Figure 15 and Figure 16.

Figure 14

Language exposure to all the languages in School A

Spanish
Hours: 3h. 45'
Sessions: 5
Minutes: 225'
16.6%

Catalan
Hours: 6h
Sessions: 8
Minutes: 360'
26.6%

CLIL
Hours: 10h.30'
Sessions:14
Minutes: 630'
46.6%
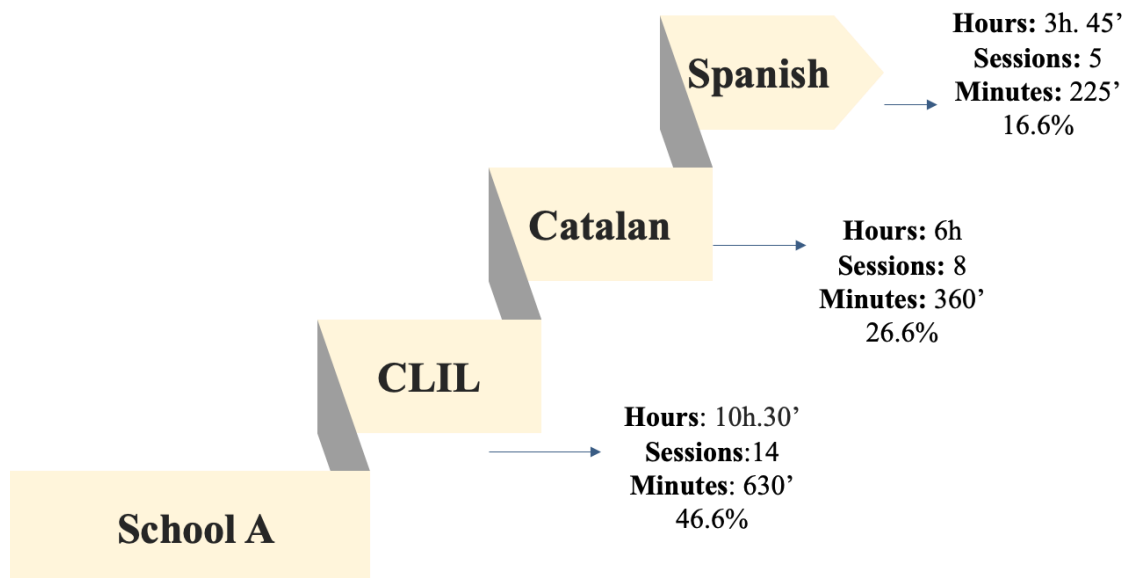
School A

Figure 15

Language exposure to all the languages in School B

Spanish
Hours: 4h. 30'
Sessions: 4h 30
Minutes: 270'
20%

Catalan
Hours: 11h
Sessions: 11
Minutes: 660'
48.8%

CLIL
Hours: 4h
Sessions: 4
Minutes: 240'
21.1%
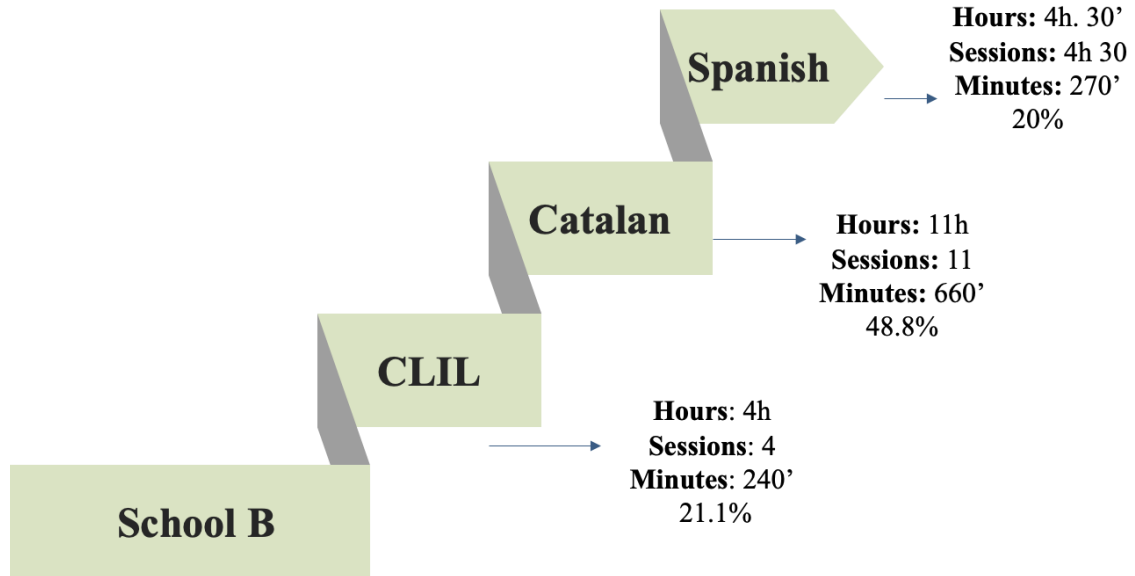
School B

Figure 16

Language exposure to all the languages in School C

Spanish
Hours: 6h. 45'
Sessions: 9
Minutes: 405'
30%

Catalan
Hours: 12h
Sessions: 16
Minutes: 720'
53.3%

CLIL
Hours: 1h.30'
Sessions: 2
Minutes: 90'
6.6 %
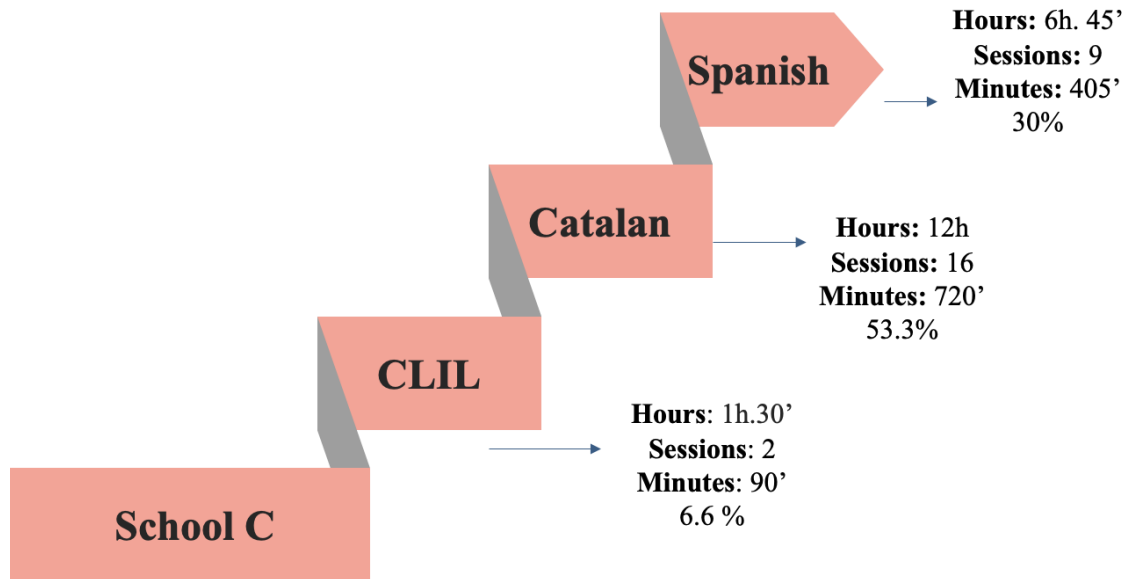
School C

Table 5 illustrates a brief overview of the main characteristics of the different CLIL intensity programmes offered by the three schools selected for the present study, together with intensity of exposure to the two official languages in each school.

Table 5

Overview of the main characteristics of the different CLIL intensity programmes

School	Educational Program	From	Catalan	Spanish	English	Subjects in Catalan	Subjects in Spanish	Subjects in English	Additional information
School A	PEPM	2009	26.6%	16.6%	46.6%	Catalan Music PSHE	Spanish	PE Maths Science Social-Science Arts and Craft	The school offers one session of 45' to reading in Catalan. Regarding the Spanish it language, offers four Spanish sessions plus one of 45' to reading in Spanish each week. CLIL is implemented from 3 years old.
School B	PEPM	2009	48.8%	20%	21.1%	Catalan Maths Social-Science Arts and Craft Music	Spanish PSHE	Science PE	Students in the school had been under the PEPM programme since 2009. CLIL is implemented from 3 years old.
School C	PEPLI	2018	53.3%	30%	6.6%	Catalan Maths Social-Science Music	Spanish PSHE PE	Science Arts and Crafts	Students in this programme had been under the IPL programmes until 2017. In this programme only Arts and crafts was taught in English. 45 minutes of Science in Catalan each week. 30' of oral English communication each week. CLIL is implemented from six years old.

Data for the present study were collected from the Science subject, which was taught in English in the three schools mentioned above. Figure 17 summarises the intensity of exposure to the different languages in the curriculum across the schools where the data of the present study were collected.

Figure 17

Overview of the intensity of CLIL programmes and language exposure to the other two official languages in the curriculum
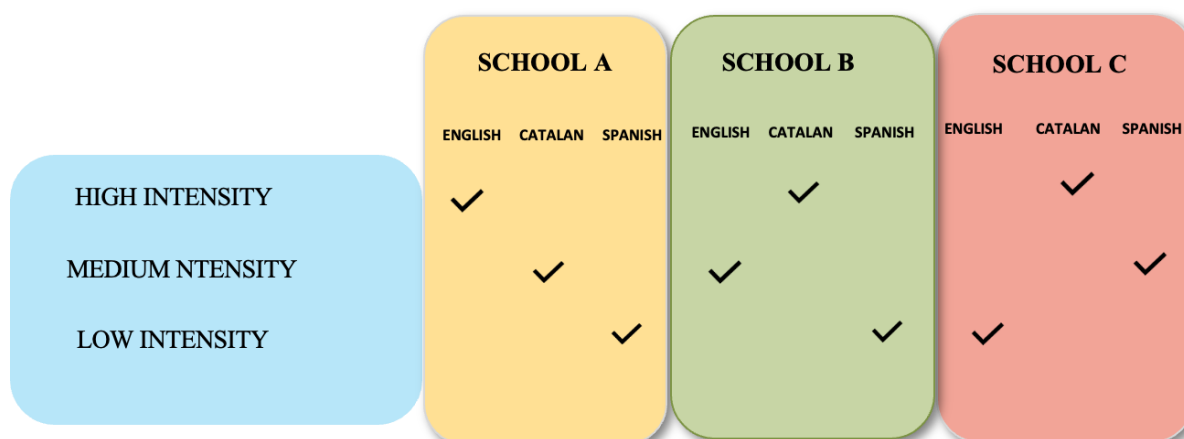
5.2 Participants

The final sample for this study consisted of 392 participants, all of them were Year 6. The initial number of participants was 428, but several reasons beyond the control of the researcher contributed to a decline in participants. For instance, a number of participants ($n = 26$) did not write anything in the writing task, their writing could not be understood ($n = 5$) or they wrote only a couple of words ($n = 5$). Due to privacy regulations, all the participants will be kept anonymous and therefore labelled with numbers.

Participants were selected from three schools located in the province of Castelló, Spain. In particular, participants that took part in the present study were enrolled at schools that had incorporated the CLIL approach in the Valencian Community, with different degrees of intensity of exposure to all the languages in the curriculum. Figure 18 presents the number of participants in each school.

Figure 18

Number of participants in each school

School	Educational Program	Year	Participants
A	PEPM	6	$(n = 137)$
B	PEPM	6	$(n = 123)$
C	PEPLI	6	$(n = 132)$

Total = 392
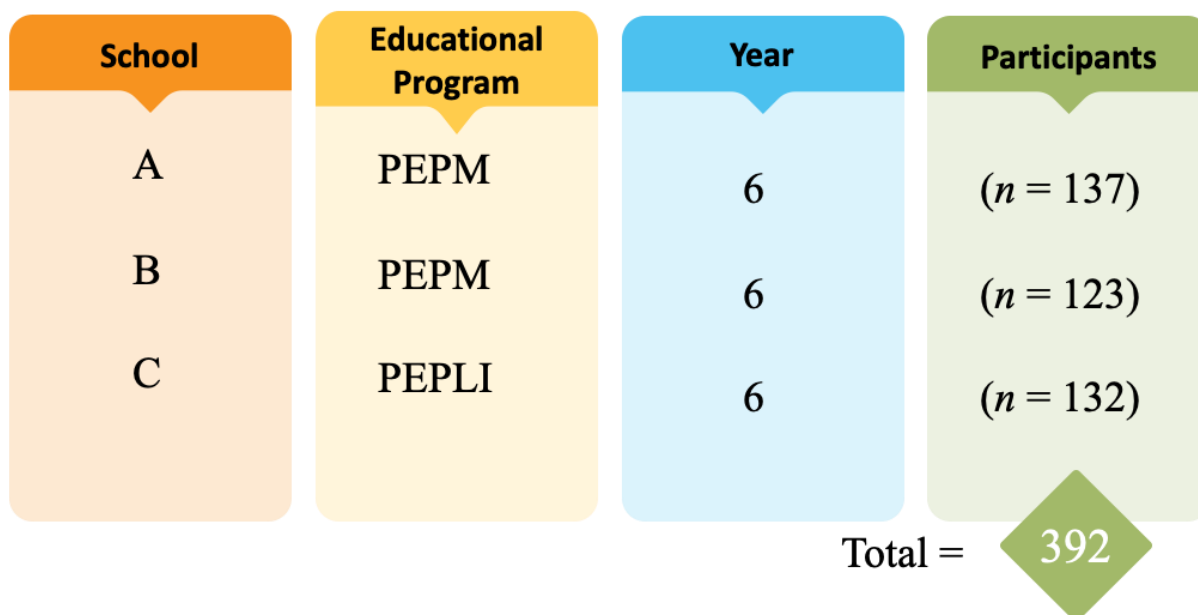
It is worth mentioning that all the participants had Science as a subject in the curriculum, and were taught in English. A total of $n = 137$ participants were enrolled in School A, having a high intensity English exposure, medium intensity Catalan exposure and low intensity exposure to Spanish. Participants in school A had five hours of Science in English. A total of $n = 123$ participants were enrolled in School B, having a medium intensity exposure to English, high intensity exposure to Catalan and low intensity exposure to Spanish, with one hour of Science in English. Finally, a total of $n = 132$ participants were enrolled in School C. Participants had low intensity exposure to English, high intensity exposure to Catalan and medium intensity exposure to Spanish, with forty-five minutes of Science in English.

Regarding the students' characteristics, the distribution of participants by gender is illustrated in Figure 19, 52.8% ($n = 209$) of them were male and 47,2% were female ($n = 183$), and their mean age was 10.5 ranging from 10 to 11 years old. Regarding students' L1, as shown in Figure 20, more than half of the participants had Spanish as L1. 56.6% of the participants ($n = 212$) reported having Spanish as L1, 25.4% ($n = 105$) claimed to have Spanish and Catalan, while only 15.3% ($n = 67$) reported having Catalan as L1. Finally, 2.7% ($n = 8$) of the participants mentioned having another language as L1.

Figure 19

Participants distribution by gender
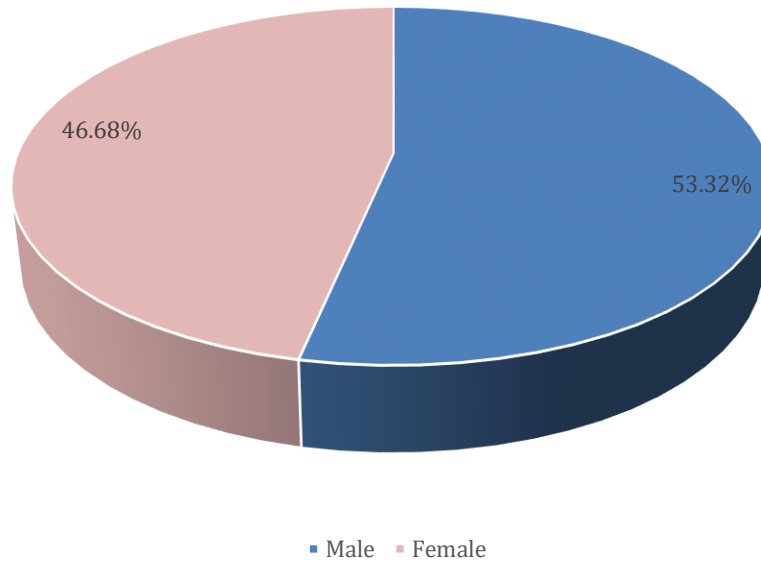
Figure 20

Participants' L1s
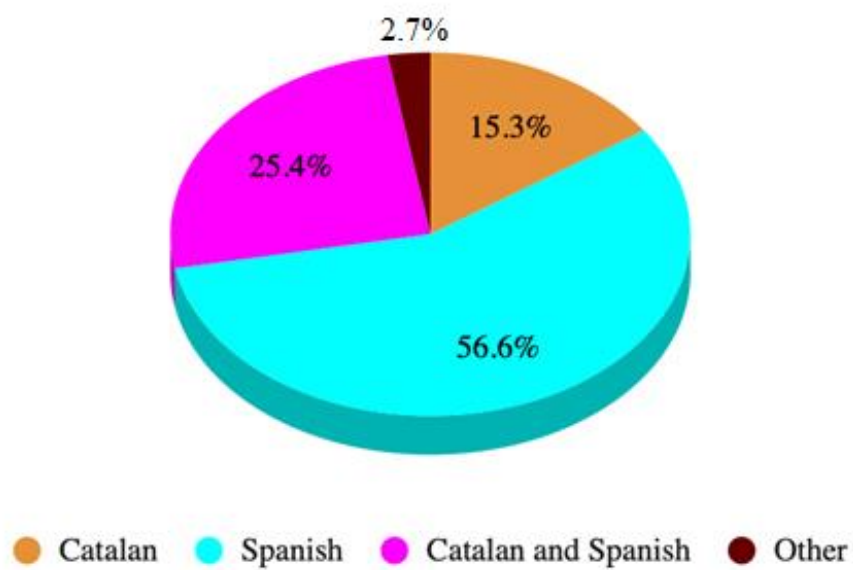
Moreover, in relation to students' language proficiency in English, a Cambridge Assessment test was adapted and used to measure student's proficiency (see Appendix 1) and the level assessed was A1-A2 level. Those students with a higher or lower level of English proficiency were relegated from the study. In the case of Spanish and Catalan, they were asked to report their last grade in the school's subjects. The students were evaluated on a scale from 0 to 10, with 0 being the lowest and 10 being the highest. All the grades that we took as an average were between 5 and 9. As self-assessment is not the ideal operationalization of students' proficiency in Spanish and Catalan, but this self-assessment was confirmed by the students' primary teachers.

Additionally, from the 392 participants, a subset of 30 students ($n = 10$ in each school) and 9 teachers ($n = 3$ in each school) representing 7.65% and 33.3% of the sample, respectively participated in the oral interviews. This group of primary school teachers exhibits the following characteristics. Among the 9 teachers, 7 were female, and 2 were male, resulting in an overrepresentation of women, which aligns well with the current ratios in primary education. Their ages ranged from 26 to 52 years, with an average age of 39. The mother tongue of these teachers was Catalan for 4 participants and Spanish for 2. Additionally, 3 teachers declared proficiency in both languages as their mother tongue.

Furthermore, 30 parents ($n = 10$ in each school) representing 33.3% took part as informants for the qualitative analysis. They were asked to participate in interviews upon completing all the quantitative instruments designed for the present study.

5.3 Data collection instruments

The study utilised a mixed-methods research approach, where both quantitative and qualitative data were collected to mitigate the limitations of relying on a single method. While the effectiveness of this approach remains inconclusive (Euske, Hesford, & Malina, 2011; Bryman, 2012), we believe that the major strength of employing mixed methods is the capability to incorporate multiple perspectives, resulting in richer and more comprehensive insights by leveraging diverse data sources.

In the present investigation, two main quantitative instruments are used (a written task and one questionnaire), together with one qualitative instrument (semi-structured interviews).

5.3.1 Quantitative instruments

Since the aim of the present study is to examine students' communicative appropriateness under the different intensity of CLIL programmes in the multilingual context of the Valencian Community, we designed a task in which participants were asked to write about the water cycle in three languages (English, Spanish and Catalan). In addition, a questionnaire was administered to collect information on students' backgrounds and exposure to the language beyond the school.

5.3.1.1 Written task

The study centred around a written task in which participants were asked to write about the water cycle in three languages (English, Spanish and Catalan). The task was created to be as authentic as possible, and it related to a topic that students had already dealt with in the subject of Science. The task was carried out in CLIL science sessions, where English was the language of instruction. In addition, since students also had Catalan and Spanish as subjects in the curriculum, part of the written task was performed in Catalan and in Spanish.

Thus, the elicitation task for the present study was divided into three parts. The first part dealt with the first two steps of the water cycle, that is to say, evaporation and condensation, using Catalan as the language of communication (see the Catalan task in Appendix 2). In contrast, the other two cycles, precipitation and collection were in Spanish and included in the second part of the task (see the Spanish task in Appendix 2). Finally, in the third part, participants had to write about water pollution in English (see the English task in Appendix 2).

The selection of the type of text was based on the fact that primary students were used to describing processes, and the order of each language for each task was made based on the difficulty that the teachers reported to us. The topic of the water cycle was selected as it was a topic included in the subject of science, taught in English in every school.

Teachers suggested that explaining the process of evaporation and condensation, together with the process of precipitation and collection, was more difficult than writing about water pollution. Thus, to explain the whole process of the water cycle, we decided to start with Catalan, followed by Spanish, and end up with English.

Choosing the topic for the written task was a challenge and we had to make sure the topic was previously addressed in each school. In addition, it is worth mentioning that a company dealing with the integral water cycle and located in Castelló organised school visits to explain and help students to become aware of the importance of the water cycle in the three languages (https://www.facsa.com/elcursodelagua/). Thus, in order to make sure that all the participants in the present study dealt with the topic of the water cycle in the three languages, the brochures in each language given by the organisation were given to teachers before our visit. We asked the teachers to dedicate some time to review the concepts in Spanish, English and Catalan. Hence, prior to our data collection, we made sure teachers devoted some time to explain the water cycle in the three languages and students were familiar with it. Finally, before task completion, the researcher also devoted some time to explain each specific process of the water cycle.

The three phases of the written task on the water cycle were piloted, with 40 CLIL students in two primary schools. The pilot study was carried out the academic year before the present study was conducted (September, 2018), and it was carried out with a population similar to the participants of the present study. The pilot study suggested some changes in relation to task implementation, the duration of task performance and motivation.

Before the written task, the researcher did an explanation in relation to what the students were about to write which took around 10 minutes. The task was conducted three times a week, one day per language and students were given 30 minutes to complete each part. During the pilot study, we acknowledged several important points to consider. First, the explanation of the topic took longer than expected, as students' behaviour was difficult to standardise. Thus, we realised that more time was needed to explain the topic before engaging students in task performance. Hence, the time allocated for teachers' explanations was increased to 20 minutes. Visual support was added to facilitate understanding and draw learners' attention. Also, the time allocated to the task was deemed too long. Teachers from the school suggested decreasing it to 20 minutes. Finally, in relation to motivation, we acknowledged the need to use visual aids as well as a sticker to act as a reward. The information provided during the pilot study led us to modify the present study. Figure 21 illustrates the changes mentioned above.

Figure 21

Task design implementation

<table>
<tr><td>

PILOT STUDY

✔ Topic: Water cycle

✖ Explanation 10 min

✖ Written task 30 min

✖ No motivation

✖ No visual aid

</td><td>

MAIN STUDY

✔ Topic: Water cycle

✔ Explanation 20 min

✔ Written task 20 min

✔ Sticker

✔ Visual aid

</td></tr>
</table>

5.3.1.2 Questionnaire

One questionnaire, adapted from Lasagabaster and Huguet (2007), was used to elicit information about students' exposure to languages beyond the school, as well as their linguistic background. The questionnaire included the following aspects: Personal and family linguistic information, which comprised gender, nationality, age, language(s) spoken at home and family language; previous experience in English-speaking countries (length of stay, type and purpose of the trip); language contact beyond school, including private tuition and exposure to the language through TV, and perception towards languages. In relation to perception towards languages, and due to the amount of data analysed in the present study, we decided not to use it for the current investigation.

With regards to private tuition, participants were asked whether they attended extra English classes outside school, and, if so, to specify whether it was individual tuition, in group, and how many times per week. Furthermore, participants were asked about contact with English, Catalan and Spanish TV. To collect information about input exposure through TV, participants had to specify their frequency, within a week. Participants had to choose between "every day" "sometimes" "rarely" or "never". The next part elicited information on all languages students

regularly use in their spare time. Thus, participants were asked about their contact with the three languages (English, Catalan and Spanish) beyond school and to name the situations in which they were in contact with the languages. This information allowed a more fine-grained analysis of the contact of the language beyond the classroom.

The development of the questionnaire greatly benefitted from constructive feedback from the primary teachers, which helped to identify items that could be misunderstood or might be unclear for students in the target age group. A pilot study conducted with 10 Year 6 students confirmed teachers' feedback and, due to difficulty in understanding some of the questions, the final questionnaire was in Spanish, Catalan and English, and participants selected the language they preferred in answering the questionnaire. The questionnaire was in paper format and administered during the first day of the data collection process (see Appendix 3).

5.3.2 Qualitative instruments

As described in Section 6.1 and 7.1, the qualitative data adds valuable insights on participants' opinion regarding intensity of exposure inside and beyond the school.

5.3.2.1 Semi-structured interviews

A subset of 30 participants (*n* = 10 in each school), randomly selected, representing 7.65% of the total sample took part in the semi-structured interviews. The semi-structured interviews lasted around 25 minutes and were conducted individually. The conversations were recorded and transcribed to extract additional information to the one obtained in the questionnaire. The following guiding questions were used during students-semi-structured interviews: 1) How do you feel about English, Spanish and Catalan, and which language do you prefer?; 2) Do you like learning science in English?; 3) Do you enjoy watching TV in English, Spanish and Catalan?; 4) Do you like going to the academy?; 5) Do you like going abroad?.

To have a wider view, we were also interested in knowing parents' and teachers' opinions about the linguistic programme adopted at school, the importance of English, Catalan and Spanish watching TV, and the impact of private tuition and short period of time in the target language community. In the case of parents, a subset of 30 parents *(n* = 10 in each school) were interviewed (only the parents who were willing to participate were considered). In the case of the teachers, a total of 9 primary teachers (*n* = 3 in each school), randomly selected, were also interviewed individually by the researcher. The interviews lasted around twenty minutes and

were conducted at the school and in parents' L1. Although the aim of the researcher during the semi-structured interviews was to allow the parents to talk as much as possible about the issues included in the questionnaire, the following questions guided teachers and parents' semi-structured interviews: 1) What do you think about the linguistic programme at school?; 2) How important are the out-of-school factors (watching TV, private tuition and short period of time in the target language community) for English, Catalan and Spanish learning?.

Considering the information obtained from the above-mentioned instruments, in what follows we refer to the data collection procedure, followed by our data coding and analysis.

5.4 Data collection procedure

The process of collecting the data took four academic years (2018-2019; 2019-2020; 2020-2021; 2021-2022), and as reported above, a pilot study was carried out in September 2018. Thus, the data were gathered in different academic years for several reasons, but mainly due to the COVID-19 pandemic, as the researcher had to adapt herself to the school's needs and possibilities.

In September 2018, the researcher contacted each school to present the general idea of the project, requested their willingness to participate, and asked the best dates to visit the school, talked to teachers and proceed with the necessary arrangements concerning the consent forms. Then, the pilot study was conducted and the data collection instruments were presented to the teachers to know their opinion and in order to obtain permission from the head of the schools. In the academic year 2018-2019 data were collected from Schools A and B. School C did not participate, since the PEPLI programme had not reached Year 6 yet (the target group year). In 2019-2020 data were collected from Schools A, B and C, while data in the academic year 2020-2021 was only collected from School C. In addition, to compensate for the decrease of participants due to the pandemic, more data were collected during the academic year 2021-2022 (from Schools A and C). Figure 22 illustrates the timeline for the data collection.

Figure 22

Timeline for the data collection
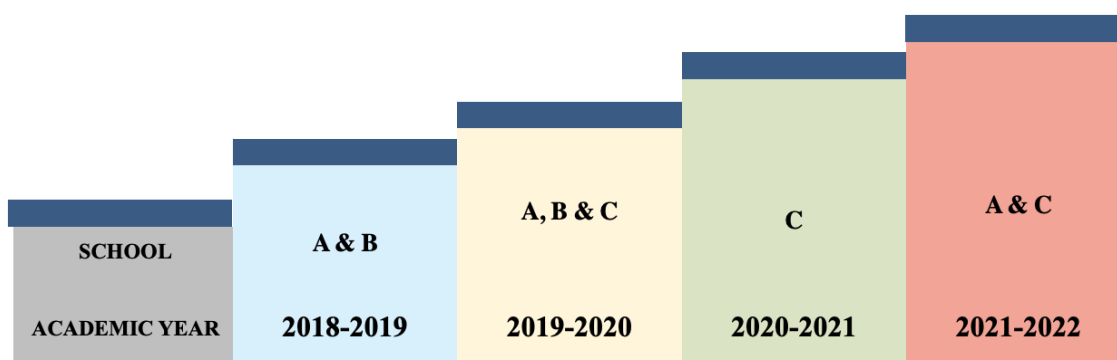
The data collection procedure was the same for each school and along the years in which the data were collected. In the academic year 2018-2019, each school was visited on Monday for the completion of the task in Catalan, Wednesday for the completion of the task in Spanish, and Friday for the completion of the task in English.

In the data collection process, after explaining the reason for my visit, participants first listened to the explanation of the water cycle in Catalan (20 minutes), and then they did the written task (20 minutes). Following this, students filled out the background questionnaire (15 minutes). Two days later, participants listened to the second part of the water cycle in Spanish (20 minutes), and they performed the written task in Spanish (20 minutes). The same procedure occurred two days later. Students listened to the last part of the water cycle in English (20 minutes), and completed the written task in English (20 minutes).

On Friday, once the students had finished the written task, the researcher selected 10 students in each school to participate in the semi-structured interview (which lasted 20 minutes). At the end of all sessions, students were given a sticker in appreciation of their contribution. Finally, for the teachers' and parents' semi-structured interviews, the researcher and the teacher established a day and a time. Each interview with parents and teachers lasted twenty minutes. Figure 23 shows the procedure of the data collection for each language.

Figure 23

Data collection procedure
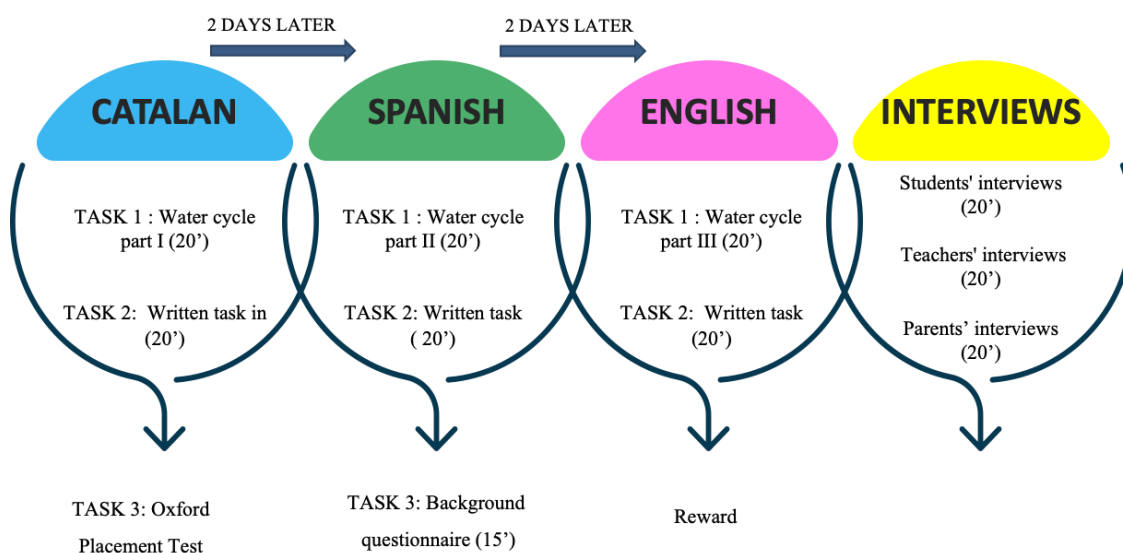
During the academic year, 2018-2019, the researcher contacted the schools to see how many of them were willing to take part in the study. Schools A and B accepted to take part in the study. School C did not participate, since the PEPLI programme had not reached Year 6 yet (the target group year). Therefore, the same procedure that we followed in 2018-2019 took place in 2019-2020, and data were collected from Schools A, B and C. In the academic year 2020-2021, School C was willing to participate, and Schools A and B decided not to participate. Finally, in the last academic year in which data were collected, 2021-2022, Schools A and C participated and data were collected following the same procedures as the previous academic years.

Figure 24 shows the data collection timeline that the present study followed as well as the number of participants at each time of the data collection. There were a total of 1,176 written tasks, 392 in each language (English, Catalan and Spanish).

Figure 24

Data collection timeline and the participants involved
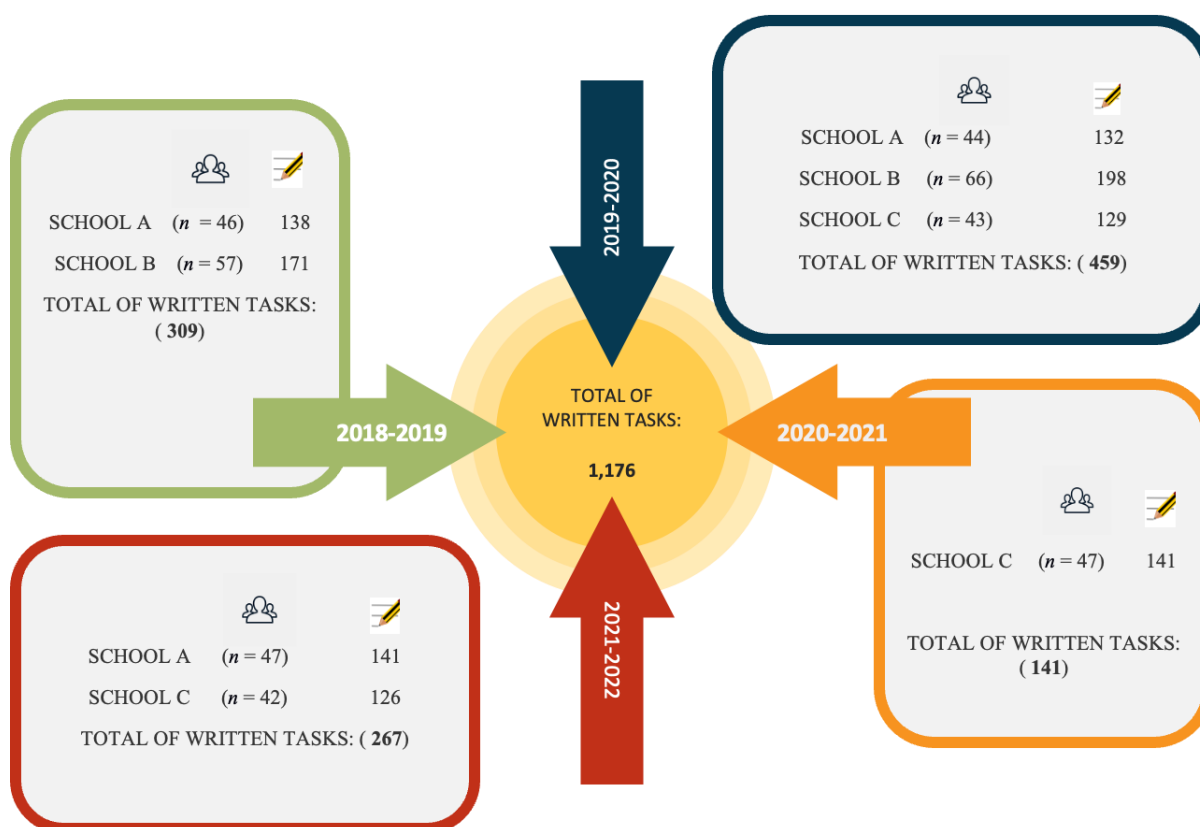
It is worth mentioning that ethical considerations related to conducting research with humans, especially young learners, within a school setting, were addressed (Pinter & Zandian, 2014; Pinter, 2019). Informed consent was obtained from parents or legal guardians, and assent was obtained from the young participants. Necessary permissions were also obtained from school authorities. The data collection process was conducted with strict confidentiality and personal identifiers were coded to ensure anonymity.

5.5 Data coding and analysis

The present study deals with how the intensity of exposure to different languages in the classroom influences students' communicative appropriateness at the primary school level in CLIL settings. Therefore, in what follows is the rating scale used to evaluate students' communicative appropriateness. This is followed by the operationalization of the independent variables analysed in the present study.

5.5.1 The rating scale

The rating scale was specially designed for the present study and adapted from Kuiker and Vedder's (2017) scale and Jacob's *et al.* (1981) taxonomy (see Chapter 2 for a detailed explanation). The scale proposed by Kuiker and Vedder (2017) was a six-point Likert scale, which explored content, task requirement, comprehensibility, and coherence and cohesion, and, and it was designed to assess students' functional adequacy at the university level. Jacob *et al.'s* (1981) taxonomy is a grading scale from 2 to 30 that takes linguistic aspects into account, as we did in the present study. To the authors' knowledge, Jacob *et al.'s* (1981) taxonomy has never been used in CLIL settings. Thus, taking all into account the aim of the present study we included the following three components: the pragmatic component (content and comprehensibility), the textual component (coherence and cohesion), and the linguistic components (SPAG).

Concerning the pragmatic component of the scale, two dimensions are considered; content and comprehensibility. While the former refers to the adequacy of the number and the relevance of the ideas expressed in the text, the latter focuses on the effort required by the reader in order to understand the purpose of the written assignment and the ideas expressed (see Figure 25 for Content and Figure 26 for Comprehensibility).

Figure 25

Content scale dimension (adapted from Kuiken & Vedder, 2017)

0	1	2	3	4	5
The number of ideas is not all adequate and insufficient and the ideas are unrelated to each other.	The number of ideas is scarcely adequate and the ideas lack consistency.	The number of ideas is somewhat adequate, even though they are not very consistent.	The number of ideas is adequate and they are sufficiently consistent.	The number of ideas is very adequate and they are very consistent to each other.	The number of ideas is extremely adequate and they are very consistent to each other.

Figure 26

Comprehensibility scale dimension (adapted from Kuiken & Vedder, 2017)

0	1	2	3	4	5
The text is not at all comprehensible. Ideas and purposes are unclear stated and the efforts of the reader to understand the text are ineffective.	The text is scarcely comprehensible. Its purposes are not clearly stated and the reader struggles to understand the ideas of the writer. The reader has to guess most of the ideas and purposes.	The text is somewhat comprehensible. Some sentences are hard to understand at the first reading. A second reading helps to clarify the purposes of the text and the ideas conveyed but some doubts persist.	The text is comprehensible. Only a few sentences are unclear but are understood, without too much effort, after a second reading.	The text is easily comprehensible and read smoothly. Comprehensibility is not an issue.	The text is easily comprehensible and highly readable. The ideas and the purposes are clearly stated.

The textual component includes the dimension of coherence and cohesion. This considers the occurrence of cohesive ties such as deictic elements, anaphoric references, use of conjunctions, and coherence breaks. Finally, regarding the linguistic component (SPAG) were considered in our construct (see Figure 27 for Coherence and Cohesion and Figure 28 for SPAG).

Figure 27

Coherence and cohesion scale dimension (adapted from Kuiken & Vedder, 2017)

0	1	2	3	4	5
The text is not at all coherent. The text is not at all cohesive. Connectives are hardly ever used and ideas are unrelated.	The text is scarcely coherent. The writer often uses unrelated progressions; when coherence is achieved, it is often done though repetitions. The text is not very cohesive. Ideas are not well linked by connectives which are rarely used.	The text is somewhat coherent. Unrelated progressions and/or repetitions are frequent. More than two sentences in a row can have the same subject (even when the subject is understood). The text is somewhat cohesive. Some connectives are used, but they are mostly conjunctions.	The text is coherent. Unrelated progressions are somewhat rare, but the writer sometimes relies on repetitions to achieve coherence. The text is cohesive. The writer makes good use of connectives. Sometimes not limiting this to conjunctions.	The text is very coherent: When the writer introduces a new topic, it is usually done by using connective phases. Repetitions are very infrequent. The text is very cohesive and ideas are well linked by adverbial and /or verbal connectives.	The writer ensures extreme coherence by integrating new ideas in the text with connectives or connective phases. The structure of the text is extremely cohesive, thanks to skilful use of connectives (especially linking chunks, verbal constructors and adverbials) often used to describe relationships between ideas.

Figure 28

SPAG scale dimension (adapted from Kuiken & Vedder, 2017)

0	1	2	3	4	5
The text is not grammatically correct and punctuation and spelling are not effective.	The text is scarcely grammatically correct and punctuation and spelling are hardly used.	The text is somewhat grammatically correct, punctuation and spelling are sometimes used.	Most of the text is grammatically correct but some spelling and punctuation are observed.	Almost all the text is grammatically correct and a few spelling and punctuation errors are observed.	The text is all grammatically correct. None spelling and punctuation errors are observed.

In contrast to Kuiker and Vedder's (2017) scale, the dimension of task requirement has not been considered. However, in our taxonomy, we have accounted for Jacob *et al's.* (1981) taxonomy, by including the linguistic aspect. Since, at this educational level, it is difficult to assess students' writing holistically without considering the linguistic aspect included in Jacob *et al.* (1981).

The rating scale with all the components can be found in Appendix 4, and the scoring system was also modified from Kuiken and Vedder's (2017) study. The original rating scale ranged from 1 to 6, while in the present study, the rating ranged from 0 to 5. Participants could get a total of 20 points. This decision of scoring was made in order to avoid mistakes when reporting results, as the Spanish scoring system ranges from 0 to 10. This modification was also conducted by Herraiz-Martínez (2018). However, Herraiz-Martínez (2018) dimensions also differ from the ones in the present study. Figure 29 shows the difference between the original scale of Kuiken and Vedder's (2017) and the scale for the present study.

Figure 29

Implementation of Kuiken and Vedder's (2017) FA rating scale and the scale of the original study
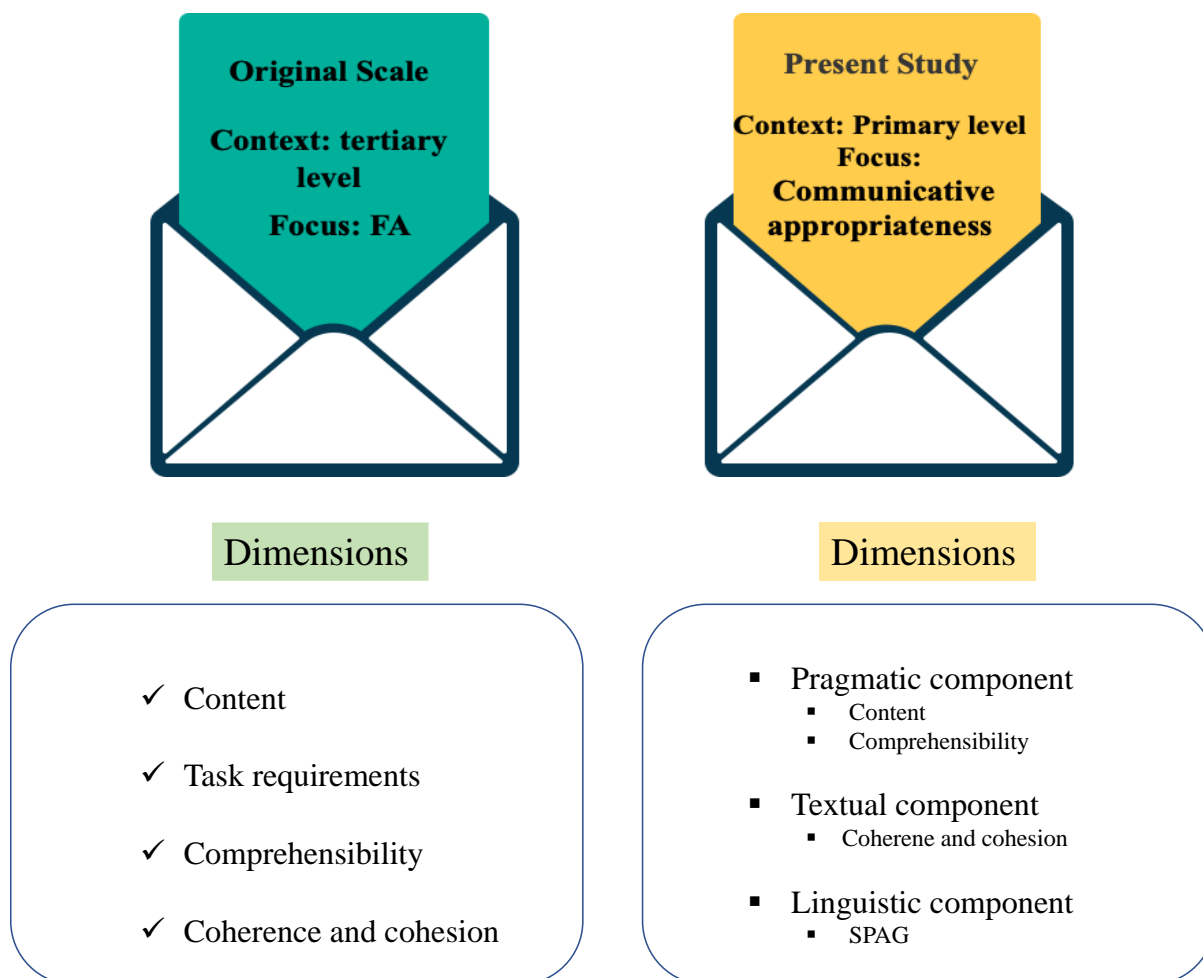
5.5.2. Coding and operationalization of the variables

First, the three different schools were categorised regarding the percentage of exposure given to each language. As mentioned in Section 5.1, three representative types of schools were selected to reflect what happens in the Valencian Community, and they were coded based on the percentage of language exposure. School A and C had 30 sessions of 45 minutes each, with a total of 22h30' teaching hours per week. As for School C, it had 22.30 sessions of 60 minutes each, with a total of 22h30' teaching hours per week. As for CLIL, School A had 14 sessions per week of CLIL, representing 46.67% of the time dedicated to language and content instruction. Since this school represents a high percentage of hours dedicated to CLIL in the Valencian Community, it was coded as high intensity CLIL programmes. School C, representing 6.67% of CLIL in relation to the 22.5 teaching hours they had, was coded as low

intensity CLIL programmes, since it represents the type of schools with the lowest percentage of time dedicated to CLIL. In the case of School B, with 13.67% of hours of CLIL was coded as a medium intensity CLIL programme, as it represents an intensity level between the aforementioned categories, although not necessarily an intermediate point. It should be noted that the three sessions per week dedicated to the teaching of the English language, representing 10% of the teaching hours, was common to the three schools and were not considered in our analysis.

Regarding Catalan and Spanish, the intensity of exposure to the official languages, Catalan and Spanish, was coded based on what happens in the educational context of the Valencian Community. In the case of Spanish, Schools A and B, students were exposed to Spanish in a percentage of 16.6% and 20% respectively, of the total teaching sessions, and were coded as low exposure. School C, representing 30% of Spanish exposure was coded as medium exposure. As for Catalan, School A, representing 26.6% of Catalan exposure was coded as medium exposure, while Schools B and C, representing 48.8% and 53.3% of Catalan exposure, and being representative of schools with higher exposure to Catalan, were coded as high exposure to Catalan.

The second step was to score students' communicative appropriateness in writing. In the present study, there were a total of 1,176 written tasks, 392 in each language (Spanish, Catalan and English). The written tasks were written in electronic format (.txt,) and typed up exactly as they were written in paper format. To code students' communicative appropriateness, each writing was coded considering the dimensions of pragmatic, textual, and linguistic (see Section 5.5 for a detailed explanation of the rating scale), and each dimension received a point value on a scale from 0 to 5. For instance, when grading SPAG, 0 points were given when the text lacked sufficient grammar, spelling and punctuation; 1 point when the text was scarcely correct in grammar, punctuation or spelling; 2 points when the text was somewhat correct in grammar, punctuation or spelling; 3 points when most of the text was correct in grammar, punctuation or spelling; 4 points when almost all the text was correct in grammar, punctuation or spelling; and, finally, 5 points when the text was all correct in grammar, spelling and punctuation.

It is worth mentioning that each student had one score for each dimension in each language. Each participant obtained a score by adding their grade in all the dimensions. Thus, a total of 20 points was the maximum the students could obtain in communicative appropriateness for each language.

A database was created in order to perform the corresponding analysis regarding the pragmatic component (content and comprehensibility), the textual component (coherence and cohesion), and the linguistic component (SPAG). The written tasks were evaluated by the principal researcher and two external evaluators (primary-school teachers). However, before coding students' writings, evaluators went through two training sessions in order to become familiar with the rating scale and to provide them with specific instructions on how the compositions should be assessed. They coded, independently, 60% of the data from the main study (934 written tasks). Coding resulted in these agreements, in terms of the pragmatic components; 93% for content, and 91% for comprehensibility. In relation to the textual component; 90% for coherence and 88% for cohesion and finally for the linguistic component 87% for SPAG.

Thirdly, data collected in the questionnaire were entered into the Microsoft Access Database and a demographic profile for each of the participants was created (age, gender, L1, nationality, language opinions towards English, Catalan and Spanish, language spoken at home, short period of time in the target language community, private tuition, language contact outside school, and the exposure to the English, Catalan, and Spanish TV).

Participants were categorised according to the language used at home, which was operationalized with 4 different categories: 1 for Catalan language, 2 for Spanish, 3 for both and 4 for other languages. In relation to private tuition and short period of time in the target language community, category 1 was represented by 0 (in the case of not receiving private tuition or not having had an abroad experience) and category 2 was represented by 1 (if they did attend private tuition and had had abroad experience). Furthermore, students' impact of exposure to English, Catalan, and Spanish through watching TV was also categorised as follows: 1 for every day, 2 for sometimes, and 3 and 4 for rarely and never respectively. Students' impact of exposure to English, Catalan and Spanish outside school was coded adding the total number of frequencies they reported in each language.

The final step was to code the qualitative data, that is to say, the information obtained through students', teachers' and parents' semi-structured interviews, in which several topics emerged (see Sections 5.3.2.1 and 5.3.2.2, respectively). Participants' responses during the semi-structured interviews were coded thematically and used for further interpretation of our quantitative results. To analyse the qualitative data thematically, a qualitative analysis following Kuckartz (2016) was conducted. We first carefully read through the data and noted any thoughts and comments. Next, main topics were chosen, considering whether they emerged

from the pre-established topics during the semi-structured interviews, or whether other topics emerged from the interview data. Figure 30 displays the process of our thematic qualitative content analysis.

Figure 30

Thematic qualitative semi-structured interviews analysis (adapted from Kuckartz, 2016)
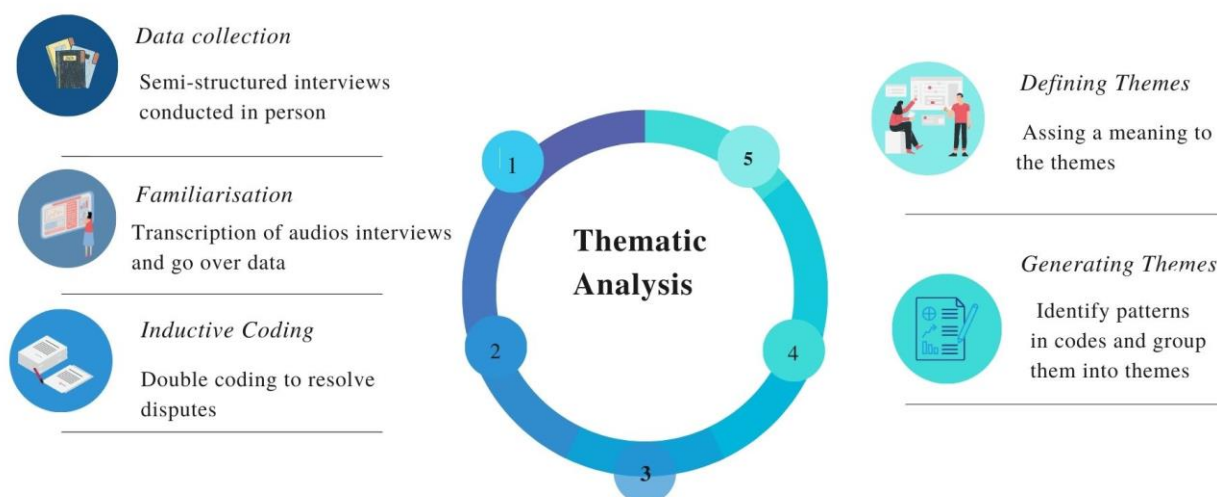
Finally, in order to examine the relationship between the variables at play, statistical analysis tests were conducted using SPSS (version 27). The Kruskal-Wallis test was primarily used, with the Mann-Whitney U test used in instances where only two independent samples were compared. Additionally, Dunn's Multiple Comparison test and Bonferroni test were applied to determine differences between groups.

Hierarchical regression analyses were conducted for each language in the study to determine the main predictors of students' communicative appropriateness. The dependent variable was students' total scores in communicative appropriateness, while the independent variables included language spoken at home, private tuition, short period of time in the target language, exposure to TV, and participation in a language programme.

5.6 Summary of the chapter

Chapter 5 has outlined the research methodology used in the present study. A total of 392 participants enrolled in three different input intensity exposure to languages under CLIL approach completed a written task, and a questionnaire. Additionally, semi-structured interviews with 30 participants, 9 teachers and 30 parents were conducted. Table 6 presents a summary of the data collection instruments and data analysis in relation to the hypotheses investigated in the present study.

Table 6

Summary of the data collection and analysis in each research question

RQ	Hypotheses	Data collection instruments	Data analysis
RQ1. Are there any differences in students' communicative appropriateness in English considering the intensity of CLIL programmes? If so, are differences also observed in the other languages of the curriculum?	**H1:** The degree of exposure to English in CLIL programmes will affect students' communicative appropriateness in writing	⇒ Written task ⇒ Semi-structured interviews 　o Students 　o Teachers 　o Parents	° Kolmogorov-Smirnov test ° Kruskal-Wallis test ° Post hoc Dunn's Multiple Comparation test ° Bonferroni test
	H2: The degree of exposure to Catalan and Spanish will affect students' communicative appropriateness in writing	⇒ Written task ⇒ Semi-structured interviews 　o Students 　o Teachers 　o Parents	° Kruskal-Wallis test ° Bonferroni test ° Post hoc Dunn's Multiple Comparation test ° Bonferroni test

RQ2. Does exposure to English, Catalan and Spanish beyond the school have an impact on students' communicative appropriateness in writing in all school languages (Catalan, Spanish and English)?	**H3:** English exposure beyond the school plays a role in students' communicative appropriateness in writing	⇒ Written task ⇒ Background questionnaire ⇒ Semi-structured interviews o Students o Teachers o Parents	° Kruskal-Wallis test ° Post hoc Dunn's Multiple Comparation test ° Bonferroni test ° Mann-Whitney U test ° ANOVA ° Hierarchical Multiple Regression ° Durbin Watson test
	H4: Spanish and Catalan exposure beyond the school plays a role in students' communicative appropriateness in writing	⇒ Written task ⇒ Background questionnaire ⇒ Semi-structured interviews o Students o Teachers o Parents	° Kruskal-Wallis test ° Bonferroni test ° ANOVA ° Hierarchical Multiple Regression ° Durbin Watson test

CHAPTER 6. RESULTS AND DISCUSSION RELATED TO RESEARCH

QUESTION 1

CHAPTER 6

RESULTS AND DISCUSSION RELATED TO RESEARCH

QUESTION 1

Chapter 6 presents the results regarding the first research question of the study and its corresponding hypotheses. As previously mentioned in the theoretical part, previous research suggests that intensity of input exposure promotes students' language learning (Serrano & Muñoz, 2007; Merino & Lasagabaster, 2017). However, as far as we know, only two studies have addressed input exposure and written performance in CLIL settings (Merino & Lasagabaster, 2017; San Isidro & Lasagabaster 2018). Considering these previous studies, conducted at secondary school level, the main focus of the present study is to examine the impact of different intensity of CLIL programmes on students' communicative appropriateness at primary school level in the multilingual context of the Valencian Community, looking at the three languages of the curriculum: Catalan, Spanish and English.

We will examine the results related to Research Question 1, Hypothesis 1 and 2, which unfold as follow:

Research Question 1 (RQ1): Are there any differences in students' communicative appropriateness in English considering the intensity of CLIL programmes? If so, are differences also observed in the other languages of the curriculum?

Hypothesis 1 (H1): The degree of exposure to English in CLIL programmes will affect students' communicative appropriateness in writing (Serrano & Muñoz, 2007; Serrano *et al.*, 2011; Merino & Lasagabaster, 2017).

Hypothesis 2 (H2): The degree of exposure to Catalan and Spanish will affect students' communicative appropriateness in writing (Cenoz *et al.,* 2013; Arocena, 2017; San Isidro & Lasagabaster, 2018; Orcasitas-Vicandi, 2022).

In this chapter, Section 6.1 reports our quantitative findings related to Hypothesis 1. Similarly, Section 6.2 presents results related to Hypothesis 2. In addition, this chapter also provides qualitative findings derived from students', teachers' and parents' semi-structured interviews in relation to the implementation of CLIL programmes (Section 6.3). Chapter 6 also provides

a discussion of the findings related to H1 and H2 (Sections 6.4 and 6.5 respectively), and Section 6.6 ends the chapter with a recapitulation of the main findings related to Research Question 1.

6.1 Findings related to Hypothesis 1

In order to address Hypothesis 1, that is to say, to examine the impact of different intensity of CLIL programmes on students' communicative appropriateness in English, pairwise comparisons were performed using Dunn's (1964) procedure. It is worth pointing out that significance values were adjusted by the Bonferroni correction for multiple tests (see Table7).

Table 7

Pairwise comparisons across schools regarding communicative appropriateness in English

Pairwise comparisons	Mean Rank	Test Statistic	Sig
School C-School A	3.30-15.31	12.260	.000
School C-School B	3.30-16.15	12.456	.000
School A-School B	15.31-16.15	7.383	.596

This post hoc analysis revealed statistically significant differences in communicative appropriateness scores between school C (mean rank = 3.30) and school A (mean rank = 15.31) (*p* = .000). The Kruskal-Wallis test also provided strong evidence when comparing school C (mean rank = 3.30) and school B (mean rank = 16.15) *(p* = .000). However, the inferential statistical analysis indicated that, in terms of the English language, there were no statistically significant differences between schools A (mean rank = 15.31) and B (mean rank = 16.15) (*p* = .596).

Differences were also observed when we analysed students' writing considering the different components of the construct of communicative appropriateness: Pragmatics (content and comprehensibility), textual (coherence and cohesion), and linguistics (spelling punctuation and grammar). With the aim of exploring whether significant differences across schools were observed, in view of the components of the construct of communicative appropriateness, the Kruskal-Wallis test was used. We found statistically significant differences in pragmatics, including content and comprehensibility ($\chi 2$ (2) = 204.152, *p* = .000; ($\chi 2$ (2) = 207.822, *p* =

.000 respectively). Differences were also observed in the textual (coherence and cohesion ($\chi2$ (2) = 198.779, p = .000) and the linguistic (spelling punctuation and grammar ($\chi2$ (2) = 194.801, p = .000) dimensions. The boxplot analysis below shows the range of distributional characteristics, displaying the statistical variance for the three schools for the four dimensions; Content (see Figure 31), Comprehensibility (see Figure 32), Coherence and cohesion (see Figure 33) and SPAG (see Figure 34).

Figure 31, 32, 33 and 34

Boxplot for the four dimensions of communicative appropriateness in English across schools
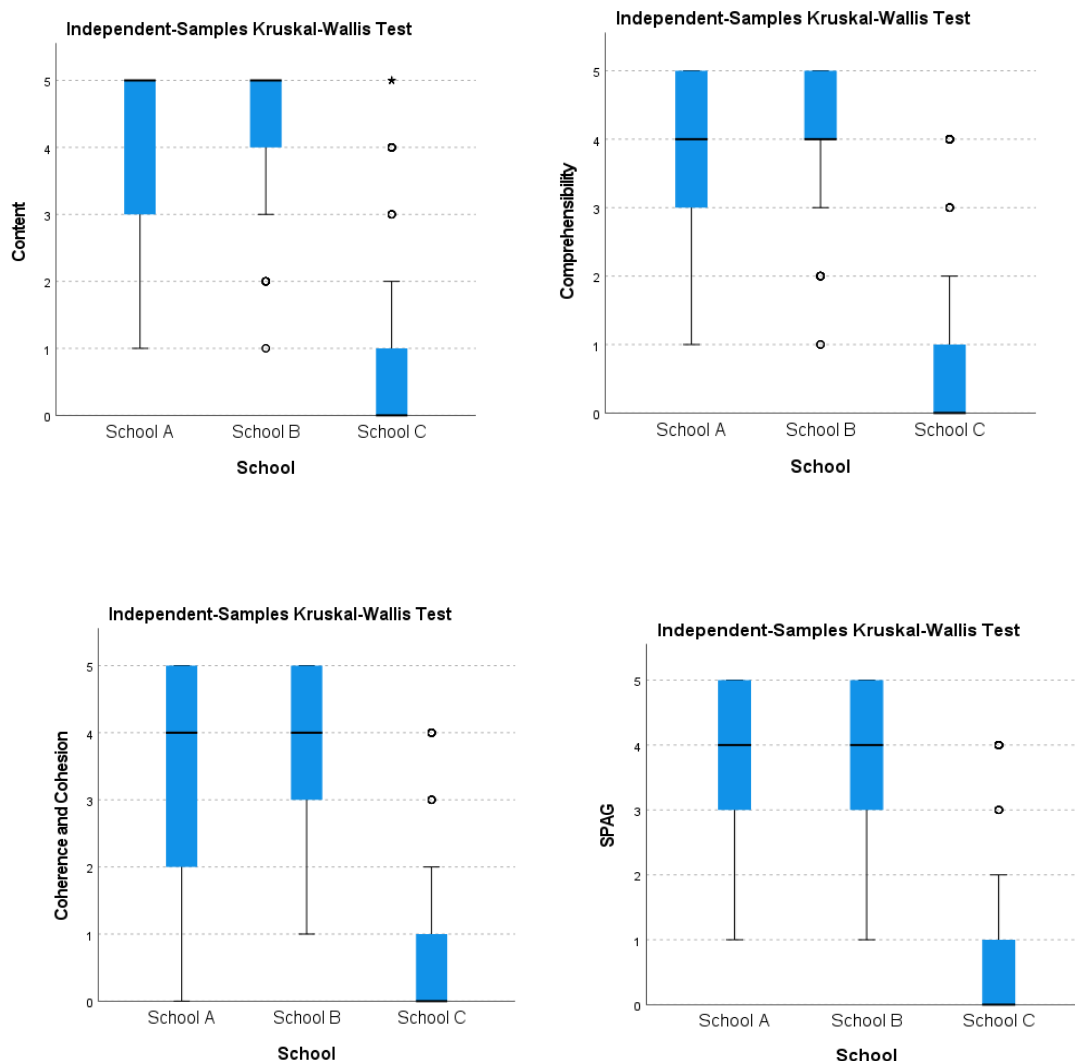
As illustrated in Figures 31, 32, 33 and 34, participants in Schools A and B performed well in the pragmatic component, but participants in School B (with fewer hours of CLIL) were more homogeneous. The same occurred in the textual component, where students in School B

showed less variability of scores. Finally, regarding the linguistic component, participants in Schools A and B showed equal data distribution.

All in all, participants from Schools A and B performed better in the pragmatic component than in the other components. What these findings show is that Schools A and B (with high and medium intensity CLIL programmes respectively) performed well in content (five out of five points) and language (four out of five points), suggesting that CLIL seems to facilitate the knowledge of science and the English language. It is worth pointing out that the worst scores are obtained in the cohesion and coherence dimension, followed by grammar. On the contrary, participants from School C, performed poorly in all the dimensions, suggesting that hours devoted to CLIL make a difference in students' communicative appropriateness for an effective implementation of CLIL programme.

Additionally, pairwise comparisons across dimensions were performed using Dunn's (1964) procedure (values were adjusted by the Bonferroni correction for multiple tests) (see Table 8).

Table 8

Pairwise comparisons for the pragmatic, textual and linguistic components in English

Dimensions	Pairwise comparisons	Mean Rank	Test Statistic	Sig
	School C-School A	1.05-4.11	165.819	.000
	School C-School B	1.05-4.27	166.673	.000
Content	School A-School B	4.11-4.27	.853	.950
	School C-School A	0.83-3.88	165.492	.000
	School C-School B	0.83-4.12	173.941	.000
Comprehensibility	School A-School B	3.88-4.12	8.459	.536
	School C- School A	0.67-3.64	160.931	.000
Coherence &	School C-School B	0.67-3.88	171.635	.000
Cohesion	School A-School B	3.64-3.88	10.704	.435
	School C-School A	0.74-3.67	159.357	.000
	School C-School B	0.74-3.88	170.141	.000
SPAG	School A-School B	3.67-3.88	10.784	.432

Table 8 shows statistically significant differences in the scores obtained in School C, in comparison to the scores obtained in Schools A and B. In fact, there were significant differences for all the communicative appropriateness dimensions. Differences in the pragmatic component between School C (mean rank = 1.05 for content and 0.83 for comprehensibility) and School A (mean rank for content = 4.11 and 3.88 for comprehensibility) (p = .000), and also between School C and School B (mean rank = 4.27 for content and 4.12 for comprehensibility) (p = .000). Differences in the textual component between School C (mean rank = 0.67) and School A (mean rank = 3.64) (p = .000), and also between School C (mean rank = 0.67) and School B (mean rank = 3.88) (p = .000). Finally, significant differences between School C (mean rank = 0.74) and School A (mean rank = 3.67) (p = .000), and between School C (mean rank = 0.74) and School B (mean rank = 3.88) (p = .000) were observed in relation to the linguistic component.

To sum up, our findings show that intensity of CLIL programmes does not always make a difference. Significant differences in the three components of the construct of communicative appropriateness were observed between School C (with a low intensity CLIL programme) and Schools A and B (high intensity and medium intensity CLIL programme respectively). However, no significant differences were observed when we compared the other Schools: A and B. This may indicate that, on the one hand, hours devoted to CLIL make a difference in CLIL programmes to benefit students' gains in pragmatics (content and comprehensibility), textual (coherence, cohesion) and linguistic (Spelling, Grammar and Punctuation) dimensions.

6.2 Findings related to Hypothesis 2

In order to address Hypothesis 2, the Kruskal-Wallis test was used to examine differences in students' communicative appropriateness in Spanish and Catalan across schools. Starting with the Spanish, written scores were significantly different (χ^2 (2) = 16.138, p = .001). Figure 35 shows the data distributions for each school regarding the written scores in Spanish.

Figure 35

Total scores in Spanish across schools
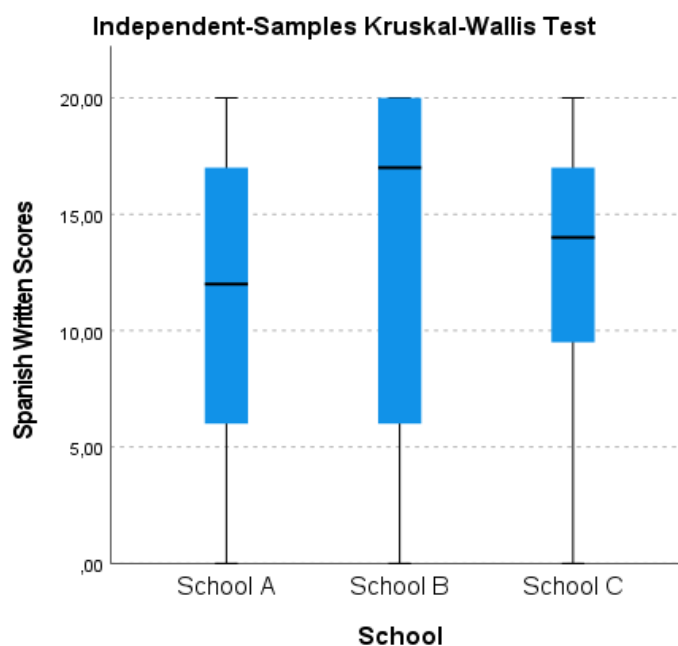
We can see that all the boxes are all above the median, implying that a positive association may exist between written performance and intensity of exposure. To examine differences in students' commutative appropriateness in Spanish across schools, pairwise comparisons were performed using Dunn's (1964) procedure (values were adjusted by the Bonferroni correction for multiple tests) (see Table 9).

Table 9

Pairwise comparisons across schools regarding communicative appropriateness in Spanish

Pairwise comparison	Mean Rank	Test Statistic	Sig
School A-School C	11.45-13.00	-22.721	.099
School A-School B	11.46-13.86	-56.129	.001
School C-School B	13.00-13.86	33.408	.018

Table 9 shows statistically significant differences between School A (mean rank = 11. 45) and School B (mean rank = 13.00) (*p* = .001). However, the inferential statistical analysis indicated that, in terms of the Spanish language, there were no statistically significant differences between Schools A (mean rank = 11.46) and C (mean rank = 13.00) (*p* = .099) and School C (mean rank = 13.00) and B (mean rank = 13.86) (*p* = .018). Statistical analysis shows that the scores obtained in School B (with a total of 20% hours of exposure) were significantly different from School A, even though the hours of exposure to Spanish within the two schools did not differ much (20% and 16.6% respectively).

It is also worth mentioning that differences were observed when we analysed the different components in the construct of communicative appropriateness: pragmatic (content and comprehensibility), textual (coherence and cohesion), and linguistic (spelling punctuation and grammar) components. The Kruskal-Wallis test showed that in relation to pragmatics, content was not statistically significant (χ^2 (2) = 7.564, *p* = .023), but a statistically significant difference was observed for comprehensibility (χ^2 (2) = 13.560, *p* = .001). Concerning the textual and linguistic components significant differences were observed (χ^2 (2) = 11.279, *p* = .004 and (χ^2 (2) = 17.320, *p* = .001 respectively). The range of distributional characteristics in each school in written scores in Spanish are presented in the boxplots below for all the dimensions; Content (see Figure 36) Comprehensibility (see Figure 37) Coherence and cohesion (see Figure 38), and SPAG (see Figure 39).

Figure 36, 37, 38 and 39

Boxplots for the four dimensions of communicative appropriateness in Spanish across schools
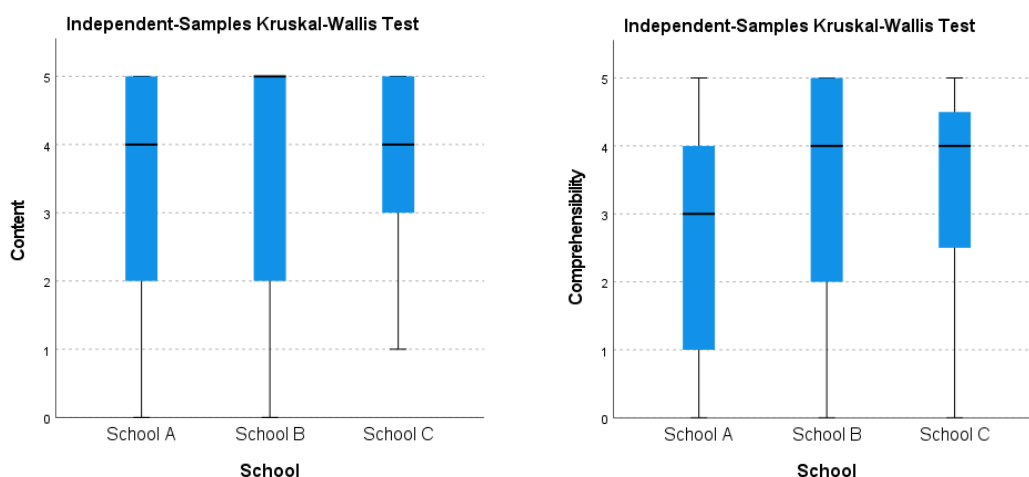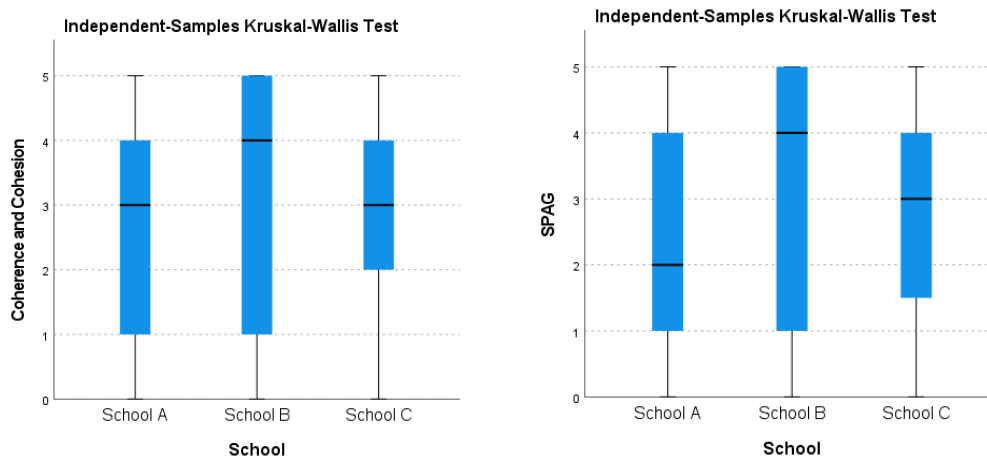
All in all, participants from School B (low exposure) performed better than participants from School C, even though School C was coded as medium exposure to Spanish. Additionally, pairwise comparisons across dimensions were performed using Dunn's (1964) procedure (values were adjusted by the Bonferroni correction for multiple tests) (see Table 10).

Table 10

Pairwise comparisons for the pragmatic, textual and linguistic components in Spanish

Dimensions	Pairwise comparisons	Mean Rank	Test Statistic	Sig
	School A-School C	3.23-3.72	-28.581	.032
	School A-School B	3.23-3.61	-34.580	.011
Content	School C -School B	3.72-3.61	6.000	.662
	School A-School C	2.99-3.45	-26.746	.047
	School A-School B	2.99-3.63	-50.379	.001
Comprehensibility	School C-School B	3.45-3.63	23.633	0.88
	School A-School C	2.70-2.99	-16.404	.226
	School A-School B	2.70-3.32	-45.962	.001
Coherence & Cohesion	School C-School B	2.99-3.32	29.558	.034
	School A-School C	2.53-2.83	-17.806	.189
	School A-School B	2.53-3.28	-56.495	.001
SPAG	School C-School B	2.83-3.28	-38.689	.005

Table 10 shows that the pragmatic dimension (content and comprehensibility) is the highest in all schools, while the scores in the linguistic components are the lowest (SPAG). Statistically significant differences were observed between Schools A and B in the three components: the pragmatic component, more specifically in the comprehensibility dimension (mean rank of School A = 2.99 and mean rank of School B = 3.63, p = .001), the textual component (mean rank of School A = 2.70 and mean rank of School B = 3.32, p = .001), and the linguistic component (mean rank from School A = 2.53 and School B 3.28, p = .001).

In short, our findings show that the intensity of exposure to Spanish does not necessarily make a difference in students' scores on communicative appropriateness in Spanish. In fact, School B presents better results than School C, even though School B is labelled as low intensity exposure to Spanish and School C is coded as medium intensity exposure to Spanish. This may be explained by the exposure to Spanish, the dominant language in the Valencian Community, outside the classroom. In turn, this suggests that input beyond the classroom needs to be considered, an issue that will be explored in response to Research Question 2.

Turning our attention to the Catalan language, the Kruskal-Wallis statistical test showed that scores in Catalan were significantly different, considering frequency of exposure to Catalan in the school (χ^2 (2) = 153,507, p = .000). In order to provide further information, Figure 40 presents the distribution of each school in terms of the written scores in Catalan.

Figure 40

Total scores in Catalan across schools
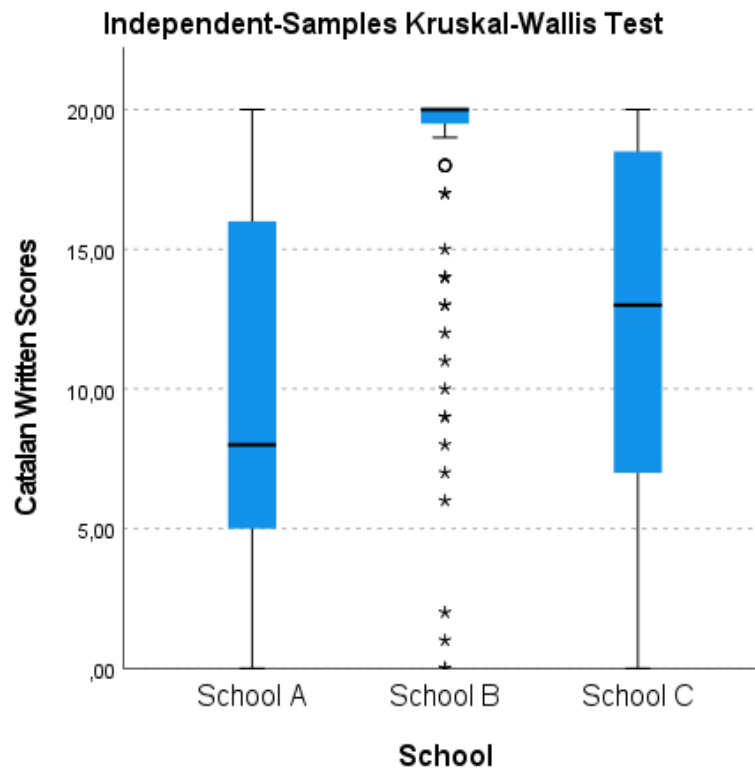
We can see that two boxes, School B and School C, are above the median, while School A is below the median, implying that differences may exist.

Kruskal-Wallis test pairwise comparisons provided strong evidence on the statistically significant differences between School A (mean rank = 9.50) and School C (mean rank = 12.63) (p = .001), and between School A (mean rank = 9.50) and School B (mean rank = 18.20) (p = .000). Finally, differences were also observed between School C (mean rank = 12.63) and school B (mean rank = 18.20) (p = .000). It is interesting to observe that, in relation to the Catalan language, School B and C, with high intensity exposure to Catalan, showed differences in students' communicative appropriateness, suggesting that intensity of exposure at school is not the only possible explanation for students' written scores (see Table 11).

Table 11

Pairwise comparisons across schools regarding communicative appropriateness in Catalan

Pairwise comparison	Mean Rank	Test Statistic	Sig
School A-School C	9.50-12.63	-46.625	.001
School A-School B	9.50-18.20	-167.982	.000
School C-School B	12.63-18.20	121.357	.000

Moreover, the Kruskal-Wallis statistical test was applied for all the dimensions of the construct of communicative appropriateness in Catalan. Scores in pragmatics, including content (χ^2 (2) = 115.306 p = .000) and comprehensibility (χ^2 (2) = 121.393 p = .000) were statistically significant. Concerning the textual and linguistic components, statistically significant differences were observed (χ^2 (2) = 130.154, p = .000 and (χ^2 (2) = 137.933, p = .000 respectively). Figure 41 presents the data distribution of the content dimension, Figure 42 for the comprehensibility dimension, Figure 43 for coherence and cohesion, and Figure 44 for SPAG dimension.

Figure 41, 42, 43 and 44

Boxplot for the four dimensions of communicative appropriateness in Catalan across schools
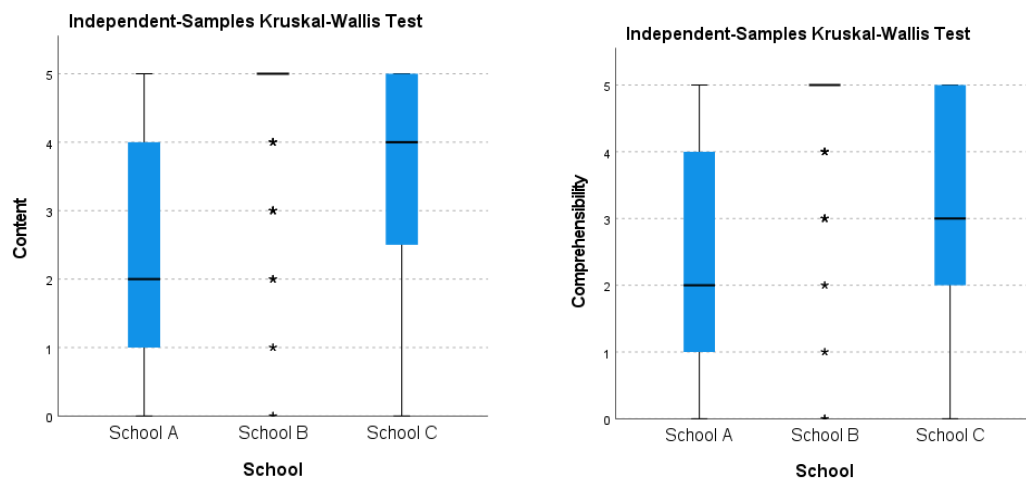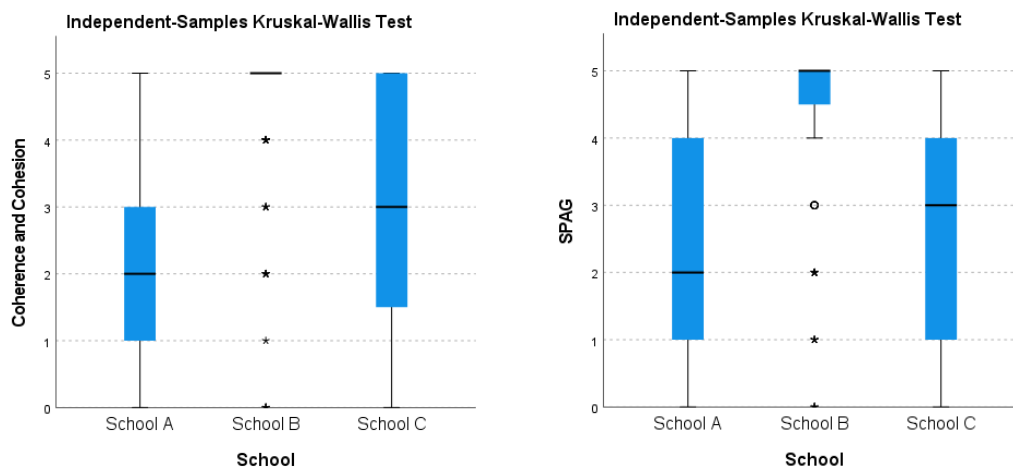
As illustrated in Figures 41, 42, 43 and 44, School B outperformed Schools A and C in all dimensions. Students from School B achieved the highest scores in pragmatics and in the textual component, and they also performed well in linguistics. Regarding Schools A and C, the data distribution also shows that better scores were observed in the pragmatic component than in the textual and the linguistic component. Additionally, pairwise comparisons among dimensions were performed using Dunn's (1964) procedure (the Bonferroni correction for multiple tests adjusted values) (see Table 12).

Table 12

Pairwise comparisons for the pragmatic, textual and linguistic components in Catalan

Dimensions	Pairwise comparisons	Mean Rank	Test Statistic	Sig
	School A-School C	2.63-3.55	-58.128	.001
	School A-School B	2.63-4.64	-142.331	.000
Content	School C-School B	3.55-4.64	84.204	.001
	School A-School C	2.51-3.27	-45.895	.001
	School A-School B	3.27-4.62	-145.735	.000
Comprehensibility	School C-School B	3.27-4.62	23.633	.001
	School A-School C	2.17-3.02	-49.058	.001
	School A-School B	2.17-4.54	-152.518	.000
Coherence & cohesion	School C-School B	3.02-4.54	103.460	.001
	School A-School C	2.19-2.78	-35.000	.009
SPAG	School A-School B	2.19-4.39	-154.914	.000

School C-School B	2.78-4.39	119.914	.000

As Table 12 shows, statistically significant differences across all the schools were observed between the pragmatic and textual components. Concerning the linguistic component, significant differences among schools are observed, except between Schools A and C (see Table 12). It is worth pointing out that School B (with high intensity of Catalan exposure) shows differences in relation to the other schools in all the dimensions, even when compared with School C, which was also coded as a school with high intensity of Catalan exposure. These results suggest that, in the case of Catalan, other factors such as exposure to the minority language outside the classroom may explain these differences.

To sum up, the findings reported above indicate that intensity of language exposure does not always make a difference. Starting with English exposure in CLIL programmes, School B, with a medium intensity CLIL programme, obtained the highest scores in communicative appropriateness, followed by School A and school B (see Table 13). In addition, significant differences were observed between School C (with a low intensity CLIL programme) and Schools A and B (high intensity and medium intensity CLIL programme respectively). However, no significant differences were observed when we compared School A (high intensity CLIL programme) with School B (medium intensity CLIL programme). This may indicate that hours devoted to CLIL make a difference on students' communicative appropriateness, including the dimensions of pragmatics (content and comprehensibility), textual (coherence and cohesion) and linguistics (SPAG).

Table 13

Main findings across schools with different intensity of CLIL programmes

Intensity	School	Differences in Communicative Appropriateness
High (46.6%)	A	Non-Significant
Medium (21.1%)	B	Non-Significant
Low (6.6%)	C	Significant

Note. ↕ indicates differences among the schools. Green circle indicates the school that obtained the highest scores; yellow circle indicates the school that got the second-highest scores; Red circle indicates the school that achieved the lowest scores.

Focusing on Spanish, our findings shown in Table 14, indicate that the intensity of exposure does not necessarily make a difference in students' scores on communicative appropriateness. In fact, School B presents better results than School C, even though School B is labelled as low intensity exposure to Spanish and School C is coded as medium intensity exposure to Spanish. School A and B, with similar intensity of exposure, present significant differences in relation to students' communicative appropriateness. This may be explained by the exposure to Spanish, the dominant language in the Valencian Community, outside the classroom, which suggests that input beyond the classroom needs to be considered.

Table 14

Main findings across schools with different intensity of Spanish exposure

Intensity	School	Differences in Communicative Appropriateness
Low (16.6%)	A	Significant
Low (20%)	B	Significant
Medium (30%)	C	Non-Significant

Note. ↕ indicates differences among the schools. Green circle indicates the school that obtained the highest scores; yellow circle indicates the school that got the second-highest scores; Red circle indicates the school that achieved the lowest scores.

In the case of Catalan, intensity of language exposure at school may explain differences in the written scores (see Table 15). Participants from School B and C, coded as schools with high intensity of Catalan exposure, obtained better results than participants from School A, coded as a medium intensity of Catalan exposure. However, Schools B and C, having similar exposure to Catalan at school, presented differences in relation to the construct of communicative appropriateness analysed in the present study. This suggests, in line with what we have mentioned in the case of English and Spanish, that other factors, in this case, exposure to the minority language outside the classroom, may explain differences in communicative appropriateness in writing.

Table 15

Main findings across schools with different intensity of Catalan exposure

Intensity	School	Differences in Communicative Appropriateness
Medium (26.6%)	A	Significant
High (48.8%)	B	Significant
High (53.3%)	C	Significant

Note. ↕ indicates differences among the schools. Green circle indicates the school that obtained the highest scores; yellow circle indicates the school that got the second-highest scores; Red circle indicates the school that achieved the lowest scores.

6.3 Qualitative analysis related to the implementation of CLIL programmes

To further understand the potential benefits and problems of CLIL programmes in the context of multilingual education, this section presents an analysis of the data obtained from the semi-structured interviews conducted with students, teachers and parents. Their opinions about the intensity of CLIL programmes in the Valencian Community, where different intensity of CLIL programmes co-exist with different degrees of exposure to Spanish and Catalan, may shed light on language policy and teacher training in the Valencian Community.

From the 392 sample, a subset of 30 participants ($n = 10$ in each school), representing 7.6% of the total sample, took part in the semi-structured interviews (see Chapter 5 for an explanation of the semi-structured interviews). Although they were asked about several aspects, we only took into account students' responses to the question "Do you like to learn Science in English?"

Besides, the interviews also served to identify students' preferences towards the three languages of the curriculum by answering the following question "What language do you prefer, Catalan, Spanish or English?".

Furthermore, we also wanted to know teachers' opinions about the linguistic programme adopted in the school and the importance given to languages. For this reason, a total of 18 primary teachers ($n = 6$ in each school) were interviewed (see Chapter 5 for a detailed explanation of our method). Participants had to respond to the question: "What do you think about the linguistic programme adopted in the school?". Teachers' interviews served to further understand their perceptions of the languages in the curriculum, and how that could influence students' communicative appropriateness.

Finally, in order to have a wider view, a subset of 15 parents ($n = 5$ in each school) were interviewed by the researcher. We were interested in understanding parents' opinions about the different languages in the curriculum, and their opinion on the linguistic programme adopted in the school. Participants responded to the question: "What do you think about the linguistic programme adopted in the school?".

The interviews were conducted in Spanish or Catalan with the aim to get information about: a) perceptions of the CLIL experience; b) language preference, and c) opinion of the linguistic educational programme.

Starting with students' semi-structured interviews we observed that, regardless of the intensity of CLIL programmes, while some students felt they liked to learn new words and felt comfortable, others felt lost. This contrast is illustrated in the examples below taken from participants' answers to the question "Do you like to learn Science in English?" in the three intensity of CLIL programmes.

> S1: "I like it because we can learn things that happen in the world and also in English but it is difficult".

> S214: "I like it, it's a way to keep learning English but when we do assignments, I find it difficult".

S333: "It's a bit of a puzzle because there are some things we don't know, but the teacher makes us work a lot in groups and we almost never do it alone and we help each other".

S335: "Regular, because as we don't have a high level and at home, we speak Valencià, I'm not used to it. Besides, next year we'll do it in Valencià so we'll understand it better".

However, students' perceptions of languages varied across schools. To the question "What language do you prefer, Catalan, Spanish or English?", we observed that students' preferences were in line with the percentage of language in each of the linguistic programmes of the Valencian Community. That is to say, in School A, with higher intensity of CLIL, a more positive perception towards English was observed. In School B, participants' positive perception towards the three languages is observed. However, in School C, this pattern was not observed. Below examples of these patterns are provided.

Positive opinion mainly towards English from participants in School A

S12: "I like it because most of the hours are in English and I love English as we use it in school. I also like Spanish but Catalan, no".

S31: "The hours in the school are perfect because English is the language that we use".

S65: "We should not learn subjects in Valencian, it should only be language subjects and we should pay more attention to English".

Positive opinion towards the three languages from participants in School B

S120: "I like all three because I use them for different things and we use all three equally at school".

S198: "I like all three, but I think it's good because we do all three because I find them all useful".

S210: "At school we are taught with the three languages pretty much the same and I think that helps us to understand what we learn in the three languages".

Negative opinion towards English and Catalan from participants in School C

S248: "We do almost no English, and better because I don't know anything, but we do little Spanish".

S298: "I think that we do too much Catalan, I don't like it at all, in the playground we almost always speak in Spanish, which is the language we like the most".

S301: "Good because we do a few hours of English and we don't like it at all".

Students' perceptions aligned with parents' perceptions about the linguistic programme of the school. During the semi-structured interviews, parents provided information regarding the implementation of the CLIL programme in the context of multilingual education. As illustrated in the examples below, in answering the question "What do you think about the linguistic programme of the school?", parents from School A showed a positive perception towards the 46.6% of CLIL hours. They even expressed disagreement with the regional government's decision to increase the percentage of exposure to other languages in the curriculum, thereby reducing subjects taught in English. On the contrary, while the parents' opinions in School B demonstrated a positive perception regarding the hours of CLIL (21.1% of CLIL), they also agreed with the use of other languages at school (48.8% Catalan and 20% Spanish). Finally, parents in School C expressed concerns about the insufficient level of English and the high exposure to Catalan. Examples illustrating the patterns mentioned are presented below.

More English required from parents in School A

P1: "We have two daughters and one of them will no longer come to school because of the reduction in the number of hours of English allocated in the timetable. We want more English like we had. They have increased Catalan and I don't think it's good, we prefer more English".

P2: "Now they want to reduce English to 37% and increase Valencian, I'm going to look for another school for my son because I want him to learn more English".

P3: "Until recently I was happy, but now the percentage of English is dropping and in fact we have gone on strike to stop them from doing so".

Satisfaction about balanced hours of exposure in School B

P4: "The truth is that it's good, they do a bit of all of them because none of them is more important than the other because my son speaks them all outside, one with friends, another with his father and another with me and English at the academy. So, he must know all of them equally and at school they treat all of them equally".

P5: "I think it's good that children have all three almost equally, maybe Valencian has a little more than Spanish and maybe we should balance it a little, but they use all of them, and that means that my son can use them when it suits him best".

P6: "I think the school gives importance to all languages without focusing too much on one, and this enriches my daughter's education".

More English and less Catalan required from parents in School C.

P7: "At school they do a lot of Valencian and hardly ever do English lessons... that worries me a bit .... maybe I'll consider looking for a school with more English lessons because it seems to me that he's not learning anything".

P8: "It's good because they do all three but some give them too much importance. They always tell me that they speak Valencian and I don't like that. I want them to do English but also Spanish because it's the official language here".

P9: "No, because I think they do very little English and we don't have the resources to send him to an academy outside".

Additionally, teachers' perceptions of the linguistic programme were in line with the pattern reported above. Although teachers in School A were aware of their insufficient knowledge of English, they consider English important and suggest that more English should be given to

students. Similarly, to students and parents, teachers in school B agreed that a balanced linguistic programme may benefit the process of learning in the context of a multilingual school, and teachers in School C referred to the fact that the school had too many hours of Catalan and insufficient hours devoted to the English language.

More English required from teachers in School A and C

T1: "The school has a 60% of hours of instruction in English but now it will be reduced to 37% of hours of instruction and I think it's worse for the children but better for us because English is very difficult for us".

T2: "The school has had to put in more hours of Valencian because otherwise the children go on to secondary school without a level of Catalan and the secondary school teachers complain. I think the percentage of English speakers should be higher".

T3: "I would make the percentage more balanced by increasing hours in English".

T4: "I would put more emphasis on English, but by law we have to do other languages as well".

Satisfaction with the balanced linguistic programme in School B

T5: "The percentage of English is balanced with the others. It is not good if only one language dominates too much".

T6: "I think it's fine, we don't have any complaints from the secondary school teachers that they don't know when they get there. Personally, maybe Spanish should have a bit more weight, but in general I think it's fine. But English doesn't need to be given as much importance as other schools give it".

T7: "I think it's fine, since we don't use a lot of English either because we forget the other languages and we use all three both inside and outside the school".

Furthermore, during teachers' interviews, and regardless of intensity of the CLIL programme, they made comments about difficulties for CLIL implementation. Among the difficulties reported they mentioned: (i) Teachers do not have sufficient knowledge in English to perform an English lesson, (ii) Teachers training in CLIL is urgent, (iii) Teachers are not aware of how to teach a CLIL lesson and how to cope with complex content, (iv) Teachers need time and material to prepare proper classes, (v) Teachers do not consider that CLIL is language and content at the same time, they assess it separately, (vi) Teachers reported that CLIL just works in a high socioeconomic context where parents can help at home, and (vii) Teachers do not vocalise their agreement to teach Science in CLIL sessions, and they reported that CLIL just works in dynamic subjects such as PE or Arts and Crafts. All these issues are beyond the scope of this thesis, and further studies should address these difficulties. However, since all the teachers reported having difficulties in four issues, we suggest prioritising them for successful CLIL implementation. As illustrated in the examples below, the four main issues are: not having the sufficient knowledge of English to conduct a CLIL lesson, lack of resources and time, insufficient teacher training in CLIL approach, and unbalanced content and language.

Knowledge of English

> T1: "The truth is that I am not good enough to teach English at this level because I am a substitute teacher and they know more than I do. If I had known I would have chosen another school".

> T4: "I have a B2 but I always try to keep up with English. I have taken part in the teacher exchange programme in England to keep in touch with the language. I think that only with a B2 and without your effort we can't teach a subject with content".

> T7: "The truth is that I don't have a very good level of English, I took the B2 some time ago and I have forgotten it since I haven't practised it".

Resources and time

> T3: "The truth is that we don't have time to do a CLIL class properly, due to lack of time and resources".

T9: "Not in this school because we don't have adequate online materials or anything. Also, CLIL only works if parents can also reinforce at home, so the socio-economic aspect has to be taken into consideration".

T4: "The CLIL approach requires a lot of preparation on our part and we don't have the time or the resources".

Training

T1: "It is a pity that we cannot help them more, because we have neither the training nor the time to prepare good CLIL classes. We need training".

T5: "Teachers do not have the training on how to teach it. CLIL cannot be taught without training because the content is not learned. It is a false myth".

T8: "I consider that we are not well trained, and so we cannot be required to do a CLIL class".

T11: "In CLIL, content is lost because the content is reduced to explain it in English".

T13: "In CLIL there can be confusion as to what is being learnt, it is complicated for them to learn language and content at the same time".

T15: "I don't know much about this methodology, but if people with a B2 degree teach subjects in English, in the end they do not learn English or content".

Lack of support from the educational authorities

T16: "We don't have aids and we are not trained to teach. In addition, the authorities are not consistent in the education laws".

T17: "There is no understanding of the education laws and that does not help the child who will go to secondary school next year".

All in all, we can claim that students', parents' and teachers' perceptions were positive for high and medium CLIL intensity programmes. In fact, parents in School A showed a positive perception towards the 46.6% of CLIL hours, where students performed better in English than the other languages. In addition, parents in School B showed a positive perception regarding the hours of CLIL (21.1% of CLIL), but they also agreed with the use of other languages at school (48.8% Catalan and 20% Spanish). Besides, in School B, students' communicative appropriateness in writing was balanced, since most of the students performed equally well in all the languages. However, parents in School C, with a low intensity CLIL programme, showed their discontent regarding the insufficient amount of CLIL, and expressed their desire to reduce Catalan hours and increase English hours. Besides, participants' scores in School C were worse than expected in all the languages of the curriculum.

Additionally, our findings show some difficulties that teachers reported having when implementing a CLIL lesson. Considering findings obtained from the semi-structured interviews, illustrated in Figure 45, we suggest the need to prioritise teacher training for CLIL implementation. There is a need to improve teachers' knowledge of English, to provide them with resources, training, and time to create them and to facilitate the coordination of language and content teachers to find a balance between language and content in the implementation of CLIL programmes.

Figure 45

Difficulties for CLIL implementation
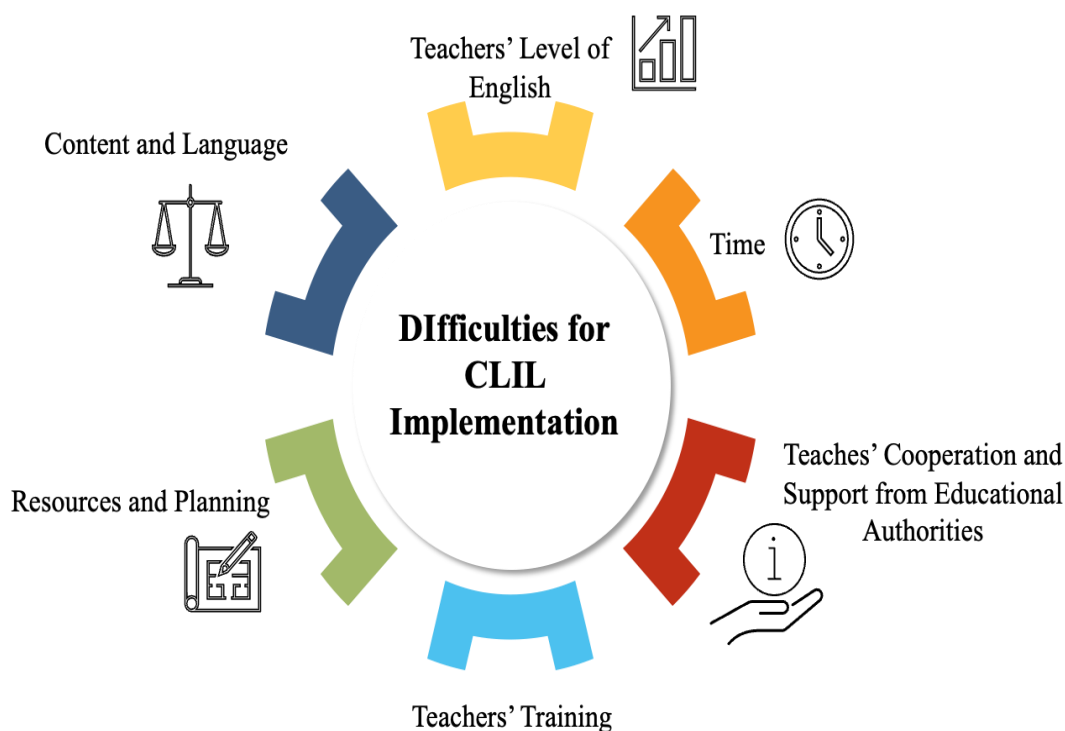
6.4 Discussion of results related to Hypothesis 1

Hypothesis 1 is partially confirmed. Significant differences on students' communicative appropriateness were observed when comparing the high intensity CLIL programme (School A) with low intensity CLIL programme (School C). These findings are consistent with previous research indicating that the more hours of exposure the better for language learning (Llanes & Muñoz, 2013; Muñoz, 2014). However, no significant differences were observed when comparing the high intensity CLIL programme (School A) with the medium intensity CLIL programme (School B).

Our results seem to contradict Serrano and Muñoz's (2007) study. These scholars found significant differences when comparing regular with intensive hours of exposure to English and found differences among the groups. In the present study, we did not observe significant differences between Schools A and B. Nevertheless, this claim should be viewed with caution since, in the context of the present study, our participants were primary learners and we considered the multilingual perspective that Serrano and Muñoz (2007) did not consider. Besides, in their study the number of hours is not explicitly indicated, an issue that may explain

why it is difficult to compare our results derived from 46.6% of hours of CLIL and 21.1% of hours of CLIL with their findings.

In addition, since participants in high (School A) and medium (School B) intensity CLIL programmes performed well in the written task, we can claim CLIL benefits students' communicative appropriateness in writing. Our results are in line with other scholars (Ruiz de Zarobe, 2011; Llinares *et al.,* 2012), but they seem to contradict Dalton-Puffer, (2007) and Llinares and Whittaker's (2010) investigations. Dalton-Puffer (2007) and Llinares and Whittaker (2010) reported limited progress regarding writing in CLIL contexts. The difference may lie in learners' characteristics, as in those studies. Participants were not primary school multilingual learners, and a different taxonomy for analysing the data was used. Among others, these two issues might have influenced research outcomes.

Furthermore, findings from our study elucidate the inconclusive results regarding whether language and content are acquired at the same time in CLIL. On the one hand, focusing on language, our results have shown that in a high intensity CLIL programme students outperformed participants enrolled in a low intensity CLIL programme with regard to the textual and linguistic components. These findings are in line with Jiménez-Catalán *et al.* (2006), who claimed that CLIL students performed a large number of lexical verbs and they showed more complete and complex sentences. Along the same line, our results are in line with Pérez and Basse (2015) and Juan-Garau and Salazar-Noguera (2015), who reported the benefits for grammar under the CLIL approach. Similarly, in line with Agustín-Llach (2017), participants from the high intensity CLIL programme performed better in spelling, mechanisms and coherence and cohesion, the last two aspects not being considered in previous investigations, as far as we know.

Moreover, our results are in line with previous research, demonstrating the positive gains regarding content and language (Mattheoudakis *et al.,* 2014; San Isidro & Lasagabaster, 2018). As we have seen from our quantitative results, intensity of CLIL programme does not interfere negatively in content and comprehensibility. In fact, participants in Schools A and B performed equally well in content, comprehensibility, and language. Although considering finding from School C (low intensity CLIL programme), we acknowledge that hours devoted to CLIL make a difference in students' communicative appropriateness and for the effectiveness of content and language learning.

However, contrary to our findings, other investigations have reported no gain in content (Piesche *et al.,* 2016; Anghel *et al.,* 2016). For instance, Piercshe *et al.* (2016) focused their investigation on CLIL primary learners in the subject of science and found that non-CLIL students obtained higher results in science. Similarly, Anghel *et al.* (2016) indicated that the bilingual programme seemed to have had negative effects in terms of content. Besides, Sotoca-Sienes and Muñoz-Hueso's (2014) study showed that non-bilingual schools obtained better results than bilingual ones in English and Science. However, in our study, participants from School C (low intensity CLIL programme) did not obtain better scores than participants from School A (high intensity CLIL programme) and B (medium intensity CLIL programme). One possible explanation could be the hours of CLIL in the schools. As previously mentioned, it seems that hours devoted to CLIL need to be taken into account to be effective for language and content.

Moreover, in spite of providing further insight into the benefits of CLIL for language and content, findings from the semi-structured interviews provided insights about the implementation of CLIL. In line with Piercshe *et al.* (2016), teachers reported concerns about the balance and the planification of CLIL classes. Similarly, in line with Dalton-Puffer (2007), Mehisto *et al.* (2008), Pérez-Vidal and Juan-Garau (2015) and Llinares and Morton (2017), who reported that it was complicated to accomplish an equal balance between content and language, teachers also mentioned this issue during the semi-structured interviews. In addition, our findings seem to support previous research that indicates a need to train teachers on the CLIL approach. Similarly, as highlighted in previous investigations (Czura *et al.,* 2009; Martí & Portolés, 2019), our study reveals that one of the flaws of CLIL is teachers' level of proficiency to teach content in an additional language.

It is also worth pointing out that although teachers from schools with different intensity of CLIL programmes (high, medium, and low) reported difficulties in the implementation of CLIL, Schools A and B showed linguistic and content gains while School C did not. This indicates that in spite of lack of CLIL training methodology or teachers' knowledge of English (teachers acknowledged that a B2 level of English is not enough to perform a CLIL lesson) intensity of CLIL potentially benefits the learning of language and content.

To conclude our discussion related to Hypothesis 1, it is worth mentioning that previous research on CLIL has focused their investigation on exploring CLIL versus non-CLIL (Jiménez-Catalán & Ruiz de Zarobe, 2009; Mattheoudakis *et al.,* 2014; Sotoca-Sienes &

Muñoz-Hueso, 2014; Anghel *et al.,* 2016; Piesche *et al.,* 2016; Agustín-Llach & Canga-Alonso, 2016; Agustín-Llach, 2017), and little attention has been given to intensity of CLIL programmes. As far as we know, intensity of CLIL programme has only been addressed by Merino and Lasagabaster (2017), who reported similar findings to those obtained in the present study. There was a significant impact of the numbers of CLIL sessions on students' gains in content and English proficiency. The main difference from the present study and that conducted by Merino and Lasagabaster (2017), is that we have considered different intensity of CLIL in the context of multilingual education, where intensity of exposure to the other languages of the curriculum (Catalan and Spanish also considered). An issue that will be discussed in relation to Hypothesis 2.

6.5 Discussion of results related to Hypothesis 2

Hypothesis 2 investigates whether the amount of Spanish and Catalan at school has an impact on students' communicative appropriateness. Starting with Spanish, Hypothesis 2 is not confirmed. Participants in School C with 30% of hours of Spanish, and coded as medium exposure, did not obtain better results than participants in School B, with 20% of hours of Spanish and participants in School A with 16.6% of hours of exposure and both coded as low intensity. However, differences were observed between School A and B both with low intensity of exposure suggesting that input beyond the classroom needs to be considered. In fact, it is worth mentioning that students in all schools performed better in Spanish than expected. One possible explanation could be the prestige of Spanish in society, an issue already reported in previous studies (Safont, 2007; Martín-Laguna & Alcón-Soler, 2018; Guzmán-Alcón & Portolés, 2021; Guzmán-Alcón, 2022). Another explanation could be contact with the Spanish language outside the school. In fact, during the semi-structured interviews students reported using Spanish outside the classroom most of the time.

In relation to the Catalan language, Hypothesis 2 is partially confirmed. One tentative hypothesis is that other variables may play a role in students' communicative appropriateness. This hypothesis is also addressed by Strobl and Baten (2021). In fact, the information provided during the semi-structured interviews by the students with high exposure to Catalan at school allowed us to identify the following explanations language at home, mainly Spanish; participants' identity towards Spanish (some of them perceived Catalan as a threat to Spanish); lack of extrinsic motivation, since some participants did not consider Catalan as a useful language, and insufficient contact with Catalan outside the school. These findings are in line

with previous investigations, which suggested that languages at home (Safont, 2005; Portolés, 2014; Guzmán-Alcón & Portolés, 2021), and the combination of input intensity in the classroom and beyond (Muñoz *et al.,* 2018; De Wilde *et al.,* 2021; Muñoz & Cadierno, 2021) might explain why intensity of exposure at school is not always the variable that explains language learning.

Our findings provide additional insights to previous research. Specifically, our study suggests that being in contact with multiple languages does not necessarily have a negative impact on language proficiency, as evidenced by the performance of School B, which performed equally well in all languages despite having a more balanced exposure to the curriculum's languages. Overall, our study highlights the importance of balanced exposure to multiple languages in promoting better communicative appropriateness across all language dimensions. These results support previous research pointing out that students' language exposure and use of the minority language improves students' L3 writing (Cenoz & Valencia, 1994; Sagasta, 2003; Sanz, 2008; Arocena, 2017; Orcasitas-Vicandi, 2022) indicating the positive effects of multilingualism on multilingual writers (Kobayashi & Rinnert, 2023). Besides, our findings provide insights into students' communicative appropriateness in writing in another multilingual context: the primary education context of the Valencian Community. Here, CLIL programmes coexist with different degrees of exposure to English, Spanish and Catalan at school.

Secondly, taking into account students' language repertoire, especially in balanced linguistic programmes in the Valencian Community, it seems that CLIL has no negative impact on the other languages of the curriculum, or vice versa. In this sense, our study adds intensity of CLIL programmes as a variable, and supports findings from other studies, such as the one conducted by San Isidro and Lasagabaster (2018), who found that English had no negative impact on the two other official languages of the bilingual community: Galician and Spanish, suggesting that CLIL encourages students' multilingual competence.

Thirdly, previous studies dealing with all the language in the curriculum and CLIL differ from the present study as we took into account pragmatics, and other scholars examine general L3 written production (Cenoz & Valencia, 1994; Sagasta, 2003; Sanz, 2008; Arocena 2017; Orcasitas-Vicandi, 2022) or use the CAF taxonomy (Strobl & Baten, 2021), ignoring the pragmatic component. In line with other researchers that have explored pragmatics in other educational contexts such as in the EFL (Alcón-Soler, 2005; Martínez-Flor & Usó-Juan, 2006; Alcón-Soler, 2015; Sánchez-Hernández & Alcón-Soler, 2019) or the multilingual context

(Safont, 2005; Martín-Laguna & Alcón-Soler, 2018; Martín-Laguna, 2020; Portolés, 2015; Safont & Portolés, 2016; Portolés & Safont, 2018), the present study contributes to the field of pragmatics, by examining students' communicative appropriateness in a CLIL multilingual context at primary school level.

Our analysis suggests that exposure to multiple languages does not have a negative impact on language learning, and may even have a positive effect on the learning of other languages, as evidenced by students in School B. In other words, it seems that students, who are in contact with more languages, may benefit from their multilingual pragmatics. This finding has been pointed out in previous research on pragmatics conducted at tertiary (Safont, 2005), secondary (Martín-Laguna & Alcón-Soler, 2018; Martín-Laguna, 2020), and primary education (Portolés, 2015; Safont & Portolés, 2016; Portolés & Safont, 2018). However, while schoolars have focused on aspects such as speech acts (Safont, 2005; Martínez-Flor & Usó-Juan, 2006; Portolés, 2015) or discourse markers (Martín-Laguna & Alcón-Soler, 2018; Martín-Laguna, 2020), we have focused on students' communicative appropriateness. In addition, similarly to previous research, the present study acknowledges that languages are in permanent interaction and language learning is a complex and dynamic process (Cenoz & Gorter, 2011; Portolés & Martín-Laguna, 2012; Jessner, 2013; Portolés & Safont, 2018; Safont, 2013; Kobayashi & Rinnert, 2023).

6.6 Summary of the chapter

Chapter 6 deals with Research Question 1 and examines whether differences in students' communicative appropriateness in English were observed, considering different intensities of CLIL programmes, and, if so, whether those differences were also observed in the other languages of the curriculum. A summary of the two hypotheses formulated is provided in Table 16.

Table 16

Summary of the results related to Hypothesis 1 and Hypothesis 2

Hypothesis	Main result	Conclusion
H1: The degree of exposure to English in CLIL programmes will affect students' communicative appropriateness in writing	• Significant differences are observed when we compare high and low intensity CLIL programmes. • Hours devoted to CLIL make a difference on students' communicative appropriateness.	H1: Partially confirmed.
H2: The degree of exposure to Catalan and Spanish will affect students' communicative appropriateness in writing	• Intensity of exposure to Spanish and Catalan does not necessarily make a difference. • Parents and teachers focus on English and neglect the other languages in the curriculum.	H2: In the case of Catalan: Partially confirmed. In the case of Spanish: Not confirmed.

Hypothesis 1, which hypothesised that the amount of English in CLIL programmes would affect students' communicative appropriateness, is partially confirmed. Results from the quantitative analysis showed that (i) students' communicative appropriateness was different across groups with different intensities of CLIL, (ii) intensity of exposure to English in CLIL programmes makes a difference on the pragmatic, textual and linguistic components of students' writing, and (iii) hours devoted to CLIL make a difference on students' communicative appropriateness.

Additionally, our quantitative findings were complemented with insights into learners' perceptions of CLIL and on parents' and teachers' opinions regarding the linguistic programme adopted in the school. The data collected from students', parents' and teachers', during semi-structured interviews provided valuable insights that shed light on participants' perceptions on intensity of CLIL programmes in the multilingual context of the Valencian Community. Our findings can be summarised as follows: (i) students had mixed feelings about CLIL; (ii) parents' and teachers' opinions were in line with the linguistic programme adopted in the school; (iii) teachers did not consider that CLIL is language and content at the same time, they assessed it separately, (iv) reported not having sufficient knowledge of English, (v) insufficient training, and (vi) lack of resources and time to implement effective CLIL lessons.

Focusing on Hypothesis 2, which hypothesised that the amount of Spanish and Catalan would affect students' communicative appropriateness, is partially confirmed. Results from the

quantitative analysis showed that; (i) intensity of exposure to Spanish and Catalan does not necessarily make a difference in students' scores on communicative appropriateness; (ii) individual differences are also observed in Spanish and Catalan, which suggests that other variables, apart from intensity of exposure to the official languages at school, may play a role.

To summarise briefly, findings from our study are in line with previous investigations that show that intensity of CLIL programmes (Merino & Lasagabaster, 2017) is beneficial for language learning, although our study shows that hours of CLIL need to be taken into account for its effectiveness. In addition, the present investigation provides further support for multilingual education. In line with San Isidro and Lasagabaster (2018), who looked at student language repertoire (Spanish, Galician and English), we considered the three languages of the Valencian curriculum (Spanish, Catalan and English). These authors compared CLIL versus non-CLIL programmes and reported that English had no negative impact on the two other official languages of the bilingual community (Galician and Spanish). In our study, we dealt with intensity of CLIL programmes and intensity of exposure to the other official languages (Spanish and Catalan) and found that English had no negative effect on the other official languages (Spanish and Catalan) as seen in School B that participants performed equally well to all the languages.

Finally, our results also provide insights for CLIL teachers in the context of multilingual education. Based on our findings, we suggest that teachers should avoid the monolingual paradigm, which is based on the traditional approach, where languages are viewed separately. Besides, this view is not in line with the reality of multilingualism, its development and how a third language is acquired (Cenoz & Gorter, 2017; Lin & He, 2017; San Isidro, 2018). Issues such as students' language backgrounds (Lin & He, 2017; Pavón-Vázquez, 2020), or the use of translanguaging as a pedagogical strategy (Cenoz, 2019; Cenoz & Gorter, 2022; Orcasitas-Vicandi, 2022; Mañoso-Pacheco, 2023) need to be considered to adopt a more multilingual approach, paying attention to all the languages of students' repertoire, as suggested by Safont (2021). This would not only avoid the monolingual paradigm and the neglect of the other languages of the curriculum, but, as shown in the present study, it may also facilitate students' communicative appropriateness in multilingual contexts, such as the Valencian Community.

CHAPTER 7. RESULTS AND DISCUSSION RELATED TO RESEARCH QUESTION 2

CHAPTER 7

RESULTS AND DISCUSSION RELATED TO RESEARCH QUESTION 2

Chapter 7 presents results related to how exposure to languages beyond the school impacts on students' communicative appropriateness in writing. In this regard, we examine exposure to watching TV in English, private tuition, and short period of time in the target language community as potential variables that have an impact on students' communicative appropriateness in English writing. In addition, this study considers exposure to watching TV in Catalan and Spanish, and language at home to examine its influence on students' communicative appropriateness in Spanish and Catalan writing.

Previous research shows that watching TV (Bunting & Lindstrom, 2013; Pujadas & Muñoz, 2020; Pujadas & Muñoz, 2020; Pattemore & Muñoz, 2020) and listening to music (Kuppens, 2010; Jensen, 2017) have a positive impact on language learning. Additionally, with regard to exposure to English through extracurricular instruction, research has reported that private tuition and short period of time in the target language community are good predictors of language learning (Evans & Fisher, 2005; Llanes & Muñoz 2009; Llanes & Serrano, 2014; Muñoz, 2014; Llanes *et al.,* 2015; Strobl & Baten, 2021). Moreover, to the best of our knowledge, only one study (Nightingale, 2016) has explored the impact of input exposure outside the school on all the languages in the curriculum. However, Nightingale's (2016) study did not consider primary school learners.

The present study considers a population that has not received much attention, that is, the population of primary school learners with different input exposure to all the languages of the curriculum. Thus, Section 7.1 reports findings related to Hypothesis 3, which deals with the impact of watching TV, private tuition and short period of time in the target language community on students' communicative appropriateness in English. Next, Section 7.2 presents results related to Hypothesis 4, focusing on the impact of watching TV and language at home on students' communicative appropriateness in Spanish and Catalan. Following this, Sections 7.3 and 7.4 present findings related to H3 and H4 respectively. Finally, Section 7.5 offers a summary of the chapter.

In what follows, we will present the results related to Research Question 2 of the study and its corresponding hypotheses:

Research Question 2 (RQ2): Does exposure to English, Catalan and Spanish beyond the school have an impact on students' communicative appropriateness in writing in all school languages (Catalan, Spanish and English)?

This research question triggered two hypotheses:

Hypothesis 3 (H3): English exposure beyond the school plays a role in students' communicative appropriateness in writing (Pujadas & Muñoz, 2020; Pattemore & Muñoz, 2020; De Wilde *et al.*, 2021).

Hypothesis 4 (H4): Spanish and Catalan exposure beyond the school plays a role in students' communicative appropriateness in writing (Cenoz & Valencia, 1994; Sagasta, 2003; Llanes & Serrano, 2014; Arocena, 2017; Strobl & Baten, 2021; Orcasitas-Vicandi, 2022).

7.1 Findings related to Hypothesis 3

Starting with exposure to TV in English, this variable was coded into four main categories in order to facilitate statistical analysis: 1 (high frequency: everyday), 2 (moderate frequency: sometimes), 3 (low frequency: rarely), and 4 (non-exposure: never). Figure 46 presents a descriptive analysis in terms of participants' frequency of exposure to English outside the school through TV.

Figure 46

Percentages of participants' exposure to TV in English
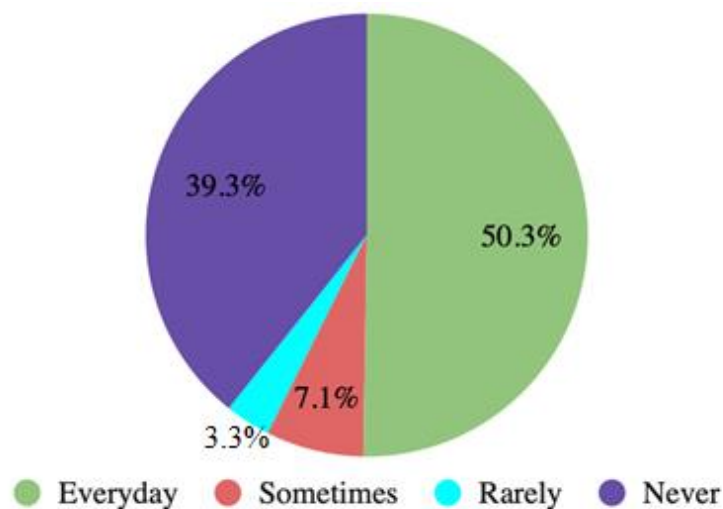
As it can be observed in Figure 46, 50.3% of the participants ($n = 197$) reported being exposed to TV in English everyday, in comparison to the 39.3% of the participants ($n = 154$) that reported to never watch TV in English. The less representative categories were sometimes (7.1%, $n = 28$) and rarely (3.3%, $n = 13$). This seems to indicate that participants either watch TV or everyday, or they never do.

To analyse whether frequency of exposure to watching TV influenced students' communicative appropriateness in English, we relied on non-parametric statistical tests. Kruskal-Wallis test was used to determine if there were differences in communicative appropriateness. Specifically, the test examined written scores in English between groups that differed in their frequency exposure to TV in English outside school. Scores in English were significantly different, considering frequency of exposure to TV in English ($\chi^2 (3) = 318.977$, $p = .000$). Nevertheless, the distribution of writing scores in English were not similar for all groups, as assessed by visual inspection of boxplot (see Figure 47).

Figure 47

Boxplot displaying total scores in communicative appropriateness according to frequency of watching TV
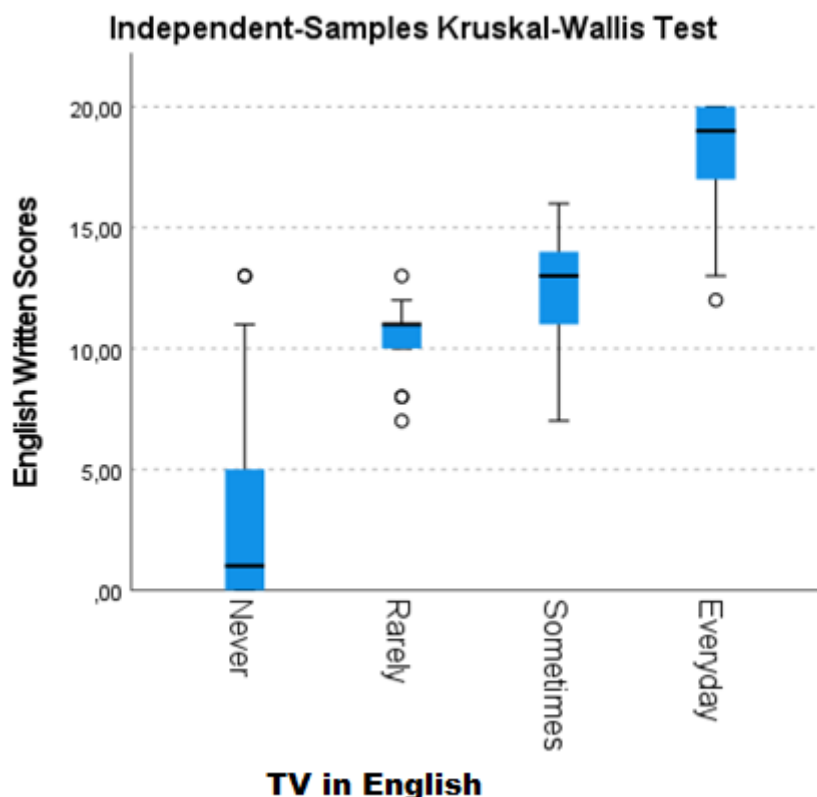
As illustrated in Figure 47, we can see that the box referring to watching TV, the frequency of everyday use is the highest in comparison to other frequencies, implying that a positive association may exist between written performance and everyday use of watching TV in English. In terms of the average, the medians of everyday and sometimes show the highest scores, and are squeezed to the left, indicating that those students performed better in English. On the contrary, those who rarely or never watch TV in English outside school show a low median, indicating that low scores were obtained.

Subsequently, pairwise comparisons were performed using Dunn's (1964) procedure. Significance values were adjusted by the Bonferroni correction for multiple tests (see Table 17).

Table 17

Pairwise comparisons regarding frequency of watching TV in English

Pairwise comparison	Mean Rank	Test Statistic	Sig
Never-Rarely	2.70-10.31	80.874	.013
Never-Sometimes	2.70-12.29	98.878	.001
Never-Everyday	2.70-18.39	214.778	.000
Rarely-Sometimes	10.31-2.29	18.004	.633
Rarely-Everyday	10.31-18.39	133.904	.001
Sometimes-Everyday	12.29-18.39	115.900	.001

Note. never = non-exposure frequency group; rarely = low frequency; sometimes = moderate frequency;

everyday = high frequency

This post hoc analysis revealed significant differences in communicative appropriateness scores between the non-exposure group (mean rank = 2.70) and the low-frequency group (mean rank = 10.31) (p = .0001). There were significant differences between the non-exposure group and the moderate frequency group (mean rank = 2.70 and 12.29) (p = .000), and differences between the non-exposure group (mean rank = 2.70) and the high-frequency group (mean rank = 18.39) (p = .000). Besides, not only were there significant differences between the low frequency group (mean rank = 10.31) and the high frequency group (mean rank = 18.39) (p = .001), but also between the moderate frequency group (mean rank = 12.29) and high frequency group (mean rank = 18.39) (p = .001). However, no significant differences were found between the non-exposure group (mean rank = 2.70) and the low frequency group (mean rank = 10.31) (p = .013), or between the low frequency group (mean rank = 10.31) and the moderate frequency group (mean rank = 12.29) (p = .633). These findings suggest that being exposed to English TV, especially if it is a frequent or moderate exposure, is beneficial for students' communicative appropriateness in English.

In short, our findings show that frequency of exposure to English, through watching TV, plays a role in students' communicative appropriateness in writing. Better scores are observed in participants' writings who are exposed to watching TV everyday, followed by those who reported being exposed sometimes. On the contrary, low scores are obtained by those who are rarely or never exposed to English watching TV.

To further understand the potential benefits of being exposure to TV, we present an analysis of the data obtained from the semi-structured interviews conducted with students, teachers, and parents. From the 392 sample, a subset of 30 participants ($n = 10$ in each school), representing 7.6% of the total sample, took part in the semi-structured interviews. Although participants were asked about several aspects, we only took into account students' responses to issues concerning exposure to watching TV. Furthermore, we also wanted to know teachers' and parents' opinions about the importance of watching TV in English, and whether or not they encouraged exposure to it. For this reason, a total of 9 primary teachers ($n = 3$ in each school) and 30 parents ($n = 10$ in each school) were interviewed by the researcher.

In the interview students responded to the question "Do you enjoy watching TV in English?" and their responses were analysed thematically. Our thematic analysis revealed that while participants in School A and B claimed to enjoy watching TV in English, they understood it as a family activity and showed motivation to overcome lack of understanding. Participants in School C did not enjoy it, showing unwillingness to overcome the problems of understanding TV in English.

More specifically, the following themes emerged:

Enjoyment and motivation to overcome lack of understanding in School A and B (see examples below)

> S23: "I like it a lot because I watch the series in the evening with my parents and my sister".

> S87: "Because my parents like it too and we always try to watch a film in English together at the weekend".

> S89: "Yes because tik toks in English are more fun and I can watch the ones with famous people who speak English".

> S94: "My friends and I play videos in English of famous people and the truth is that we understand them well, and if not we help each other".

Dislike and lack of motivation and effort in school C (see examples below)

S108: "No, because I don't understand anything. The videos are in English on the social networks but I always put them in Spanish".

S133: "I never watch TV in English. I don't even want to watch it, I don't understand anything".

S145: "No, I don't watch the videos in English because I don't understand anything. I usually watch the ones in Spanish!".

S180: "There are video games that are only available in English, but I don't download them because I won't understand anything about them!".

The patterns that emerged from our thematic analysis correlate with writing scores from participants in Schools A and B. These schools reported enjoyment and motivation towards watching TV in English, and achieved better written scores than participants from School C. School C reported mostly dislike and lack of motivation towards watching TV in English.

Furthermore, parents' opinions about the importance of watching TV in English are in line with students' opinions reported above. Teachers and parents answered the question "How important do you think it is for students to watch TV in English?" "Do you encourage them?", and regardless of the school, they considered that exposure to TV in English is essential for learning English (see examples below):

Parents' opinions:

P1: "Yes, TV in English is essential to reinforce English in the classroom".

P3: "I think everyone should watch TV in English. My son also watches almost all videos in English on his mobile phone".

P6: "I know it's important but my daughter doesn't want to and there's no way to put anything in English. But I always try".

On the other hand, teachers reported that it was important to be exposed to TV in English, but not all of them encouraged it:

T2: "Yes, the truth is that nowadays we have a lot of access to a lot of things in English on the internet and children should take advantage of this. It's true that I don't encourage them much and I don't show them things in English that they can see".

T3: "It is important for them to reinforce a bit outside because we don't have many hours of English, and English requires time. At school we don't encourage them to look at things on the internet in English either...".

T4: "I think it's fundamental and that's why I always encourage students to spend it".

T8: "Yes of course, that's why I send videos to my students in English to reinforce content. I think it's very important".

Moving to the other variable considered as an out-of-school factor, private tuition, our participants were asked whether they attended private tuition or not, the frequency of attendance to this activity, and whether they received individual or group tuition (see Appendix 3). The total sample ($n = 392$) was divided into two groups: Private tuition group representing 54.4% of the sample ($n = 212$), and non-private tuition group, representing 45.6% ($n = 180$) of the final sample (see Figure 48).

Figure 48

Total percentage of participants receiving private tuition
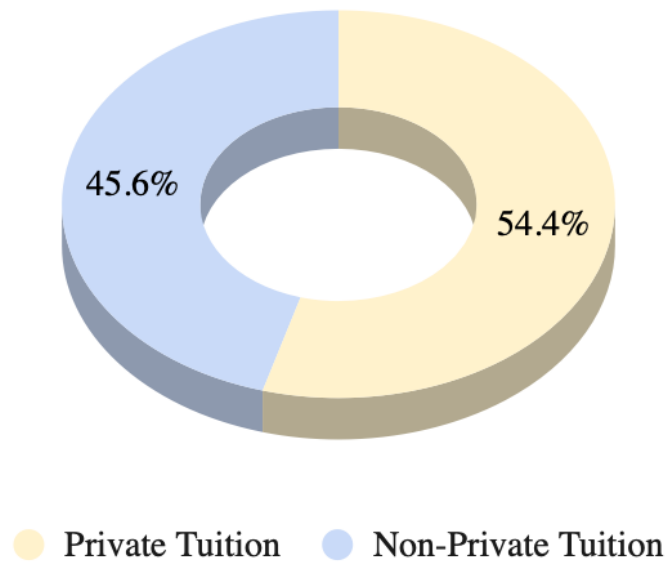
Results from the Mann-Whitney U test indicated that the distribution of scores between the non-private tuition group and the private tuition group were not similar. Scores for the private tuition group (mean rank = 285.21) were significantly higher than scores from the non-private tuition group (mean rank = 92.02), $U = 274.0$, $z = -16.984$, $p = .000$. Figure 49 illustrates the data distribution of both groups.

Figure 49

Graph displaying mean rank scores according to attending private tuition or not
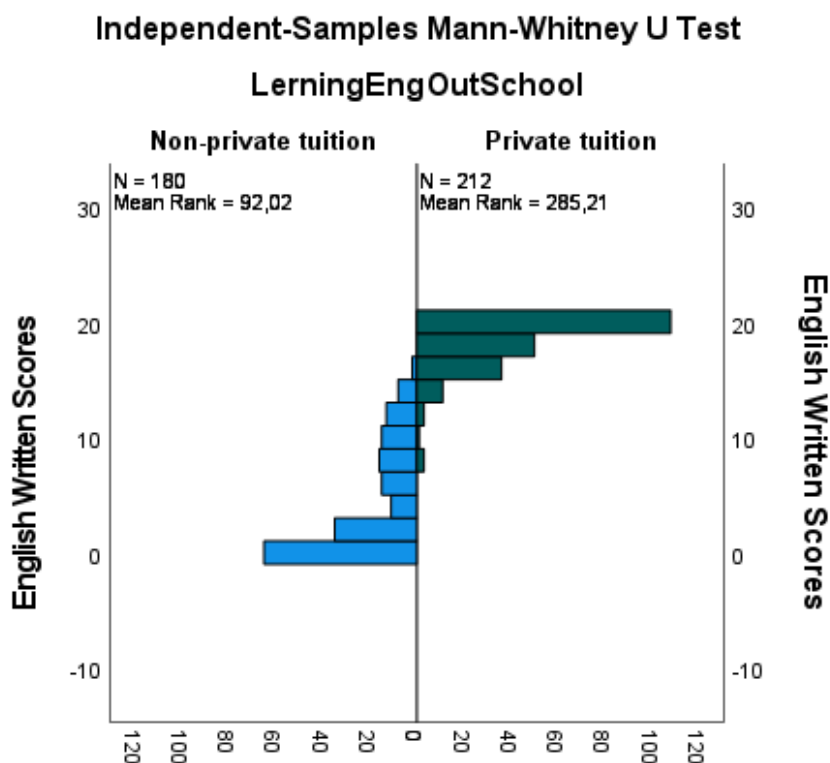
As observed in the boxplot, non-identical distributions were observed between private tuition and non-private tuition groups. The chart on the right, representing those who received private tuition, obtained better results. On the other hand, the chart on the left, those who did not receive private tuition, showed data distribution was located towards the low numbers.

Thus, it seems that private tuition plays a role in students' communicative appropriateness in English. We were also interested in exploring whether frequency of private tuition played a role. To that end, a descriptive analysis was conducted with a sub-sample of the total sample, and only those students who received private tuition were taken into account. Within the total sample ($n = 212$), three groups were made according to their frequency of attending private tuition: low enrolment, representing 24.6% ($n = 52$), and included those that reported receiving one day per week of private tuition, medium, and high enrolment, representing 40.5% ($n = 86$)

and 34.9% (*n* = 74), and who reported receiving 2 and 3 days of private tuition respectively. Figure 50 illustrates the percentages of the three groups.

Figure 50

Frequency of private tuition
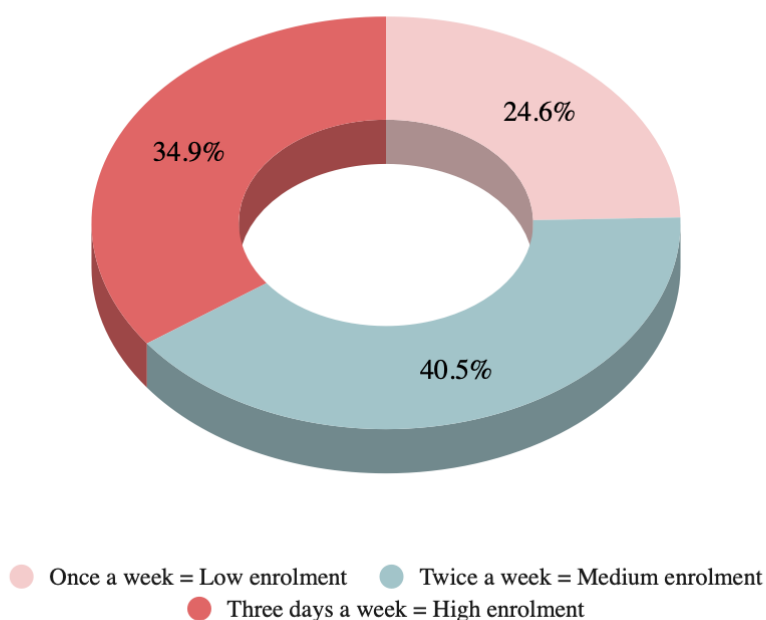
A Kruskal-Wallis test indicated that students' communicative appropriateness in English showed statistically significant differences considering frequency of private tuition (χ^2 (2) = 75.003, *p* = .000). However, the distribution of students' scores were not similar for all groups, as assessed by visual inspection of boxplot (see Figure 51).

Figure 51

Boxplot displaying total scores in communicative appropriateness according to frequency of private tuition
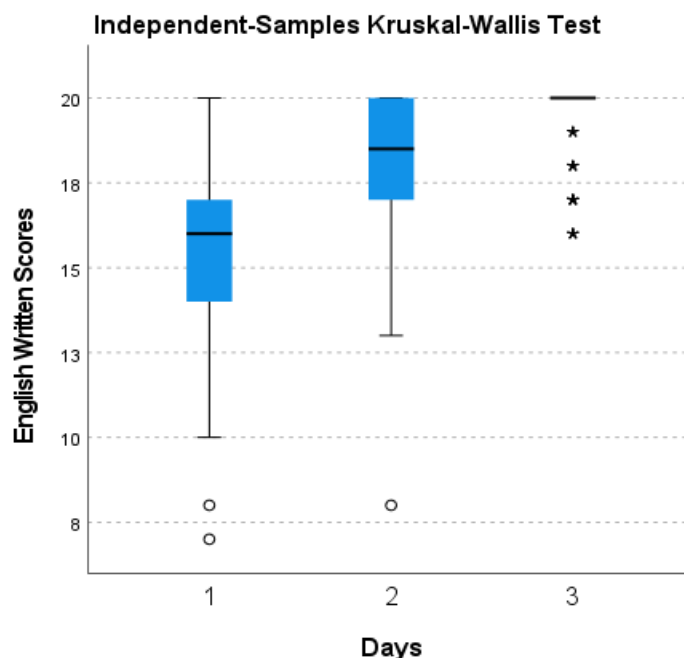
Note. 1 = one day; 2 = two days; 3 = three days

As illustrated in Figure 51, we can see that the box labelled as 3, referring to attending private tuition three days a week, set the highest scores. This implies that a positive association exists between written performance in English and frequency of attendance of private tuition. In relation to the shape of each boxplot, all frequencies present negative values for the skewness. In addition, regarding the average, those who attend three days show the highest median, followed by those who attend two days, and last, those who only receive one day of private tuition.

Pairwise comparisons were also performed using Dunn's (1964) procedure, pointing out that significance values were adjusted by the Bonferroni correction for multiple tests (see Table 18).

Table 18

Pairwise comparisons regarding the frequency of private tuition on scores in English

Pairwise comparison	Mean Rank	Test Statistic	Sig
1-2	19.39-18.08	-50.925	.001
1-3	19.39-15.62	-91.690	.000
2-3	18.08-15.62	-40.765	.001

Note.1= one day ; 2= two days; 3= three days

As shown in Table 18, there are statistically significant differences between the high enrolment group (mean rank = 19.39) and the medium enrolment group (mean rank = 18.08) (p = .001), as well as between the low enrolment group (mean rank = 15.62) and high enrolment group (mean rank = 19.39), and, finally, between the medium and high enrolment group (mean rank = 18.08 and 19.39, respectively) (p = .001). These findings suggest that being exposed to more frequent days of private tuition results in better scores in students' communicative appropriateness in writing.

Finally, the modality of private tuition was considered, that is to say, attending private tuition individually or in groups. To that end, a sub-sample of the total sample (n = 212) was divided into two groups: community group, representing 66% of the sample (n = 128) and individual group, representing 34% (n = 84) of the sample (see Figure 52).

Figure 52

Percentages of the two modalities of private tuition
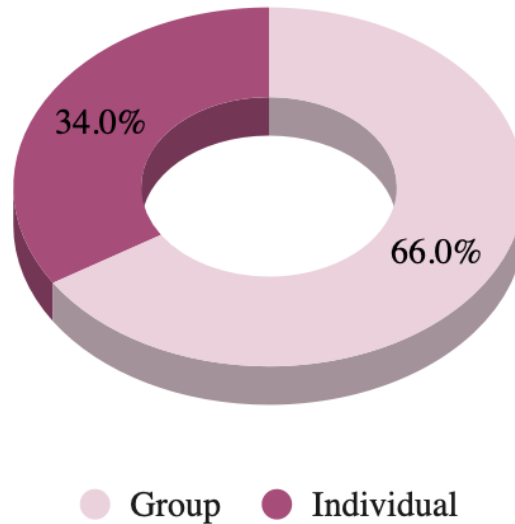
The Mann-Whitney U test suggested that there were no statistically significant differences between the two groups. Scores for the community group (mean rank = 108.04) were not significantly higher than those in the individual group (mean rank = 104.16), $U = 5179.500$, $z = -.471$, $p = .638$.

As observed in Figure 53, symmetrical distributions are observed between the community group and the individual group. The chart on the left, representing those who received community tuition, obtained slightly better results than those from the individual group, located on the right chart, but the visual inspection of the above boxplot shows a similar shape of the data distribution among both groups.

Figure 53

Graph displaying mean rank scores according to the modality of private tuition and English scores.
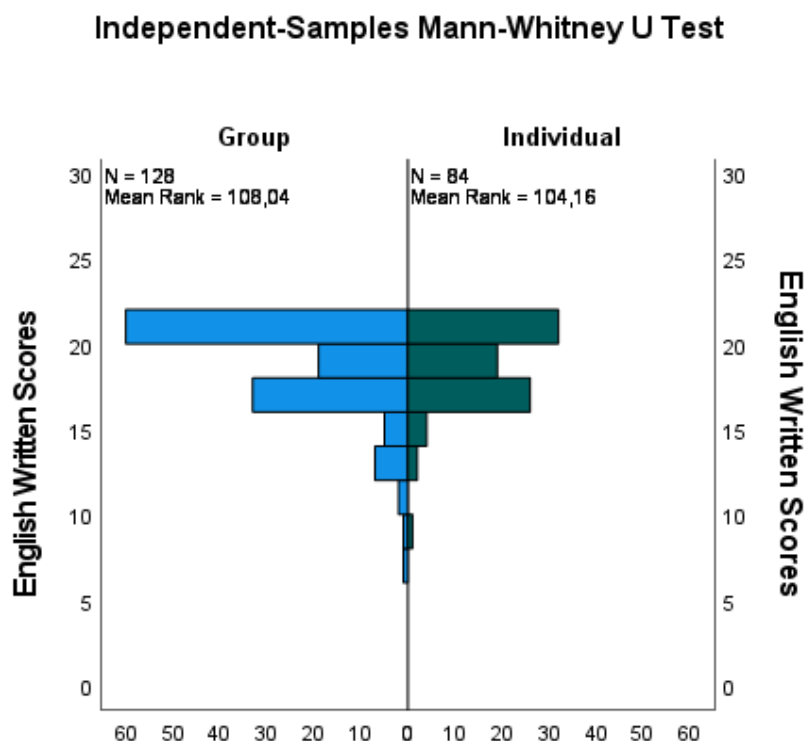
All in all, regarding private tuition, it seems that it has an impact on students' communicative appropriateness in writing, especially if a high or moderate frequency of attendance is applied. However, no difference is observed considering whether participants attended private tuition individually or in groups.

The final variable to consider is whether having a short period of time in the target language community had an impact on students' English writing. Participants were divided into two groups: short period of time in the target language community group, including the participants who reported having had the experience ($n = 200$), and representing 51% of the sample, and non-short period of time in the target language community group, participants who have never had the experience, representing 49% ($n = 192$) of the total sample. Figure 54 illustrates the descriptive analysis of the data.

Figure 54

Overall percentage of having short period of time experience in the target language

● Non-Short period of time experience   ● Short period of time experience
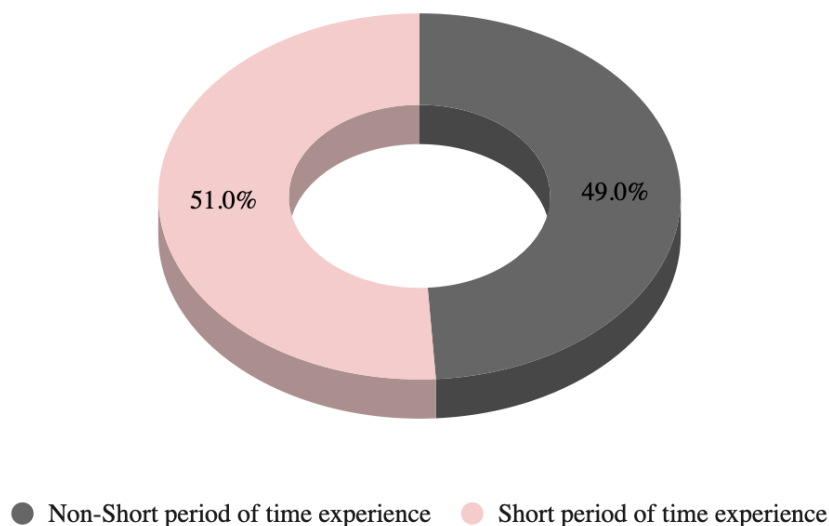
The results of the Mann-Whitney tests show that the distribution of scores between both groups was not similar. Scores for the short period of time in the target language community group (mean rank = 290.51) were significantly higher than those from the non-short period of time in the target language community group (mean rank = 98.57, U = 38002, z = 16.927, p = .000). These findings indicate that the variable short period of time in the target language community plays a role in students' communicative appropriateness in writing.

As observed in Figure 55, non-identical distributions are observed between both groups. It can be observed that higher written scores were obtained by those who have had the experience group (see chart on the left). However, in the chart on the right, those who are in the non-short period of time in the target language community group, performed lower scores in written English.

Figure 55

Graph displaying mean ranks scores according to having had the experience abroad or not

Furthermore, it is noteworthy to highlight that students, teachers and parents provided useful information during the semi-structured interviews. Students were asked whether they enjoyed attending private tuition and why, and whether they liked going to the target community group and why. Different responses were provided and the following themes emerged.

Enjoyment towards private tuition and short period of time in the target language community and understanding them as a social activities in School A and B

> S13: "I do like going to the academy because I go with my friends and I think it's easier to learn that way".

> S45: "I like to go because that way we review everything we have seen and we have a good time".

> S49: "I have spent two summers with a family and I like it very much, I hope to continue going for more summers because you learn a lot and meet new people".

S53: "The truth is that I've been abroad and I've had a great time every time I've been there".

Dislike and preference for other non-academic activities in School C

S98: "I don't like to go because I prefer to go to football, which I like more".

S170: "My parents force me to go but I don't like it, I see it as just another class".

S198: "I've never been and I wouldn't like to either because I prefer to do other activities that are not so much English".

S209: "I've been abroad, but I don't like it, I'd rather stay on the beach with my friends than learn English".

As illustrated in the examples above, participants reported that they liked attending private tuition and having a short period of time in the target language community as they see it as a social activity (this pattern was mainly observed from participants in Schools A and B) and participants, mainly from School C, claimed that they preferred other activities rather than going to the academy or going abroad.

Regarding parents' semi-structured interviews, they considered private tuition and a short period of time in the target language community had a positive effect, regardless of whether their children took part in them or not, or if parents could afford it (see examples below).

P3: "The two activities make them improve their English. My daughter goes abroad during the summer and it is an economic effort as well as the academy but I think she can learn more this way".

P4: "I would love him to do both but we can't, so I always encourage him to watch things online in English".

P5: "Both are important but my son only goes to the academy because I couldn't afford to send him away, but I would love the school to organise something cheaper".

P9: "Yes, my two children go away every summer and the truth is that what they learn in one month is more than what they can learn all year at school...".

In the same line, teachers reinforced the same ideas that emerged from parents' semi-structured interviews: importance of private tuition and short period of time in the target language community, and lack of opportunities for all students. In addition, they admitted that the school should organise activities to cover all students' needs.

> T4: "The truth is that going abroad is very important to be familiar with the language, I think it helps the children a lot, just like going to the academy, but not all parents can afford it".

> T5: "The school organises a summer trip to England and I think it is essential, but not all students can afford it".

> T7: "If they can go abroad it's the best, just like the academy, the combination of everything is very good for learning".

> T9: "The school organises a trip but maybe they should lower the price or make it free because not everyone can go. It's very noticeable who has gone and who hasn't".

Thus, we can claim that the patterns that emerged from our thematic analysis correlate with participation in private tuition, since participants from School A and B, who received private tuition more frequently, reported enjoyment and viewed private tuition as a social activity. In contrast, participants from School C, who reported mostly dislike towards this activity, received less hours of private tuition. As it can be observed in Figure 56, participants in School A and B received a similar percentage of private tuition (73% and 76%, respectively), but participants in school C only received 23%.

Figure 56

Private tuition attendance across schools
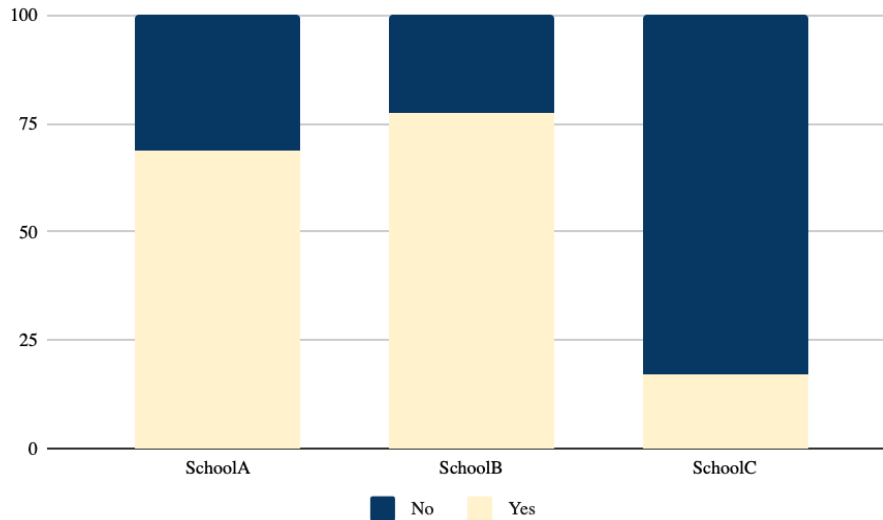
In addition, differences are also observed with regard to the frequency of attendance to private tuition (see Figure 57). As illustrated in Figure 57, low enrolment (once a week) is observed in School C in comparison with School B (28%) and School A (18%). On the other hand, medium group enrolment (private tuition, twice a week) is higher in School B with 47% followed by school C (42%) and school A (32%). Finally, with regards to high enrolment (private tuition three times a week), School A shows the highest percentage with 50% in comparison to School B (27%) and school C (12%).

Figure 57

Frequency of Private tuition attendance across schools
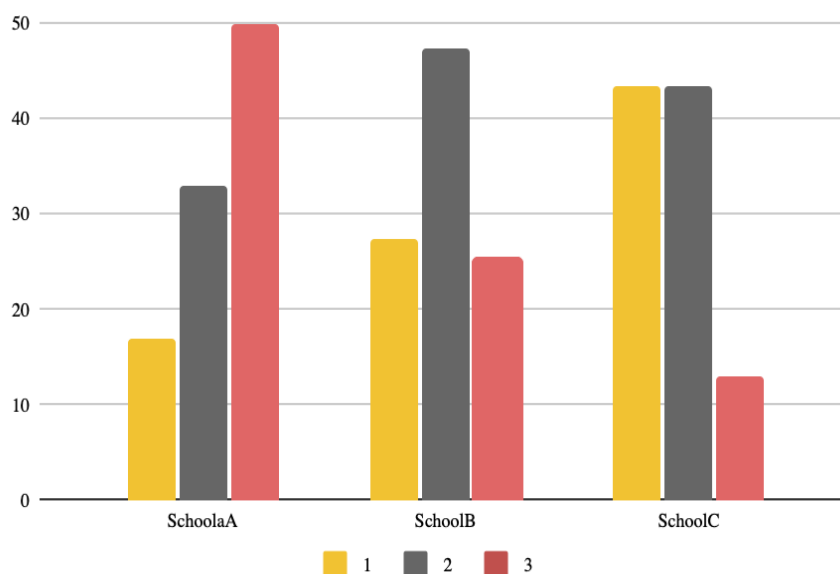
So far, we have reported results related to the impact of watching TV in English, private tuition and short period of time in the target language community on students' communicative appropriateness in writing. A hierarchical multiple regression was conducted to examine the extent to which scores in English writing can be attributed to the variables of private tuition, exposure to English through TV, and short period of time in the target language community. These variables were introduced in a hierarchical manner to assess their respective contributions.

Table 19 shows the coefficients of the standard multiple regression model for students' communicative appropriateness in English. Although the regression included the variables private tuition, watching TV in English and short period of time in the target language community, due to multicollinearity of the variables, the variable of short period of time in the target language community was excluded (0.118, Collinearity Statistics Tolerance and VIF of 8.492). The Model 1, including watching TV in English, led to a statistically significant value of R^2 of 0,886, $F(1,390) = 3045,307$, $p < 0.001$; adjusted $R^2 = 0,886$. Model 2, adding private tuition, also led to a positive increase in R^2 of 0,002, $F(1, 389) = 1546.783$, $p < 0.05$; adjusted $R^2 = 0.888$. In other words, Model 2 shows a better fit of the model since the goodness of fit of the model is 0.888.

In addition, the standardised coefficients, included in Table 19, enabled us to establish the relative weight of the variables (private tuition and exposure to English through watching TV) on the dependent variable, total scores in English (see column β in each model of Table 19). As it can be observed in Model 2, the variable private tuition shows a positive and weak relationship with the dependent variable (β = 0.115, p = 0.012). On the contrary, the variable of watching TV shows a positive and strong relationship with the dependent variable (β = 0.834, p = 0.001).

In other words, the variable watching TV in English, with higher standardised coefficients, seems to be the most influential predictor of students' communicative appropriateness, although the variable private tuition presents a relative weight on students' scores in communicative appropriateness.

Table 19

Hierarchical Multiple Regression predicting students' communicative appropriateness in English from private tuition and exposure to English through TV

Predictor	Communicative Appropriateness in English			
	Model 1		Model 2	
	B	β	B	β
(Constant)	-2.414		-1.806	
TV in English	5.193	0.942	4.602	**0.834****
Private tuition			1.810	**0.115***
R^2	0,886		**0.888**	
F	3045.307		1546.783	
ΔR^2	0,886		0.002	
ΔF^2	3045.307		6.365	

Note. *p < .05, **p < .001

Thus, Hypothesis 3, which claimed that English exposure beyond the school might play a role in students' communicative appropriateness in writing, is confirmed. The three variables analysed as out-of-school factors (private tuition, watching TV and short period of time in the target language community) play a role. In addition, one of these variables, watching TV, is the main predictor of students' communicative appropriateness in English writing.

7.2 Findings related to Hypothesis 4

This section addresses Hypothesis 4 of the study, which claimed that Catalan and Spanish exposure beyond the school played a role in students' communicative appropriateness in writing. This hypothesis was addressed by examining two variables: Exposure to Catalan and Spanish through TV, and language at home. Starting with watching TV, Figure 58 shows the descriptive data about the percentage of exposure to Spanish and Catalan through watching TV.

Figure 58

Participants' exposure to Catalan and Spanish through TV
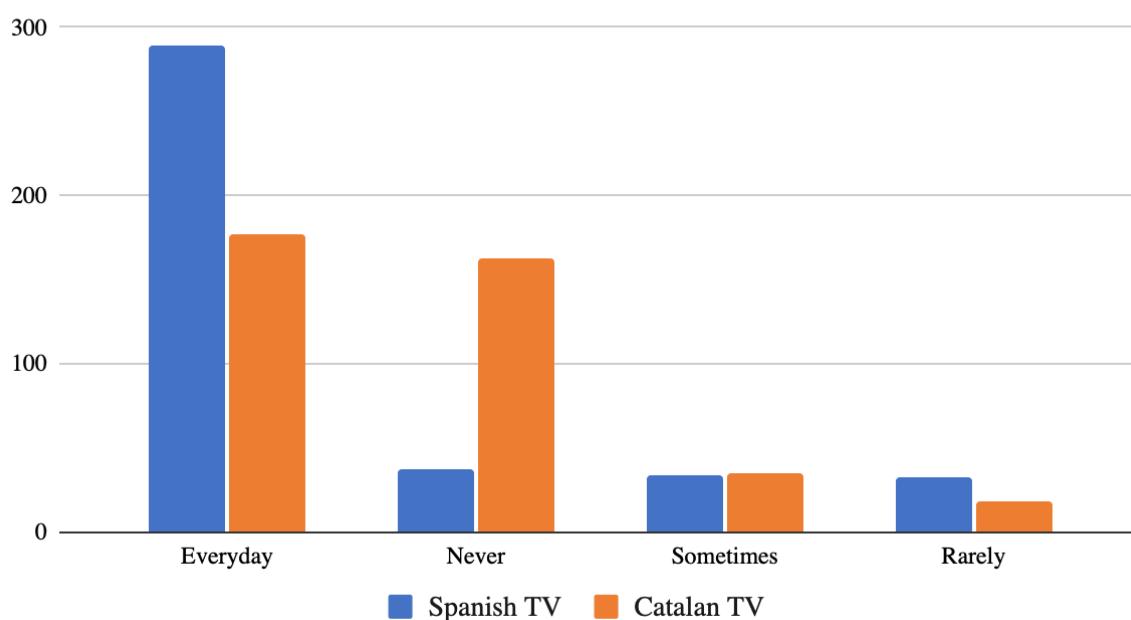
As it can be observed in Figure 58, on the one hand, the majority of participants reported being exposed to TV in Spanish every day ($n = 289$, 73.7%), and the minority of participants are exposed to TV in Catalan every day ($n = 177$, 45.2%). On the other hand, the opposite occurs with the frequency of "never", where the percentage is higher in Catalan ($n = 162$, 41.3%) than in Spanish ($n = 37$, 9.4%). In order to explore whether frequency of watching TV in Spanish and Catalan had an impact on students' communicative appropriateness in both languages, we relied on the non-parametric statistical Kruskal-Wallis. Scores in Spanish and Catalan were significantly different, considering frequency of exposure to TV in Spanish ($\chi^2(3) = 93.903$, *p*

= .000) and exposure to TV in Catalan (χ^2 (3) = 306,716, p = .000). Nonetheless, distribution of writing scores in Spanish and Catalan were not similar for all groups, as assessed by visual inspection of boxplot (see Figure 59 for Spanish, and 60 for Catalan).

Figure 59 and 60

Boxplots displaying total scores in communicative appropriateness in Spanish and Catalan according to the frequency of watching TV
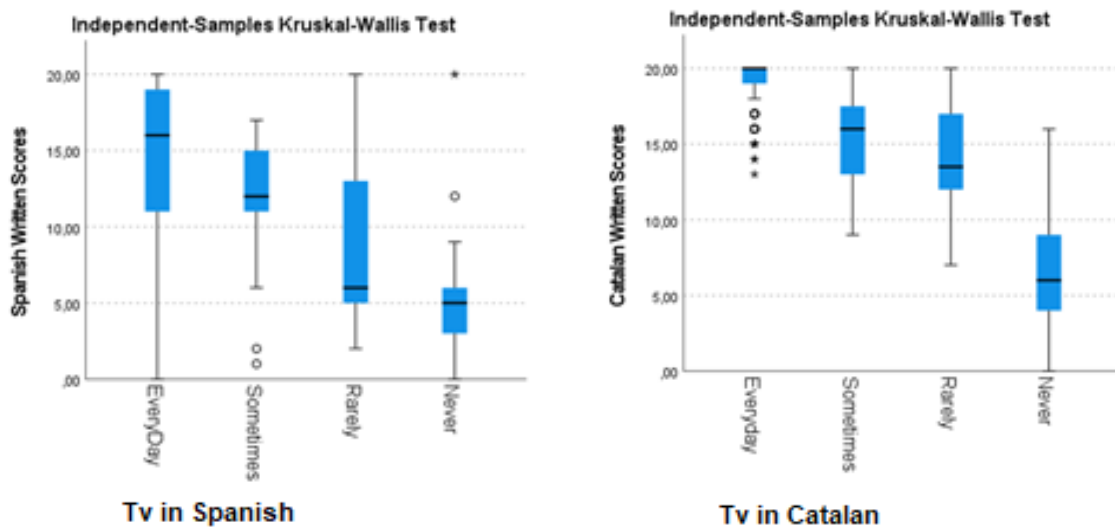
As illustrated in Figures 59 and 60, we can see that the boxes labelled as everyday, are the highest in comparison to the other frequencies, implying that a positive association may exist between written performance and everyday use of watching TV in Spanish and Catalan. In addition, pairwise comparisons were performed using Dunn's (1964) procedure, and significance values have been adjusted by the Bonferroni correction for multiple tests for the Spanish and Catalan languages (see Table 20 and 21, respectively).

Table 20

Pairwise comparisons among frequency use in watching TV in Spanish

Pairwise comparison	Mean Rank	Test Statistic	Sig
Never-Rarely	4.86-7.94	44.943	.099
Never-Sometimes	4.86-11.88	101.273	.001
Never-Everyday	4.86-14.36	162.924	.000
Rarely-Sometimes	7.94-11.88	56.331	.043
Rarely-Everyday	7.94-14.36	117.981	.001
Sometimes- Everyday	11.88-14.36	61.651	.003

Note. never= non-exposure frequency; rarely = low frequency; sometimes = moderate frequency; everyday = high frequency

Table 21

Pairwise comparisons among frequency use in watching TV in Catalan

Pairwise comparisons	Mean Rank	Test Statistic	Sig
Never- Rarely	6.46-13.95	103.194	.001
Never- Sometimes	6.46-15.19	119.882	.001
Never- Everyday	6.46-19.10	213.046	.000
Rarely- Sometimes	13.95-15.19	16.687	.607
Rarely- Everyday	13.95-19.10	109.851	.001
Sometimes- Everyday	15.19-19.10	93.164	.001

Note. never = non-exposure frequency; rarely = low frequency; sometimes = moderate frequency; everyday = high frequency

Regarding the Spanish language (see Table 20), the post hoc analysis reveals statistically significant differences in communicative appropriateness scores between the non-exposure frequency group (mean rank = 4.86) and the moderate frequency group (mean rank = 11.88) (p = .0001). There are significant differences between the non-exposure frequency group (mean rank = 4.86) and the high frequency group (mean rank = 14.36) (p = .000). Significant differences are also observed between the low frequency group (mean rank = 7.94) and the

high frequency group (mean rank =14.36) (p = .001). Finally, there were significant differences observed between the moderate frequency group (mean rank =11.88) and the high frequency group (mean rank = 14.36) (p = .003).

Concerning the Catalan language, the post hoc analysis reveals statistically significant differences in communicative appropriateness scores between the non-exposure frequency group (mean rank = 6.46) and the low frequency group (mean rank = 13.95) (p = .0001). Likewise, there are significant differences between the non-exposure frequency group (mean rank = 6.46) and the moderate frequency group (mean rank = 15.086) (p = .001). Also, differences between the non-exposure frequency group (mean rank = 6.46) and the high frequency group (mean rank = 19.10) (p = .001), and between the moderate frequency group (mean rank = 15.086) and the high frequency group (mean rank = 19.10) (p = .001) are observed. Nevertheless, no statistically significant differences are observed between the low frequency group (mean rank = 13.95) and the moderate frequency group (mean rank = 15.086) (p = .607). These findings indicate that being exposed to Spanish and Catalan through watching TV, especially if it is a high frequency or moderate exposure, is beneficial for students' communicative appropriateness in both languages. These findings are observed regardless of the schools' linguistic programme. To further understand the potential benefits of being exposed to Spanish and Catalan through watching TV, semi-structured interviews were conducted with students, teachers, and parents. Although differences in the percentage of exposure to Spanish and Catalan through watching TV are observed across schools (see Figure 58), Spanish is viewed as the dominant language across schools and differences are observed in relation to Catalan. A thematic analysis of the semi-structured interviews, where participants were asked "Do you enjoy watching TV in Catalan?" revealed the following patterns:

Like and Enjoyment in School B (see examples below)

> S24: "At home, we watch the news in Catalan. Our parents prefer that language and then we can also listen to Catalan language".

> S77: "There are few possibilities to watch Catalan on TV. Only a few channels. We watch them at home".

> S94: "To be honest, all the social networks are either in Spanish or Catalan; there is not much of Catalan. We watch Catalan on the TV at home".

Dislike and rejection in School A and C (see examples below)

> S134: "We only watch Spanish TV at home, as it is the only language on the TV. Besides, I don't like listening to TV in Catalan, it's not useful at all".

> S167: "Are there channels in Catalan? No, I don't like it and I wouldn't like to watch TV in Catalan either".

> S184: "I don't watch Catalan on TV or videos or social networks because I don't like it. I don't like Valencian".

The above-mentioned patterns are also observed in the thematic analysis carried out with teachers' and parents' semi-structured interviews, where they responded to the question "How important do you think it is for your students to watch TV in Spanish and Catalan?" "Do you encourage it?".

On the one hand, parents and teachers from Schools A and C considered that exposure to Catalan was not important. However, parents and teachers in School B mentioned that, although English was important, they acknowledged the need to protect the minority language (see example below):

Parents' and teachers' opinions in School B:

> P1: "As they have to watch videos in English, I think that my son has to watch videos in Catalan. We cannot forget the language".

> T2: "The truth is that we give a lot of importance to the English Language and we forget about the Catalan. It's true that teachers would have to recall more".

> P5: "Clearly it is important that they watch videos or TV in Catalan but unfortunately, almost everything is in Spanish and that reduces many possibilities to learn other languages".

In contrast, teachers and parents in School A and C reported that it was not important to be exposed to Catalan TV, and they did not encourage it.

> P7: "Well, I think it's more important that they watch TV in English, because in Catalan it's not that important".

T6: "I don't think it's important for them to watch TV in Catalan, the truth is that we don't encourage them to do so at school. We think it's better for them to be exposed to other languages like English".

P9: "I think it is more impotent that they watch videos in English than in Catalan, for example. And they do Catalan at school".

Summarising our quantitative analysis, it was found that participants' frequent use of watching TV in Spanish and Catalan has an impact on their communicative appropriateness in both languages. In addition, our qualitative analysis revealed that the opinion of the educational community (students, teachers and parents) may be influenced by the difference between Spanish and Catalan in society, where Spanish is a dominant language and Catalan a minority language.

Turning our attention to the other variable, language at home, Figure 61 presents a descriptive analysis in terms of participants' language at home. The total sample ($n = 392$) was divided into four groups: those who reported using Catalan at home, those who claimed to use Spanish at home, those who used both languages, and the last group, those who reported using other languages.

Figure 61

Participants language at home across school

208
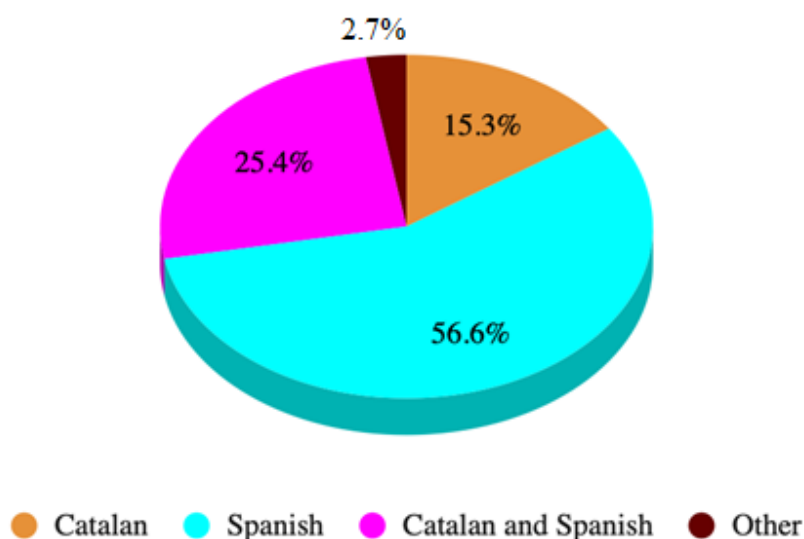
As shown in Figure 61, more than half of the participants had Spanish as L1. More specifically, 56.6% of the participants ($n = 212$) reported having Spanish as L1, 25.4% ($n = 105$) claimed to have Spanish and Catalan, while only 15.3% ($n = 67$) reported having Catalan as L1. Finally, 2.7% ($n = 8$) of the participants mentioned having another language as L1.

With the aim of exploring whether students' communicative appropriateness in Spanish and Catalan were influenced by students' language at home, we relied on the non-parametric Kruskal-Wallis test. Scores in Spanish and Catalan were significantly different, considering language at home (χ^2 (3) = 164.105, p = .000 and χ^2 (3) = 231.336 p =.000, respectively). However, the distribution of writing scores in Spanish (see Figure 62) and Catalan (see Figure 63) were not similar for all groups, as assessed by visual inspection of the boxplots.

Figure 62 and 63

Boxplot displaying total scores in communicative appropriateness in Spanish and Catalan according to language at home
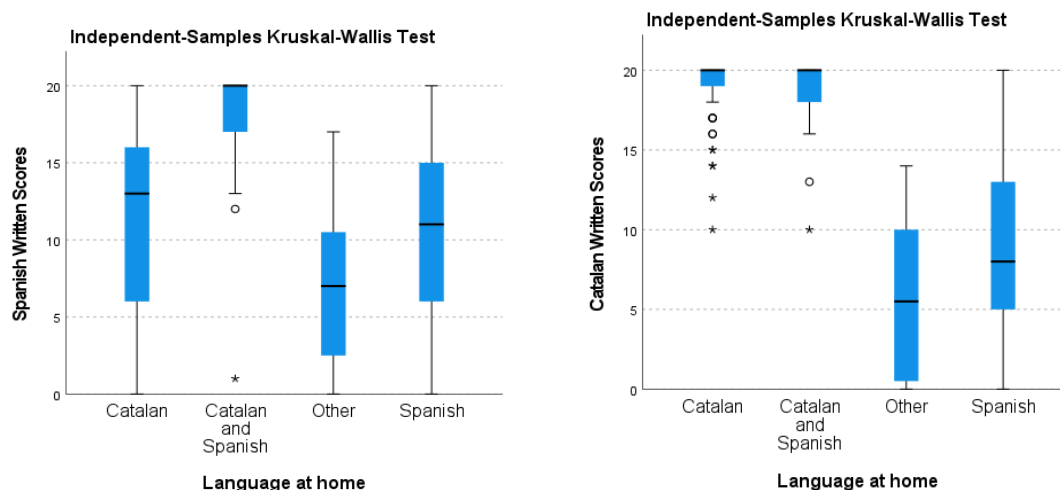
As depicted in Figures 62 (Spanish) and 63 (Catalan), in relation to the shape, those who used Catalan and both languages (Catalan and Spanish) at home present negative values for the skewness, which means that higher scores are observed. On the other hand, participants who have Spanish or other languages as L1 show positive values for the skewness, indicating that scores are low. This occurs in both cases, in Spanish and Catalan, suggesting that those who are multilingual and use a minority language, in this case Catalan, perform better in communicative appropriateness in Spanish and Catalan.

As far as the spread of the data is concerned, those who have both languages as L1 show more consistency than those whose L1 is another language. On the contrary, those who have Spanish as L1 show more variability in scores. In other words, it seems that those who have both languages as L1 performed better in Catalan and scores are the most homogenous. A similar pattern is observed in terms of the average, those participants who use both languages, or Catalan as L1, showed the highest median followed by those who have Catalan as L1, with the lowest median observed in those who have Spanish as L1. Thus, these findings suggest that having more languages or using minority languages at home triggers better scores in communicative appropriateness in writing.

In addition, pairwise comparisons were performed using Dunn's (1964) procedure, and significance values were adjusted by the Bonferroni correction for multiple tests for total scores in Spanish (see Table 22) and in Catalan (see Table 23).

Table 22

Pairwise comparisons among language use at home and total scores in Spanish

Pairwise comparisons	Mean Rank	Test Statistic	Sig
Other-Spanish	7.13-10.50	-52.323	.198
Other-Catalan and Spanish	7.13-18.60	64.343	.127
Other-Catalan	7.13-11.19	217.300	.001
Spanish-Catalan and Spanish	10.50-18.60	12.020	.447
Spanish-Catalan	10.50-11.19	164.977	.000
Catalan and Spanish-Catalan	11.19-18.60	-152.957	.000

Table 23

Pairwise comparisons among language use at home and total scores in Catalan

Pairwise comparisons	Mean Rank	Test Statistic	Sig
Other-Spanish	5.75-9.02	-44.350	.271
Other-Catalan and Spanish	5.75-18.89	214.167	.001
Other-Catalan	5.75-18.88	217.712	.001
Spanish-Catalan and Spanish	9.02-18.89	169.817	.000
Spanish-Catalan	9.02-18.88	173.362	.000
Catalan and Spanish-Catalan	18.88-18.98	3.544	.840

Considering the Spanish language, the analysis reveals statistically significant differences in communicative appropriateness scores between those who only speak Spanish at home (mean rank = 10.50) and those who speak both languages at home (mean rank = 18.60) ($p = .000$). The same occurs between those who speak only Catalan (mean rank = 11.19) and those who speak both languages (mean rank = 18.60) ($p = .000$). Regarding the Catalan language, as seen in Table 23, our results reveal significantly different differences in communicative appropriateness scores between those who have other language (mean rank = 5.75) and both languages (Spanish and Catalan) (mean rank = 18.89) ($p = .001$), and between "other" (mean rank = 5.75) and only Catalan (mean rank = 18.88) ($p = .001$). Significant differences between those who have Spanish (mean rank = 9.02) and those who have both languages (Spanish and Catalan) (mean rank = 18.89) ($p = .000$) are also observed. Besides, there are significant differences between those who have Spanish (mean rank = 9.02) and Catalan (mean rank = 18.88) ($p = .000$). However, no significant differences are found between those who have Catalan (mean rank = 18.88) and those who have both (Spanish and Catalan) (mean rank = 18.89) ($p = .840$).

Hence, our findings show that language at home seems to have an impact on students' communicative appropriateness in Spanish and Catalan. In other words, those who had more languages, one of them the minority language in their repertoire, outperformed their peers who only spoke Spanish or other languages in their repertoire. It is worth mentioning that, even though the percentages of languages at home differ across the linguistic programmes targeted

in the present study, the same pattern reported above is observed, regardless of the school's linguistic programme.

Concerning the Spanish language, we conducted a hierarchical multiple regression analysis to determine if the variables exposure to watching TV in Spanish and language spoken at home were predictors of the results of communicative appropriateness in Spanish. As shown in Table 24, model 1, including language at home, led to a statistically significant value of R^2 of 0.350 $F(3, 388) = 69.637$, $p < 0.05$, adjusted $R^2 = 0.345$. Model 2, adding watching TV in Spanish also led to a positive increase in R^2 of 0.515, $F(1, 387) = 131.691$, $p < 0.05$, adjusted $R^2 = 0.510$ (see Table 24 for details on each regression model). However, even though both models are statistically significant, the R^2 shows the goodness of fit for Model 2, explaining 51.5% of the variance.

Furthermore, the standardised coefficients, included in Table 24, enabled us to establish the relative weight of the variables (language at home and watching TV in Spanish) on the dependent variable, total scores in Spanish (see column β in each model of Table 24). As it can be observed, in Model 2, the variable Catalan as language at home shows a positive and weak relationship with the dependent variable (β = 0.211, $p = 0.034$). In addition, the Spanish language at home does not show a statistical relationship with the dependent variable (β = 0.003, $p = 0.982$). On the contrary, those who speak both languages at home (Catalan and Spanish) show a positive and a stronger relationship with the dependent variable than those who only spoke Spanish or Catalan at home (β = 0.525, $p = 0.001$). Finally, the variable watching TV shows a positive and strong relationship with the dependent variable (β = 0.457, $p = 0.001$).

In other words, speaking both languages at home seemed to be the most influential predictor of students' communicative appropriateness in Spanish followed by exposure to watching TV. In fact, the variable Catalan and Spanish spoken at home contributed to a significant effect of 7.207 units, and the variable TV in Spanish in model 2 explains the variance of scores of 2,808 units (scores vary according to the frequency of exposure).

Table 24

Hierarchical Multiple Regression predicting students' communicative appropriateness in Spanish from language at home and exposure to TV

| Predictors | Communicative Appropriateness in Spanish | | | |
| | Model 1 | | Model 2 | |
	B	β	B	β
(Constant)	7.125		.283	
L1 Catalan	4.069	0.252	3.404	**0.211***
L1 Catalan & Spanish	11.475	0.835	7.207	**0.525****
L1 Spanish	3.380	0.277	.036	**0.003**
TV in Spanish			2.808	**0.457****
R2	0.350		**0.515**	
F	69.637		102.743	
ΔR2	0.350		0.165	
ΔF	69.637		131.691	

Note: *p < 0.05, **p < 0.001

Regarding the Catalan language, a hierarchical multiple regression analysis was also run to determine if language at home and exposure to watching TV in Catalan might predict scores of communicative appropriateness in Catalan.

As shown in Table 25, model 1, including language at home, led to a statistically significant value of R^2 of 0.574, $F(3, 388) = 174.287$, p < 0.05, adjusted $R^2 = 0.571$. Model 2, adding watching TV in Catalan also led to a positive increase in R^2 of 0.793, $F(1, 387) = 407,567$ $p < 0.05$, adjusted $R^2 = 0.790$. However, even though both models are statistically significant, the R^2 shows the goodness of fit for Model 2, explaining 79% of the variance in this association.

Furthermore, to understand the relationship between the relative weight of the variables (language at home and watching TV in Catalan) on the dependent variable, total scores in Catalan, we rely on the standardised coefficients (see column β in each model of Table 25). In Model 2, the variable Catalan as language at home shows a positive and weak relationship with the dependent variable (β = 0.267, $p = 0.001$), followed by the variable Spanish as language at home, showing also a positive and slightly weaker relationship with the dependent variable (β = 0.238, $p = 0.004$). On the contrary, speaking both languages at home (Catalan and Spanish) show a positive and a stronger relationship with the dependent variable (β = 0.323, $p = 0.001$). Finally, the variable watching TV also shows a positive and stronger relationship with the

dependent variable ($\beta = 0.780$, $p = 0.001$. In fact, the variable watching TV in Catalan adds a significant effect of 20.188 units (scores vary according to the frequency of exposure).

In other words, even though the coefficients for predictors variables (language at home and watching TV in Catalan) were all statistically significant, with p-values less than 0.05, the variable watching TV seems to be the most influential predictor of students' communicative appropriateness in Catalan, followed by speaking both languages at home, as this variable shows the higher standardised coefficients.

Table 25

Hierarchical Multiple Regression Predicting students' communicative appropriateness in Catalan *from, language at home and exposure to TV*

	Communicative Appropriateness in Catalan			
	Model 1		Model 2	
Predictors	B	β	B	β
(Constant)	5.750		-.071	
L1 Catalan	13.131	0.753	3.883	**0.267****
L1 Catalan & Spanish	13.136	0.886	4.062	**0.323****
L1 Spanish	3.269	0.248	2.898	**0.238***
TV in Catalan			20.188	**0.780****
R2	0.574		**0.793**	
F	174.287		369.577	
ΔR2	0.574		0.218	
ΔF	174.287		407.567	

Note: *p < 0.05, p** <0.001

Due to the fact that language at home seemed to be one of the predictors of students' total scores in Spanish and Catalan, we were interested to examine whether language at home would influence students' communicative appropriateness in English as a third language. Table 26 illustrates differences in language at home across schools.

Table 26

Differences in language at home across schools

Language at home	A	%	B	%	C	%
Catalan	(n = 18)	13.14	(n = 40)	32.5	(n = 9)	6.82
Spanish	(n = 93)	67.9	(n = 23)	18.70	(n = 96)	72.73
Catalan & Spanish	(n = 24)	17.52	(n = 57)	46.34	(n = 24)	18.18
Other	(n = 2)	1.46	(n = 24)	18.18	(n = 3)	2.27
Total	(n =137)		(n = 123)		(n=132)	

As it can be observed in Table 26, participants in school B show the highest percentage of those who use Catalan (32.5% n = 40) or both languages, Catalan and Spanish, at home (46.34%, n = 57), and the lowest percentage in Spanish at home (18.70%, n = 23). In contrast, School A and C show the highest percentages in Spanish (67.9% n = 93, 72.73% n = 96 respectively) and the lowest percentage in Catalan or both (Catalan and Spanish).

To determine whether students' communicative appropriateness in English was influenced by students' language at home we rely on the non-parametric statistical Kruskal-Wallis test. Scores in English were significantly different, considering language at home (χ^2 (3) = 97.135 p=.000). Nevertheless, the distribution of writing scores in English were not similar for all groups, as assessed by visual inspection of boxplot (see Figure 64).

Figure 64

Boxplot displaying total scores in Communicative Appropriateness in English according to language at home
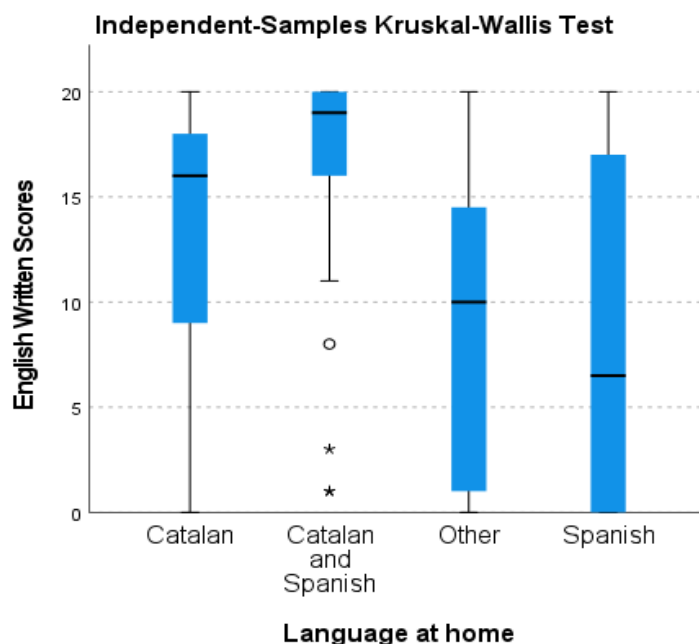
As depicted in Figure 64, we can see that all the boxes, except the boxes labelled as "other" and "Spanish", are above the median. In relation to the shape, those who have Catalan and both (Catalan and Spanish) as L1 present negative values for the skewness, indicating that high scores are observed. On the other hand, participants who have Spanish or other as L1 show positive values for the skewness, indicating that scores are low. This suggests that those who are exposed to a minority language, in this case, Catalan, seemed to perform better in communicative appropriateness in English.

As far as the spread of the data is concerned, it seems that those who have both languages as L1 performed better in English and achieved more homogenous scores. A similar pattern is observed in terms of the average, those learners who have both languages as L1 show the highest median, followed by those who have Catalan, while the lowest median is observed in those who have Spanish as L1. Thus, it seems that having a minority language may be useful for learning English as an additional language.

In order to determine whether these differences were statistically significant pairwise comparisons were performed using Dunn's (1964) procedure, and significance values were adjusted by the Bonferroni correction for multiple tests (see Table 27).

Table 27

Pairwise comparisons among language use at home and total scores in English

Pairwise comparisons	Mean Rank	Test Statistic	Sig
Spanish-Other	8.15-8.88	5.537	.891
Spanish-Catalan	8.15-13.28	64.855	.001
Spanish-Catalan and Spanish	8.15-17.41	129.831	.000
Other-Catalan	8.88-13.28	59.318	.158
Other-Catalan and Spanish	8.88-17.41	124.295	.003
Catalan-Catalan and Spanish	13.28-7.41	-64.977	.001

This post hoc analysis reveals statistically significant differences in communicative appropriateness scores between those who have Spanish (mean rank = 8.15) and both languages (mean rank = 17.41) (p = .000), and between Spanish (mean rank = 8.15) and Catalan (mean rank = 13.28) (p = .001). Finally, there is a significant difference between those who have Catalan (mean rank = 13.28) and those who have both languages (mean rank = 17.41) (p = .001) (see Table 27 for full detail). These findings suggest that being bilingual (Catalan and Spanish) is beneficial for students' communicative appropriateness in English. These results are observed across schools regardless of their linguistic model.

All in all, our results point out that the condition of having both languages (Spanish and Catalan) as L1 provides our participants with enhanced communicative appropriateness in English, probably due to the interactions that take place in their multilingual minds. In other words, our findings suggest that the pragmatic linguistic systems of our subjects interact among them, triggering the transfer phenomena, which is recognised as a significant feature in the multilingual systems. Our findings confirm that the linguistic and cognitive abilities that multilingual learners possess, in comparison to those who only use one language, contribute to the process of multiple language acquisition. For future studies, these results may be completed to shed light on the peculiarities and inherent complexity of multilingual writers.

7.3 Discussion of results related to Hypothesis 3

Hypothesis 3 is confirmed, providing further support on previous research indicating the benefits of exposure to English through TV (Muñoz *et al.,* 2021; Muñoz & Cadierno, 2021), private tuition (Nightingale, 2016) and short period of time in the target language community (Llanes *et al.,* 2015; Strobl & Baten, 2021; Vallejos & Sanz, 2021). Regarding watching TV in English, our results are in line with previous studies that investigated its impact on language learning (Pujadas & Muñoz, 2020; Muñoz *et al.,* 2021; Muñoz & Cadierno, 2021; Pattemore & Muñoz, 2020; Muñoz *et al.,* 2022; Muñoz, 2022). However, the difference is that previous investigations examined the impact of watching TV in English on students' vocabulary gains (Pujadas & Muñoz, 2020; Muñoz *et al.,* 2022; De Wilde *et al.,* 2021; Muñoz, 2022), while in the present study we focus on the impact of English TV on students' communicative appropriateness in writing. From this perspective, and in line with Muñoz *et al.* (2021), in the present study frequency of exposure to TV in English also plays a role in students' writing. Moreover, our findings are in line with the results reported by Muñoz *et al.* (2018). Similar to the present study, Muñoz *et al.* (2018) examined the impact of formal instruction and frequency of exposure to watching TV in English. These results revealed that watching TV in English had a greater impact on learning grammar than formal instruction. In our study, watching TV in English was the main predictor of students' communicative appropriateness in writing.

Moving to private tuition and short period of time in the target language community, our findings are in line with previous investigations. Similar to Nightingale (2016), private tuition seems to play a role in students' communicative appropriateness in English writing. Additionally, our study indicates that frequency of private tuition makes a difference, independently of receiving private tuition individually or in groups. This idea of frequency of exposure as an issue to consider in language learning was suggested by previous investigations (Muñoz *et al.,* 2018), and the present study provides further evidence of it.

On the other hand, our findings suggest that a short period of time in the target language is a factor to consider in language learning since students who had the experience obtained better scores in communicative appropriateness in writing than those who did not have the experience. The variable of short period of time in the target language community has been widely investigated, but little attention has been given to the connection between short period of time in the target language community and writing (Evans & Fisher, 2005; Llanes & Muñoz, 2013; Llanes *et al.,* 2015; Strobl & Baten, 2021; Vallejos & Sanz, 2021). In this sense, our findings

are in line with those reported by Evans and Fisher (2005), Llanes and Muñoz (2013) and Llanes *et al.* (2015). While Evans and Fisher (2005) looked at students' length of compositions, Llanes and Muñoz (2013) and Llanes *et al.* (2015) examined written fluency, lexical and syntactic complexity, and we analysed students' communicative appropriateness in writing, an issue that, as far as we know, has not been examined yet.

In addition, our study also corroborates findings reported by Strobl and Baten (2021), who found a positive correlation between writing gains during a short period of time in the target language community, language contact, and social networks. Strobl and Baten (2021) examined university students and the focus of the study was oral proficiency and vocabulary, while our study explores communicative appropriateness at primary school level. In line with Strobl and Baten (2021), the present study shows that exposure to watching TV and language contact outside the school played a role in English writing.

Due to the scarcity of research on short period of time in the target language with the population of primary learners, the present study contributes to shed some light on study abroad and writing in this population. Additionally, in line with Vallejos and Sanz (2021), calling for further research on study abroad and writing, we also call for further research considering students' types of study abroad. The present study does not distinguish length of time in the target language community or whether formal education is received during the short period of time in the target language community.

Thus, our results are in line with previous investigations that point out the importance of language exposure beyond the school (Llanes & Muñoz, 2013; Muñoz, 2014). However, in the case of CLIL contexts, apart from intensity of CLIL programmes, exposure to English through TV is the predictor of students' communicative appropriateness in English writing. Additionally, our study also suggests that being bilingual (Catalan and Spanish) has a positive impact on L3 (English) communicative appropriateness in writing. These findings add new insights to previous investigations (Muñoz *et al.,* 2018; De Wilde *et al.,* 2021; Muñoz & Cadierno, 2021), that have ignored students' language repertoire or have not examined the predictors of language learning in the context of primary education: Two issues that the present study has considered.

To conclude this section, our findings relating to Hypothesis 3 suggest that the interaction of all variables analysed in the present study (watching TV in English, private tuition, and short

period of time in the target language community) play a role in students' communicative appropriateness in English. In addition, our findings also suggest that those subjects who received private tuition outside school are also those who were exposed to TV in English and those who have had the experience of staying abroad, suggesting that scores in English writing are the result of different out-of-school inputs. Additionally, it is worth pointing out that we are aware that learning English is a nonlinear process, emerging from the interaction of multiple variables, some of them individual and others contextual. Some of the contextual variables have been considered in the present investigation, which was carried out in a sociolinguistic and educational setting, where learning English coexists with the learning of two official languages, Spanish and Catalan. Individual differences, on the other hand, have not been examined, but they may explain the written scores of some outliers.

7.4 Discussion of results related to Hypothesis 4

Hypothesis 4 stated that Spanish and Catalan exposure beyond the school would play a role in students' communicative appropriateness in writing. Two variables were analysed to measure out-of-school exposure: watching TV and language at home. Regarding the variable watching TV, the amount of exposure to TV in Spanish and Catalan had an impact on students' communicative appropriateness in both languages. These findings are in line with previous investigations conducted on the impact of exposure to TV on language learning (Pujadas & Muñoz, 2020; Pattemore & Muñoz, 2020; De Wilde *et al.,* 2021).

With regards to language at home, our results showed that language at home influences students' communicative appropriateness in Spanish and Catalan. Our findings revealed that Catalan-speaking learners obtained higher scores in communicative appropriateness than those who only spoke Spanish. Additionally, those who spoke both languages at home outperformed those who only spoke Catalan, and lower scores were obtained by those who only spoke Spanish at home. Our findings are in agreement with the results obtained by Sagasta (2003) and Arocena (2017). Both studies were conducted in the Basque Country, where they compared the writing skills in Basque and Spanish, accounting for the variable language at home. Similar to our results, they also reported that those who had both languages at home (Spanish and Basque) outperformed their monolingual peers, in Basque and Spanish writing. Thus, our study substantiates the theory that bilingualism plays a role in learning of English as an additional language (Safont, 2015; Portolés & Safont, 2020; Portolés, 2020). In the context of our study, using language at home, regardless of intensity of Catalan exposure at school, does not limit

proficiency in the dominant language (Spanish). On the contrary, it seems that both languages can be learned synchronically.

In addition, our study provides evidence on the role of bilingualism on L3 writing considering another population, mainly primary students. In contrast to the studies conducted in the Basque country, at the level of secondary education (Cenoz & Valencia, 1994; Sagasta, 2003; Sanz 2008; Arocena, 2017), the present study took into account primary learners in CLIL multilingual settings. Additionally, so far, previous L3 writing investigations have ignored pragmatics, an issue that we have addressed by examining students' communicative appropriateness in writing. As far as we know, Martín-Laguna and Alcón-Soler (2018) and Martín-Laguna (2022) are the only studies that have explored pragmatics and writing, viewing students' language repertoire. However, the population in Martín-Laguna and Alcón-Soler (2018) and Martín-Laguna (2022) are secondary school learners and they focused on discourse markers. In spite of the different sample, our results are in line with their reported findings, since in Martín-Laguna and Alcón-Soler (2018) the learning trajectories in the minority language (Catalan) and the L3 (English) interacted with each other, which is also observed in the written performance in Catalan and L3 (English) in our study.

7. 5 Summary of the chapter

Chapter 7 deals with Research Question 2 and examines whether exposure to English, Catalan and Spanish beyond the school has an impact on students' communicative appropriateness in writing in all school languages (Catalan, Spanish and English). Table 28 provides a summary of results related to Hypothesis 3 and Hypothesis 4:

Table 28

Summary of the results related to Hypothesis 3 and Hypothesis 4

Hypothesis	Main Results	Conclusion
H3: English exposure beyond the school plays a role in students' communicative appropriateness in writing	• Frequency of private tuition, watching TV, and short period of time in the target language community have an impact on students' communicative appropriateness in English writing • Exposure to TV in English is the main factor that predicts the scores in English writing.	H3: Confirmed
H4: Spanish and Catalan exposure beyond the school plays a role in students' communicative appropriateness in writing	• Exposure to Spanish TV and language at home (Spanish) have an impact on students' communicative appropriateness in Spanish, although using both languages at home is the main predictor • Exposure to Catalan TV and language at home (Catalan) have an impact on students' communicative appropriateness in Catalan, being exposed to TV in Catalan the main predictor. • Having more languages in the repertoire (Spanish and Catalan) helps students' L3 (English) writing.	H4: Confirmed

Hypothesis 3, which stated that the English exposure beyond the school played a role in students' communicative appropriateness in writing, is confirmed. Results from the quantitative analysis showed that; (i) students' scores in communicative appropriateness in English are influenced by watching TV in English, private tuition and short period of time in the target language community (ii) more specifically, the frequency role of watching TV and private tuition determine scores in communicative appropriateness in English; (iii) the main predictor for students communicate appropriateness is exposure to TV in English.

Additionally, the data collected from students', parents', and teachers' semi-structured interviews provided information on the differences in the percentage of exposure to English through TV, private tuition or short period of time in the target language community across schools; (i) regarding watching TV in English, learners in Schools A and B understood it as a family activity and showed motivation to overcome the difficulties of understanding TV in

English, while participants in School C did not enjoy it, showing unwillingness to overcome the problems of understanding English TV; (ii) Considering private tuition, participants in Schools A and B considered private tuition as an enjoyable activity and having the experience of short period of time in the target language as a social activity. On the other hand, participants from School C did not enjoy having the experience in the target language community and preferred other non-academic activities; (iii) Parents and teachers considered that exposure to English through TV is essential for learning English. Besides, although parents and teachers considered exposure to English through TV, private tuition and having the experience in the target community as crucial for learning, they acknowledged that the socio-economic status of parents may play a role in opportunities for learning English outside the school.

Hypothesis 4, which predicted that the Spanish and Catalan exposure beyond the school played a role in students' communicative appropriateness in writing, is confirmed. Results showed that; (i) exposure to Spanish and Catalan through TV, and language at home made a difference in students' scores on communicative appropriateness in Spanish and Catalan; (ii) having more languages in the repertoire helps learners obtained high scores in communicative appropriateness in English.

Moreover, the data collected from students', parents' and teachers' semi-structured interviews provided further information that may explain the difference in writing scores and can be summarised as follows: (i) due to the fact that Spanish is the dominant language, all participants (students, teachers and parents) acknowledged the importance of Spanish TV or they felt comfortable with Spanish; (ii) Regarding the Catalan language, opinions differed across schools. While students in School B enjoyed being exposed to TV in Catalan and speaking Catalan at home, students in School A and C rejected the language. With regards, parents and teachers, parents and teachers from Schools A and C considered that watching TV in Catalan was not important, while teachers and parents from School B mentioned that, although English was important, they acknowledged the need to protect the minority language. The differences observed in teachers' and parents' opinions across schools are in line with the scores in communicative appropriateness in the three languages of the curriculum.

CHAPTER 8. CONCLUSION

CHAPTER 8

CONCLUSION

8.1 Summary of the main findings

The main purpose of the present study has been to explore primary students' communicative appropriateness in L3 English writing, considering two main aspects: (i) intensity of CLIL programmes in the context of multilingual education, where students have different intensity of exposure to English, Spanish and Catalan at school, and (ii) exposure to these languages beyond the classroom, accounting for the variables watching TV, private tuition, short period of time in the target language community, and language at home.

The study has been motivated by the need to further understand the benefits of CLIL programmes in the multilingual education setting of the Valencian Community, and to explore the impact of exposure to languages of the curriculum in the classroom and beyond. Previous research on CLIL contexts have investigated CLIL vs non-CLIL programmes on students' gains in the English language (Mattheoudakis *et al.,* 2014; Sundqvist & Sylvén, 2015; Agustín-Llach & Canga-Alonso, 2016; Pladevall-Ballester & Vallbona, 2016; Agustín-Llach, 2017; Coral-Mateu *et al.,* 2018). However, these studies have not taken into account the rest of the languages in the curriculum or the different intensities of CLIL programmes. As far as we know, San Isidro and Lasagabaster (2018) is the only study that has taken into account students' language repertoire (Spanish, Galician and English) under CLIL versus non-CLIL programmes, but without considering different types of input exposure in CLIL programmes. Besides, to the best of our knowledge, Merino and Lasagabaster's (2017) study is the only one that explored the intensity of CLIL programmes at the secondary school level, but they did not consider all the languages in the curriculum as the present study does. Hence, the originality of our research lies in the fact that it has been carried out in a context where different intensities of CLIL programmes and different languages coexist at school, which involves looking at the three languages of the curriculum: Catalan, Spanish and English.

The present research also represents, according to our current information, is the first investigation that has examined primary CLIL students' communicative appropriateness in writing. Existing research regarding writing has examined the CAF dimension (Strobl & Baten, 2021), and few studies have focused on pragmatics (Cenoz & Valencia, 1994; Sagasta, 2003; Sanz, 2008; Arocena, 2017; Orcasitas-Vicandi, 2022). With a focus on writing and pragmatics,

Martín-Laguna (2020) is the only study that focused on multilingual learners' use of discourse markers. Thus, in an attempt to expand our understanding of pragmatics in the context of primary education, we have explored primary students' communicative appropriateness in writing and in a CLIL setting.

Furthermore, as far as we know, the current study is the first investigation that has taken into account the impact of intensity of exposure inside and beyond the multilingual CLIL classroom. Previous studies have analysed the impact of input exposure beyond the school, examining the effect of watching TV(Pujadas & Muñoz, 2020; Pattemore & Muñoz, 2020), short period of time in the target language community (Llanes & Muñoz, 2013; Llanes & Serrano, 2014; Llanes *et al.,* 2015), private tuition (Muñoz, 2014; Nightingale, 2016), or language used at home (Safont, 2005; Sanz, 2008; Arocena, 2017; Guzmán-Alcón & Portolés, 2021). However, most of the studies have measured the impact of out-of-school exposure in relation to general written performance (Llanes & Muñoz, 2013), vocabulary (De Wilde *et al.*, 2021), grammar (Muñoz *et al.,* 2018), and pragmatics (Alcón-Soler, 2015), but none have focused on communicative appropriateness, combining language exposure at school and beyond.

The present study addresses the above-mentioned research gaps and moves forward research on CLIL and multilingualism by addressing the following aims:

1. To explore CLIL primary students' communicative appropriateness in writing, taking into account also intensity of exposure to all the languages in the curriculum, that is to say, English, Spanish and Catalan.

2. To explore the impact of language exposure beyond the school on students' communicative appropriateness in writing, accounting the variables watching TV, private tuition, short period of time in the target language community, and language at home.

In an attempt to expand the CLIL research, the present investigation has addressed the above-listed aims by exploring the writings of a total of 392 primary students. Each participant performed three tasks with a focus on the processes of the water cycle (one task in each language Spanish, Catalan and English), and each task was evaluated by adapting a scoring method proposed by Kuiken and Vedder (2017) and Jacobs *et al.* (1981). A total of 1176 written tasks (392 in each of the corresponding languages) were analysed and each written task was evaluated for the pragmatic component (content and comprehensibility), textual component

(coherence and cohesion) and the linguistic component (spelling, punctuation, and grammar). In addition, this quantitative analysis was followed by a qualitative analysis of participants' semi-structured interviews.

Based on our previous research, we formulated two research questions and developed four hypotheses (two for each research question). In what follows, we provide a summary of our main findings for each hypothesis.

The first hypothesis, which predicted that the intensity of exposure to English through CLIL programmes would affect students' communicative appropriateness in English writing (Merino & Lasagabaster, 2017; San Isidro & Lasagabaster, 2018), has been partially confirmed. On the one hand, significant differences in students' communicative appropriateness have been observed when comparing the high intensity CLIL programme with the low intensity CLIL programme. On the other hand, no significant differences have been observed when comparing the high intensity CLIL programme with the medium intensity CLIL programme. Considering the results from the low intensity CLIL programme, we conclude that the hours devoted to CLIL make a difference in students' communicative appropriateness, suggesting that the educational authorities need to reconsider the flexibility given to the schools in relation to the number of CLIL hours, if the aim is the CLIL approach to be effective.

In addition, since participants in high and medium intensity CLIL programmes performed well in the written task, we can claim that CLIL benefits students' communicative appropriateness in writing. These results are in line with several scholars (Ruiz de Zarobe, 2011; Llinares *et al.*, 2012), and are of great relevance, given that some research reported limited progress regarding writing in CLIL contexts (Dalton-Puffer, 2007; Llinares & Whittaker, 2010). The discrepancy found among studies could be attributed to the characteristics of the learners, as in the studies by Dalton-Puffer (2007) and Llinares and Whittaker (2010), the participants were not multilingual primary school students, and a different method of analysing the data was employed. These factors, among others, may have impacted the results of the research.

Furthermore, our study has provided information regarding the simultaneous acquisition of content and language in CLIL settings. With this regard, when focusing on language, our results have indicated that students in a high intensity CLIL programme outperformed those in a low intensity programme in terms of textual and linguistic competence. These findings are in line with the results reported by Jiménez-Catalán *et al.* (2006), who noted that CLIL students

demonstrated proficiency in using a large number of lexical verbs and constructing complete and complex sentences. Additionally, our results support previous findings reported by Pérez and Basse (2015) and Juan-Garau and Salazar-Noguera (2015), who claimed improved grammar skills with the CLIL approach. Moreover, in agreement with Agustín-Llach (2017), participants in the high intensity CLIL programme have performed better in spelling and coherence and cohesion, the latter two aspects having not been explored in previous studies, to our knowledge. Furthermore, our results have indicated that the intensity of the CLIL programme does not have a negative effect on content and comprehensibility. In fact, participants in high and medium intensity programmes have shown no differences in content, comprehensibility, and language. However, based on the results from the low intensity CLIL programme, we can conclude that intensity of CLIL programmes may be an issue to consider for the CLIL approach to be effective in promoting both content and language learning.

In addition, in spite of the benefits of CLIL for language and content, the semi-structured interviews revealed, in line with Piercshe *et al.* (2016) and Martí and Portolés (2019), some of the difficulties that teachers face when implementing a CLIL lesson. Among them, the lack of training in CLIL methodology, insufficient coordination between content and language teachers, and teachers limited English proficiency.

An important contribution of this study is related to the uniqueness of recognising all the languages in the curriculum, an issue addressed in Hypothesis 2. Results related to Hypothesis 2, which claimed that exposure to Catalan and Spanish at school would affect students' communication appropriateness in writing, has been partially confirmed. With regards to Spanish, differences have only been observed between School A and B both with low intensity of exposure to Spanish. However, no differences were observed between participants in School C enrolled in the medium intensity programme (30% of hours of Spanish exposure) and the other schools (16.67% in School A and 20% in School B). A potential explanation for these findings could be the societal prestige of Spanish, which has been documented in previous studies, and the fact that, regardless of classroom exposure to Spanish, participants are familiar with Spanish (Safont, 2005; Martín-Laguna & Alcón-Soler, 2018; Guzmán-Alcón & Portolés, 2021; Guzmán-Alcón, 2022). Another factor could be exposure to Spanish outside the school setting. In fact, students reported in semi-structured interviews that they mostly used Spanish outside the classroom.

Concerning the Catalan language, when comparing the medium intensity exposure programme (School A) with the high intensity programme (School B and School C) differences have been observed. However, differences have also been observed among participants from the two schools that were coded as high intensity exposure to Catalan (School B and School C). Some possible explanations have been found during the semi-structured interviews. Participants who had high exposure to Catalan in school revealed several reasons for their low scores in Catalan, including: speaking Spanish at home, participants' affinity towards Spanish, lack of motivation, and limited exposure to Catalan outside of school. These findings are consistent with previous research, which have suggested that language at home (Safont, 2005; Portolés, 2014; Guzmán-Alcón & Portolés, 2021), and the interplay of classroom and out-of-school input (Muñoz *et al.,* 2018; De Wilde *et al.,* 2021; Muñoz & Cadierno, 2021) play a role in language learning. Besides, our findings suggest that language exposure at school alone may not always determine language learning.

Another important contribution of this study has been exploiting the impact of exposure beyond school contexts. An issue addressed in our Research Question 2, and formulated in Hypotheses 3 and 4. On the one hand, Hypothesis 3 established that English exposure beyond the school would play a role in students' communicative appropriateness in writing (Muñoz, 2014; Llanes & Muñoz, 2013; Llanes *et al*., 2015; Strobl & Baten, 2021). Our results related to Hypothesis 3 have corroborated findings from previous studies on the benefits of exposure to watching TV (Muñoz *et al.,* 2021; Muñoz & Cadierno, 2021) and private tuition (Nightingale, 2016). The present study has also provided further evidence that short periods of time in the target language community have an impact on students' writing (Evans & Fisher, 2005; Llanes & Muñoz 2013; Llanes *et al.,* 2015; Strobl & Baten, 2021; Vallejos & Sanz, 2021). Furthermore, the study has revealed that exposure to watching TV predicts students' communicative competence in English writing. Besides, our findings have also shown that those subjects who received private tuition outside school were also those who watched TV, and those who have had the experience of a short period of time in the target language community, suggesting that scores in English writing are the result of different out-of-school factors.

It is worth pointing out that our findings have also indicated that being bilingual in Catalan and Spanish has a positive effect on students' communicative appropriateness in English as a third language (L3). These findings support previous investigations reporting the impact of bilingualism on learning English as an additional language (Safont, 2015; Portolés & Safont,

2020; Portolés, 2020). Our findings are also in line with previous investigations pointing out that students' language exposure and use of the minority language have a positive effect on multilingual writers (Arocena, 2017; Orcasitas-Vivandi, 2022). It appears that students who are exposed to multiple languages obtained better scores in multilingual pragmatics. This observation, which was made in prior research on pragmatics and education, including tertiary (Safont, 2005), secondary (Martín-Laguna & Alcón-Soler, 2018; Martín-Laguna, 2020), and primary education (Portolés, 2015; Safont & Portolés, 2016; Portolés & Safont, 2018) is supported in the present study, providing further evidence on the benefits of multilinguals for additional language learning. Additionally, like prior research, this study recognises that languages are constantly interacting, as well as that language learning is a complex and dynamic process (Cenoz & Gorter 2011; Portolés & Martín, 2012; Safont, 2013; Jessner 2013; Portolés & Safont 2018).

Furthermore, Hypothesis 4 claimed that Spanish and Catalan exposure beyond the school would play a role in students' communicative appropriateness in writing (Ekpe *et al.,* 2019; Pujadas & Muñoz, 2020; Pattemore & Muñoz, 2020; De Wilde *et al.,* 2021). This hypothesis has been confirmed, since results have shown that exposure to Spanish and Catalan through watching TV and language at home make a difference in students' scores on communicative appropriateness, both in Spanish and Catalan. In fact, in line with previous studies (Arocena, 2017), the present study has found that those who speak both languages at home (Spanish and Catalan) outperformed those who only speak Catalan, while lower scores are obtained by those who only speak Spanish at home.

Another important contribution of this study is related to the attempt to determine the main predictors of students' communicative appropriateness in Spanish and Catalan. Earlier studies have reported the positive effect of out-of-school factors on English proficiency (Muñoz *et al.,* 2018; De Wilde *et al.,* 2021; Muñoz & Cadierno, 2021). However, to the extent of our knowledge, not a single study has determined the main predictor of students' communicative appropriateness in writing, considering exposure to Spanish and Catalan beyond the school. Regarding the Spanish language, our results have revealed that the variable language at home is the main predictor for students' Spanish writing, followed by exposure to TV. Concerning Catalan, it seems that watching TV is the main predictor followed by language at home. Hence, our research has added value by reporting predictions that determine students' communicative appropriateness in writing.

Moreover, qualitative information has been provided by students, parents and teachers during the semi-structured interviews, which have revealed interesting findings that may explain the difference in writing scores. Firstly, all participants (students, teachers, and parents) have recognised the significance of TV in Spanish or felt comfortable with it, which may be explained due to the fact that Spanish is the dominant language. Secondly, students' opinions on the Catalan language have varied among schools, which have been in line with teachers and parents' opinions, and aligned with the scores in communicative appropriateness in the three languages of the curriculum.

Additionally, findings from our study suggest the existence of a monolingual English perspective, even in multilingual educational contexts, such as the Valencian Community. Our findings have shown that, (i) parents and teachers, regardless of intensity of exposure to Catalan and Spanish at school, reported their preference for the English language, and, very frequently, they did not consider necessary the other languages in the curriculum; (ii) in the case of the school with a high exposure to Catalan, and a medium exposure to English, teachers and parents encouraged the use of the three languages of the curriculum. Besides, even if the percentage of Spanish exposure in school was low (20%), students performed well in Spanish, showing the role that Spanish, as a majority language, has in the educational system.

In a nutshell, this thesis may enrich the literature on multilingualism and CLIL by investigating a new group of learners in an under-explored setting, and presenting an in-depth analysis from various empirical perspectives and giving voice to students, teachers and parents.

Having summarised the major results of the study, the drawbacks and areas for future investigation will be stated in the following section.

8.2. Limitations of the study and directions for future research

The limitations of this thesis can be classified into classroom-based and methodological issues. To begin with, as the study has been conducted in a classroom setting rather than in a laboratory setting, a range of contextual and individual variables have not been isolated, and this may have affected the results. Hence, the number of variables included in this study have been limited, and other factors could have been considered. In addition, we have not taken into account teaching styles, due to the impossibility of conducting classroom observation. Additionally, it would have been desirable to gather more extensive information about the participants, including their motivation, aptitude, and attitudes towards languages. However, due to practical

limitations, this was not possible. Future research should include classroom observations, focus group interviews, and diary reports. This could be used to further understand the role played by participants' individual differences.

Secondly, several methodological issues are noteworthy. Starting with the uniqueness of this study, which involved the analysis of pragmatics in the context of CLIL, one limitation is the number of dimensions analysed. We have adapted the original rating scale by Kuiken and Vedder (2017) and analysed communicative appropriateness in terms of content, comprehensibility, coherence and cohesion, and SPAG. However, future research might examine additional measures, such as language choice according to the addressee, and this may provide insight into other aspects.

Regarding the data collection procedures used in the current study. The task has been carefully selected in consideration of the teachers' expertise in CLIL. However, the researcher was the one who provided the direction in the written task, this is a limitation. Additionally, in the present study, we have only taken into account the Science subject and a specific topic, the water cycle, which students were already familiar with. However, it would have been interesting to select other subjects too. Furthermore, data have been collected at a certain point in time; a longitudinal study would have provided the possibility of examining development in students' communicative appropriateness.

Another limitation is the information included in the questionnaires and their reliability. It is important to note that this information was self-reported by the participants and may not be applicable for generalisations. Regarding the variable of watching TV, it has not been analysed considering hours, or the use of subtitles. Besides, in relation to the variable short period of time in the target language community, we have only considered the experience of being abroad, without measuring the impact of length of the time aboard, or the characteristics, which varied from a summer camp to a summer course, or even visiting a family for a short period of time. Additionally, in the present study, we have not paid attention to other variables such as the socioeconomic status of the parents, teacher's role in the classroom, or strategies adopted when CLIL is implemented in the classroom.

An additional drawback is the number of participants. More participants would need to be recruited to obtain more meaningful results, including those from private schools and immersion programmes. In addition, the number of participants during the semi-structured

interviews was limited by the voluntary nature of participation. We acknowledge that it would have been valuable to include more participants' perspectives about CLIL. Thus, this study cannot be considered representative of all contexts, and care should be taken with generalisation and application of the results.

Our study also suggests ideas for further research. For instance, further studies might address how a monolingual English perspective discourages multilingualism. In our study, and in line with Guzmán-Alcón and Portolés (2021), teachers and parents from school A and C showed a monolingual English perspective. In fact, parents and teachers in school A (46.67% of CLIL) reported that they wished for more hours of English, and, along the same line, parents and teachers in School C claimed that fewer hours of Catalan should be considered in order to have more English. This supports findings reported by Safont (2021), who pointed out that a monolingual English perspective focuses on the native speaker model, and does not consider the other languages in the curriculum.

However, this pattern did not occur in School B. Students from School B performed better in all languages and all dimensions of the construct of communicative appropriateness, and parents and teachers reported that they agreed in using the three languages in the school and outside the school. These findings are in line with Pérez-Cañado's study (2012), who claimed that CLIL triggers positive attitudes towards trilingualism.

Despite its limitations, this study has provided insights into the implementation of CLIL in a multilingual context, where different languages coexist. The investigation has focused explicitly on the impact of different intensity of CLIL programmes, taking into account exposure inside and beyond the classroom on students' communicative appropriateness in writing in all the languages in the curriculum. Hopefully, future research will further enhance our understanding of the benefits of CLIL in multilingual contexts and will move forward the research on multilingual education and pragmatics. This will, in turn, provide language teachers and educational authorities with pedagogical implications, some of which are highlighted below.

8.3 Pedagogical implications

Given the rich linguistic diversity found in many classrooms, the study reported in this thesis is relevant not only for the specific characteristics of the Valencian Community, but also has worldwide relevance. Our results have shown that CLIL is beneficial for content and language

learning when high and medium intensity CLIL programmes are implemented. For that reason, the educational authorities need to pay attention to the hours devoted to CLIL when a multilingual programme, including CLIL, is intended to be implemented in a particular educational environment.

Additionally, our findings offer valuable insights for CLIL teachers in the context of multilingual education. Our results suggest that teachers should reject the monolingual paradigm, which is rooted in the traditional approach of viewing languages as separate entities. This perspective is in line with the realities of multilingualism, its growth, and the acquisition of a third language (Cenoz & Gorter, 2017; Lin & He, 2017; San Isidro, 2018). From this perspective, teachers should take into account factors such as students' language backgrounds (Lin & He, 2017; Pavón-Vázquez, 2020), and the use of translanguaging as a teaching strategy (Cenoz, 2019; Cenoz & Gorter, 2022; Orcasitas-Vicandi, 2022; Mañoso-Pacheco, 2023) to adopt a more multilingual approach, which considers all the languages in a student's repertoire, as proposed by Safont (2021). This not only challenges the monolingual paradigm and prevents the neglect of other languages in the curriculum, but, as demonstrated in this study, it can also enhance students' communicative appropriateness in multilingual contexts such as the Valencian Community.

From this perspective, and in line with Serra and Feijóo (2022) and Pérez-Vidal and Lasagabaster (2021), translanguaging should be incorporated to acquire content and language at the same time. Similarly, teacher training should focus on applying teaching practices that make students aware of the resources available to them when looking at the whole linguistic repertoire (Safont, 2021), promoting, at the same time, the use of minority languages (Cenoz & Gorter, 2022; Cenoz *et al.,* 2022). Thus, we will respond to the reality of multilingual classrooms (Martí & Portolés, 2022), and take advantage of the richness of language variety in the school context and beyond.

Since the out-of-school variables analysed in the present study (exposure to English through watching TV, private tuition, and short period of time in the target language community) have shown an impact on students' communicative appropriateness, we suggest that teachers encourage English exposure beyond the school. Furthermore, educational policies should promote extra hours of tuition and short periods of time in the target language communities, regardless of the socioeconomic status of the family.

Furthemore, given the impact of watching TV on students' communicative appropriateness, we suggest combining in-class and online input to enhance language learning for young learners. Teachers should pay attention to areas lacking in-class coverage and supplement it through TV exposure. Moreover, it would also be worthwhile to encourage learners to engage in multimodal activities such as showing videos with subtitles, which may be useful for clarifying expressions, as well as an alternative to current classroom methods.

The above-mentioned suggestions can also be implemented Catalan and Spanish through a multilingual educational programme. In fact, the main predictor for communicative appropriateness in Catalan seems to be watching TV. Hence, exposure to Catalan outside the school should be promoted, due to its status as a minority language. The present study, conducted in the context of the Valencian Community, also suggests that there is a need to find a balance between the two official languages, both at school and beyond the school. Since most of the time, society neglects the minority language and focuses on English as an international language, there is a need to protect the Catalan language. Specially, because results indicate that more languages in the repertoire help students to learn English as an additional language. One step in that direction is suggested by Safont (2021) and Cenoz and Gorter (2022), who claim that there is a need to avoid the idealised monolingual native speaker and start using students' plurilingual competence as a resource to accelerate language development. Similarly, in line with Portolés and Martí (2020), teachers should be trained to avoid a monolingual teaching perspective. Thus, "Focus on Multilingualism" (Cenoz, 2009) is a framework to prioritise when teaching language. Since, as reported in the present study, language at home plays a role in L3 writing, and teachers' home language seems to impact teachers' practices (Safont, 2005; Portolés, 2014; Arocena *et al*., 2015; Guzmán-Alcón & Portolés, 2021), we suggest "Focus on Multilingualism" (Cenoz, 2009) as an approach that could be used to promote multilingual competences and overcome the disadvantages of monolingual approaches.

To conclude, this study highlights the need to reconsider the implementation of CLIL programmes in the Valencian Community. The education system should strive to go beyond just promoting CLIL in response to the desire to learn the dominant or international language. Policies should instead help schools to find a balance between hours devoted to CLIL programmes and exposure and use of the other language of the curriculum in the classroom and beyond.

REFERENCES

REFERENCES

Ackerl, C. (2007). Lexico-Grammar in the Essays of CLIL and non-CLIL Students: Error Analysis of Written Production. *Vienna English Working Papers, 16*(3), 6-11.

Aguilar, M., & Muñoz, C. (2014). The effect of proficiency on CLIL benefits in Engineering students in Spain. *International Journal of Applied Linguistics*, *24*(1), 1-18. https://doi.org/10.1111/ijal.12006

Agustín-Llach, M. P. (2017). The effects of the CLIL approach in young foreign language learners' lexical profiles. *International Journal of Bilingual Education and Bilingualism*, *20*(5), 557-573. https://doi.org/10.1080/13670050.2015.1103208

Agustín-Llach, M. P., & Canga-Alonso, A. (2016). Vocabulary growth in young CLIL and traditional EFL learners: Evidence from research and implications for education: Vocabulary growth in young CLIL and traditional EFL learners. *International Journal of Applied Linguistics*, *26*(2), 211-227. https://doi.org/10.1111/ijal.12090

Alcaraz-Mármol, G. (2018). Trained and Non-Trained Language Teachers on CLIL Methodology: Teachers' Facts and Opinions about the CLIL Approach in the Primary Education Context in Spain. *Latin American Journal of Content & Language Integrated Learning*, *11*(1), 39-64. https://doi.org/10.5294/laclil.2018.11.1.3

Alcón-Soler, E. (2000). Desarrollo de la competencia discursiva oral en el aula de lenguas extranjeras: Perspectivas metodológicas y de investigación. In C. Muñoz (Ed.), *Segundas lenguas: Adquisición en el aula* (pp. 259-276). Ariel Lingüística.

Alcón-Soler, E. (2012). Teachability and bilingualism effects on third language learners' pragmatic knowledge. *Intercultural Pragmatics, 9*(4), 511-541.

Alcón-Soler, E. (2015). Instruction and pragmatic change during study abroad email communication. *Innovation in Language Learning and Teaching, 9*(1), 34-45. https://doi.org/10.1080/17501229.2014.995763

Alcón-Soler, E., & Codina, V. (2002). Practice opportunities and pragmatic change in a second language context: The case of request. *Elia: Estudios de lingüística inglesa aplicada*, *3*, 123-138.

Alcón-Soler, E., Martínez-Flor, A., & Safont, P. (2005). Towards a typology of modifiers for the speech act of requesting: A socio-pragmatic approach. *RAEL: Revista Electrónica de Lingüística Aplicada*, *4*(1), 1-35.

Alcón-Soler, E., & García-Mayo, M. del P. (2008). Incidental focus on form and learning outcomes with young foreign language classroom learners. In J. Philp, R. Oliver, & A. Mackey (Eds.), *Language Learning & Language Teaching* (pp. 173-192). John Benjamins. https://doi.org/10.1075/lllt.23.12sol

Alwagait, E., Shahzad, B., & Alim, S. (2015). Impact of social media usage on students academic performance in Saudi Arabia. *Computers in Human Behavior*, *51*(1), 1092-1097. https://doi.org/10.1016/j.chb.2014.09.028

Andrews, E. (2014). *Neuroscience and multilingualism*. Cambridge University Press.

Anghel, B., Cabrales, A., & Carro, J. M. (2016). Evaluating a bilingual education program in Spain: The impact beyond foreign language learning. *Economic Inquiry*, *54*(2), 1202-1223. https://doi.org/10.1111/ecin.12305

Archer, D., & Grundy, P. (2011). *The pragmatics reader*. Routledge.

Arocena, E. (2017). *Multilingual education: Teachers 'beliefs and language use in the classroom* [Unpublished doctoral dissertation]. University of Basque Country.

Austin, J. L. (1962). *How to do things with words.* Oxford University Press.

Baker, C. (1988). *Incorporation: A theory of grammatical function changing.* University of Chicago Press

Baker, C., & Wright, W. E. (2017). *Foundations of bilingual education and bilingualism*. Multilingual Matters.

Banegas, D. (2016). Teachers develop CLIL materials in Argentina: A workshop experience. *Latin American Journal of Content & Language Integrated Learning*, *9*(1), 17-36. https://doi.org/10.5294/laclil.2016.9.1.2

Basterrechea, M., & García-Mayo, M. del P. (2014). Language-related episodes during collaborative tasks: A comparison of CLIL and EFL learners. In K. McDonough & A. Mackey (Eds.), *Language Learning & Language Teaching* (pp. 25-44). John Benjamin. https://doi.org/10.1075/lllt.34.05ch2

Benson, C. (2003). Trilingualism in Guinea-Bissau and the Question of Instructional Language. In C. Hoffmann & J. Ytsma (Eds.), *Trilingualism in Family, School and Community* (pp. 166-184). Multilingual Matters. https://doi.org/10.21832/9781853596940-009

Bernhardt, E. (1992). *Life in language immersion classrooms*. Multilingual Matters.

Bloom, B. S. (1956). *Taxonomy of educational objectives, Handbook: The cognitive domain.* David McKay.

Borràs, J., & Llanes, À. (2020). L2 reading and vocabulary development after a short Study Abroad experience. *Vigo International Journal of Applied Linguistics*, *17*(1), 35-55. https://doi.org/10.35869/vial.v0i17.1464

Bournot-Trites, M., & Reeder, K. (2001). Interdependence Revisited: Mathematics Achievement in an Intensified French Immersion Program. *Canadian Modern Language Review*, *58*(1), 27-43. https://doi.org/10.3138/cmlr.58.1.27

Brinton, D. M., Snow, M. A., & Wesche, M. B. (1989). *Content-based second language instruction.* Newbury House.

Bryman, A. (2012). *Social Research Methods.* Oxford University Press.

Bulté, B., & Housen, A. (2012). Defining and operationalising L2 complexity. In A. Housen, F. Kuiken, & I. Vedder (Eds.), *Language Learning & Language Teaching* (pp. 21-46). John Benjamins. https://doi.org/10.1075/lllt.32.02bul

Bunting, L., & Lindström, B. (2013). Framing English learning at the intersection of school and out-of-school practices. *Journal of International Scientific Publications: Language, Individual & Society, 7*(1), 205-221.

Burmeister, P. & Daniel, A. (2002). How effective is late partial immersion? Some findings of a secondary school program in Germany. In P. Burmeister, T. Piske, & A. Rohde (Eds.), *An Integrated View of Language Development: Papers in Honour of Henning Wode* (pp. 499-512). Wissenschaftlicher Verlag Traer.

Cambridge English (2018). Key exam preparation. Retrieved from https://www.cambridgeenglish.org/images/young-learners-sample-papers-2018-vol1.pdf/

Canale, M. (1983). From Communicative Competence to Communicative Language Pedagogy. In J. C. Richard & R. W. Schmidt (Eds.), *Language and Communication* (pp. 2-14). Longman.

Canale, M., & Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics*, *1*(1), 1-47. https://doi.org/10.1093/applin/I.1.1

Celaya, M. L., Torras, M. R., & Pérez-Vidal, C. (2001). Short and mid-term effects of an earlier start: An analysis of EFL written production. *EUROSLA Yearbook*, *1*(1), 195-209. https://doi.org/10.1075/eurosla.1.15cel

Celce-Murcia, M. (2007). Rethinking the Role of Communicative Competence in Language Teaching. In E. Alcón-Soler & P. Safont (Eds.), *Intercultural Language Use and*

Language Learning (pp. 41-57). Springer. https://doi.org/10.1007/978-1-4020-5639-0_3

Celce-Murcia, M., Dornyei, Z., & Thurrell, S. (1995). Communicative Competence: A Pedagogically Motivated Model with Content Specifications. *Issues in Applied Linguistics*, *6*(2), 6-34. https://escholarship.org/uc/item/2928w4zj

Cenoz, J. (2003). The additive effect of bilingualism on third language acquisition: A review. *International Journal of Bilingualism*, *7*(1), 71-87. https://doi.org/10.1177/13670069030070010501

Cenoz, J. (2009). *Towards Multilingual Education: Basque Educational Research from an International Perspective.* Multilingual Matters. https://doi.org/10.21832/9781847691941

Cenoz, J. (2015). Content-based instruction and content and language integrated learning: The same or different? *Language, Culture and Curriculum*, *28*(1), 8-24. https://doi.org/10.1080/07908318.2014.1000922

Cenoz, J., & Valencia, J. F. (1994). Additive trilingualism: Evidence from the Basque Country. *Applied Psycholinguistics*, *15*(2), 195-207. https://doi.org/10.1017/S0142716400005324

Cenoz, J., & Gorter, D. (2011). Focus on Multilingualism: A Study of Trilingual Writing. *The Modern Language Journal*, *95*(3), 356-369. https://doi.org/10.1111/j.1540-4781.2011.01206.x

Cenoz, J., Arocena, E., & Gorter, D. (2013). Assessing multilingual students' writing skills in Basque, Spanish and English. In C. Muller (Ed.), *Issues in the Assessment of Bilinguals* (pp. 185-204). Multilingual Matters. https://doi.org/10.21832/9781783090105-010

Cenoz, J., Genesee, F., & Gorter, D. (2014). Critical Analysis of CLIL: Taking Stock and Looking Forward. *Applied Linguistics*, *35*(3), 243-262. https://doi.org/10.1093/applin/amt011

Cenoz, J., & Gorter, D. (2015). *Multilingual Education Between Language Learning and Translanguaging.* Cambridge University Press.

Cenoz, J., & Gorter, D. (2017). Minority languages and sustainable translanguaging: Threat or opportunity? *Journal of Multilingual and Multicultural Development*, *38*(10), 901-912. https://doi.org/10.1080/01434632.2017.1284855

Cenoz, J., & Gorter, D. (2022). *Pedagogical translanguaging.* Cambridge University Press.

Cenoz, J., Santos, A., & Gorter, D. (2022). Pedagogical translanguaging and teachers' perceptions of anxiety. *International Journal of Bilingual Education and Bilingualism*, *25*(9) 1-12. https://doi.org/10.1080/13670050.2021.2021387

Chiang, S. (2003). The importance of cohesive conditions to perceptions of writing quality at the early stages of foreign language learning. *System*, *31*(4), 471-484. https://doi.org/10.1016/j.system.2003.02.002

Chomsky, N. (1965). Persistent Topics in Linguistic Theory. *Diogenes*, *13*(51), 13-20. https://doi.org/10.1177/039219216501305102

Codó, E. (2022). *Global CLIL: Critical, Ethnographic and Language Policy Perspectives*. Routledge. https://doi.org/10.4324/9781003147374

Collins, D. W., Pincus, M., & Xie, H. (1999). Equity Valuation and Negative Earnings: The Role of Book Value of Equity. *The Accounting Review*, *74*(1), 29-61. https://doi.org/10.2308/accr.1999.74.1.29

Collins, L., & White, J. (2011). An Intensive Look at Intensity and Language Learning. *TESOL Quarterly*, *45*(1), 106-133. https://doi.org/10.5054/tq.2011.240858

Connor-Linton, J., & Polio, C. (2014). Comparing perspectives on L2 writing: Multiple analyses of a common corpus. *Journal of Second Language Writing*, *26*(1), 1-9. https://doi.org/10.1016/j.jslw.2014.09.002

Coral-Mateu, J., & Lleixà-Arribas, T. (2015). Las tareas en el aprendizaje integrado de educación física y lengua extranjera (AICLE). Determinación de las características de las tareas mediante el análisis del diario de clase. *Retos*, *24*(1), 79-84. https://doi.org/10.47197/retos.v0i24.34532

Coral-Mateu, J., Lleixà-Arribas, T., & Ventura, C. (2018). Foreign language competence and content and language integrated learning in multilingual schools in Catalonia: An ex post facto study analysing the results of state key competences testing. *International Journal of Bilingual Education and Bilingualism*, *21*(2), 139-150. https://doi.org/10.1080/13670050.2016.1143445

Coyle, D. (1999). Theory and planning for effective classrooms: Supporting students in content and language integrated learning contexts. In J. Marsih (Ed.), *Learning through a foreign language*: models, methods and outcomes (pp. 46-62). Centre for Information on Language Teaching and Research.

Coyle, D. (2002). Relevance of CLIL to the European Commission language learning objectives. In D. Marsh (Ed.), CLIL/EMILE European dimension: Actions, trends and foresight potential European Commission, Public Services Contract DG 3406/001-001.

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Coyle, D. (2006). Content and language integrated learning: Motivating learners and teachers. *Scottish languages review*, *13*(5), 1-18.

Coyle, D. (2007). Content and Language Integrated Learning: Towards a Connected Research Agenda for CLIL Pedagogies. *International Journal of Bilingual Education and Bilingualism*, *10*(5), 543-562. https://doi.org/10.2167/beb459.0

Coyle, D. (2008). CLIL—A Pedagogical Approach from the European Perspective. In N. H. Hornberger (Ed.), *Encyclopaedia of Language and Education* (pp. 1200-1214). Springer. https://doi.org/10.1007/978-0-387-30424-3_92

Coyle, D., Marsh, D., Kitanova, S., Maljers, A., Wolff, D., & Zielonka, B. (2005). Project D3-CLIL matrix. The CLIL quality matrix. Central Workshop Report 6/2005.

Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and Language Integrated Learning*. Cambridge University Press. https://doi.org/10.1017/9781009024549

Coyle, D., Meyer, O., & Staschen-Dielmann, S. (2023). *A Deeper Learning Companion for CLIL: Putting Pluriliteracies into Practice*. Cambridge University Press. https://doi.org/10.1017/9781009043755

Crystal, D. (1985). *A Dictionary of Linguistics and Phonetics.* Blackwell.

Cummins, J. (1984). *Bilingualism and special education: Issues in assessment and pedagogy.* Multilingual Matters.

Cummins, J. (2005). A proposal for action: Strategies for recognizing heritage language competence as a learning resource within the mainstream classroom. *The Modern Language Journal, 89*(1), 585-592.

Cummins, J. (2007). Rethinking monolingual instructional strategies in multilingual classrooms. *Canadian Journal of Applied Linguistics*, *10*(1), 221-241.

Czura, A., Papaja, K., & Urbaniak, M. (2009). Bilingual education and the emergence of CLIL in Poland. In D. Marsh, P. Mehisto, D. Wolff, R. Aliaga, & T. Asikainen (Eds.), *CLIL practice: Perspectives from the field* (pp. 172-178). University of Jyväskylä.

Dalton-Puffer, C. (2005). Negotiating interpersonal meanings in naturalistic classroom discourse: Directives in content-and-language-integrated classrooms. *Journal of Pragmatics*, *37*(8), 1275-1293. https://doi.org/10.1016/j.pragma.2004.12.002

Dalton-Puffer, C. (2007). *Discourse in Content and Language Integrated Learning (CLIL) Classrooms*. John Benjamins. https://doi.org/10.1075/lllt.20

Dalton-Puffer, C. (2013). A construct of cognitive discourse functions for conceptualising content-language integration in CLIL and multilingual education. *European Journal of Applied Linguistics*, *1*(2), 99. https://doi.org/10.1515/eujal-2013-0011

Dalton-Puffer, C. (2016). Cognitive discourse functions: Specifying and integrative interdisciplinary construct. In T. Nikula, E. Dafouz, P. Moore, & U. Smit (Eds.), *Bilingual education and bilingualism. Conceptualising integration in CLIL and multilingual education* (pp. 29–54). Multilingual Matters

Dalton-Puffer, C. (2017). Introduction to part III: Discourse Analysis and CLIL. In A. Llinares & T. Morton (Eds.), *Language Learning & Language Teaching* (pp. 167-181). John Benjamins. https://doi.org/10.1075/lllt.47.10dal

Dalton-Puffer, C., & Nikula, T. (2006). Pragmatics of Content-based Instruction: Teacher and Student Directives in Finnish and Austrian Classrooms. *Applied Linguistics*, *27*(2), 241-267. https://doi.org/10.1093/applin/aml007

Dalton-Puffer, C., Nikula, T., & Smit, U. (2010). Language use and language learning in CLIL: Current findings and continuous issues. In C. Dalton-Puffer, T. Nikula, & U. Smit (Eds.), *Language use and language learning in CLIL classrooms* (pp. 279-292). John Benjamins. https://doi.org/10.1075/aals.7.14dal

Dalton-Puffer, C., & Smit, U. (2013). Content and Language Integrated Learning: A research agenda. *Language Teaching*, *46*(4), 545-559. https://doi.org/10.1017/S0261444813000256

Dalton-Puffer, C., Llinares, A., Lorenzo, F., & Nikula, T. (2014). 'You Can Stand Under My Umbrella': Immersion, CLIL and Bilingual Education. A Response to Cenoz, Genesee & Gorter (2013). *Applied Linguistics*, *35*(2), 213-218. https://doi.org/10.1093/applin/amu010

Dalton-Puffer, C., Hüttner, J., & Llinares, A. (2022). CLIL in the 21st Century: Retrospective and prospective challenges and opportunities. *Journal of Immersion and Content-Based Language Education*, *10*(2), 182-206. https://doi.org/10.1075/jicb.21021.dal

De Wilde, V., Brysbaert, M., & Eyckmans, J. (2021). Young learners' L2 English after the onset of instruction: Longitudinal development of L2 proficiency and the role of individual differences. *Bilingualism: Language and Cognition*, *24*(3), 439-453. https://doi.org/10.1017/S1366728920000747

Degrave, P. (2019). Music in the Foreign Language Classroom: How and Why? *Journal of Language Teaching and Research*, *10*(3), 4-12. https://doi.org/10.17507/jltr.1003.02

DeKeyser, R. (2012). Interactions Between Individual Differences, Treatments, and Structures in SLA: Variable Interaction in SLA. *Language Learning*, *62*(1), 189-200. https://doi.org/10.1111/j.1467-9922.2012.00712.x

Del Pozo, E., & Llinares, A. (2021). Assessing Students' Learning of History Content in Spanish CLIL Programmes: A Content and Language Integrated Perspective. In C. Hemmi & D. L. Banegas (Eds.), *International Perspectives on CLIL* (pp. 43-61). Springer. https://doi.org/10.1007/978-3-030-70095-9_3

Depew, K. (2011). Social Media at Academia's Periphery: Studying Multilingual Developmental Writers' Facebook Composing Strategies. *Reading Matrix: An International Online Journal*, (*11*)1, 54-75.

Ekpe, I., Ofeimun, G. O., Yaacob, M. R., & Abdul Rahim, M. N. (2021). Social Media and Student's Learning Outcome: A case in South-East Asia. *Journal of Entrepreneurship and Business*, *6*(2), 1-10. https://doi.org/10.17687/jeb.v6i2.427

Ellis, R. (2009). Task-based language teaching: Sorting out the misunderstandings: Task-based language teaching. *International Journal of Applied Linguistics*, *19*(3), 221-246. https://doi.org/10.1111/j.1473-4192.2009.00231.x

Ellis, R., & Barkhuizen, G. (2014). *Analysing learner language*. Oxford University. Press.

Eurydice. (2006). Content and language integrated learning (CLIL) at school in Europe. In Eurydice.org. https://doi.org/10.1080/09571730685200121.

European Commission. (2008). *Multilingualism: An asset for Europe and a shared commitment.* Communication from the commission to the European parliament, the council, the European economic and social committee and the committee of the regions. Retrieved from http://eur lex.europa.eu.

Escobar-Artola, L. E. (2023). Research and training in CLIL times: Meeting practitioners' needs. *Global Journal of Foreign Language Teaching*, *13*(1), 43-56. https://doi.org/10.18844/gjflt.v13i1.7633

Escobar-Urmeneta, C. (2019). An Introduction to Content and Language Integrated Learning (CLIL) for Teachers and Teacher Educators. *Journal of Innovation and Research in Plurilingual and Pluricultural Education*, *2*(1), 7-19. https://doi.org/10.5565/rev/clil.21

Evans, M., & Fisher, L. (2005). Measuring gains in pupils' foreign language competence as a result of participation in a school exchange visit: The case of Y9 pupils at three comprehensive schools in the UK. *Language Teaching Research*, *9*(2), 173-192. https://doi.org/10.1191/1362168805lr162oa

Fragai E. (2003). Valutare la competenza linguistico-comunicativa in italiano L2: Il Glotto-Kit per bambini e adolescenti stranieri. *Didattica & Classe Plurilingue*, *7*, 1-5.

Fernández-Sanjurjo, J., Fernández-Costales, A., & Arias Blanco, J. M. (2019). Analysing students' content-learning in science in CLIL vs. non-CLIL programmes: Empirical evidence from Spain. *International Journal of Bilingual Education and Bilingualism*, *22*(6), 661-674. https://doi.org/10.1080/13670050.2017.1294142

García-Mayo, M. del P., & Pica, T. (2000). Interaction among proficient learners: Are input, feedback and output needs addressed in a foreign language context? *Studia Linguistica*, *54*(2), 272-279. https://doi.org/10.1111/1467-9582.00066

García-Mayo, M. del P., & Garcia-Lecumberri, M. (2003). *Age and the acquisition of English as a foreign language.* Multilingual Matters.

García-Mayo, M. del P., & Lázaro-Ibarrola, A. (2015). Do children negotiate for meaning in task-based interaction? Evidence from CLIL and EFL settings. *System*, *54*, 40-54. https://doi.org/10.1016/j.system.2014.12.001

Gassner, D., & Maillat, D. (2006). Spoken competence in CLIL: A pragmatic take on recent Swiss data. *Vienna English Working Papers*, *15*(1), 15-22.

Gené-Gil, M., Juan-Garau, M., & Salazar Noguera, J. (2015). A case study exploring oral language choice between the target. *Revista de Lingüística y Lenguas Aplicadas*, *7*(1), 133-146. https://doi.org/10.4995/rlyla.2012.1129

Genesee, F., & Lindholm-Leary, K. (2013). Two case studies of content-based language education. *Journal of Immersion and Content-Based Language Education*, *1*(1), 3-33. https://doi.org/10.1075/jicb.1.1.02gen

Genesee, F., & Nicoladis, E. (2007). Bilingual First Language Acquisition. In E. Hoff & M. Shatz (Eds.), *Blackwell Handbook of Language Development* (pp. 324-342). Blackwell Publishing. https://doi.org/10.1002/9780470757833.ch16

Graham, K. M., & Eslami, Z. R. (2021). English-Medium Instruction. In H. Mohebbi & C. Coombe (Eds.), *Research Questions in Language Education and Applied Linguistics* (pp. 59-62). Springer. https://doi.org/10.1007/978-3-030-79143-8_11

Graham, S., Courtney, L., Marinis, T., & Tonkyn, A. (2017). Early Language Learning: The Impact of Teaching and Teacher Factors: Early Language Learning. *Language Learning*, *67*(4), 922-958. https://doi.org/10.1111/lang.12251

Grice, H. P. (1975). Logic and Conversation. In P. Cole & J. L. Morgan. (Eds.), *Syntax and Semantics, Speech Acts* (pp. 41-58). Academic Press.

Guzmán-Alcón, I. (2022). Language attitudes and third language writing in a multilingual educational context. *Language Value*, *15*(1), 30-51. https://doi.org/10.6035/languagev.6217

Guzmán-Alcón, I., & Portolés, L. (2021). In-service teachers' language attitudes in the Valencian educational system: The effect of the school language programme and the L1. *Caplletra. Revista Internacional de Filologia*, *71*(1), 121-146. https://doi.org/10.7203/caplletra.71.21034

Halliday, M. A. K. (1975). Learning How to Mean. In E. H. Lenneberg & E. Lenneberg (Eds.). *Foundations of Language Development* (pp. 239-265). Elsevier. https://doi.org/10.1016/B978-0-12-443701-2.50025-1

Harley, C. B., Futcher, A. B., & Greider, C. W. (1990). Telomeres shorten during ageing of human fibroblasts. *Nature*, *345*(6274), 458-460. https://doi.org/10.1038/345458a0

Hatch, E. (1978). *Second Language Acquisition: A Book of Readings.* Newbury House.

Hellekjær, G. O. (2010). Language matters: Assessing lecture comprehension in Norwegian English-medium higher education. In C. Dalton-Puffer, T. Nikula, & U. Smit (Eds.), *Language Use and Language Learning in CLIL Classrooms* (Part III. CLIL at the Tertiary Level) (pp. 233-258). John Benjamins.

Herraiz-Martínez, A. (2018). *Functional adequacy the effect of English Medium Instruction, English Proficiency and previous language learning experiences* [Unpublished doctoral dissertation]. Universitat Jaume I.

Herraiz-Martinez, A., & Alcón-Soler, E. (2019). Pragmatic outcomes in the English-mediuminstruction context. *Applied Pragmatics*, *1*(1), 68-91. https://doi.org/10.1075/ap.00004.her

Herraiz-Martínez, A., & Sánchez-Hernández, A. (2019). Pragmatic Markers Produced by Multilingual Speakers: Evidence From a CLIL Context. *English Language Teaching*, *12*(2), 68-76. https://doi.org/10.5539/elt.v12n2p68

Hismanoglu, M. (2011). An investigation of ELT students' intercultural communicative competence in relation to linguistic proficiency, overseas experience and formal instruction. *International Journal of Intercultural Relations*, *35*(6), 805-817.

Hoff, E. (2006). How social contexts support and shape language development. *Developmental Review*, *26*(1), 55-88. https://doi.org/10.1016/j.dr.2005.11.002

Housen, A., Kuiken, F., & Vedder, I. (2012). Complexity, accuracy and fluency: Definitions, measurement and research. *Dimensions of L2 Performance and Proficiency: Investigating Complexity, Accuracy and Fluency in SLA*, *32*(1) 1-20. https://doi.org/10.1075/lllt.32

Housen, A., & Simoens, H. (2016). Introduction: Cognitive perspectives on difficulty and complexity in L2 acquisition. *Studies in Second Language Acquisition*, *38*(2), 163-175. https://doi.org/10.1017/S0272263116000176

Hüttner, J. (2020). Disciplinary language at school: A site of integration in content-and-language integrated learning (CLIL). In I. Hedlandova Kalischova & M. Nemec (Eds.), *Functional plurality of language in contextualised discourse* (pp. 63-76). Masaryk University.

Hymes, D. (1972). On Communicative Competence. In J. Pride & J. Holmes (Eds.), *Sociolinguistics* (pp. 269-285). Harmondsworth: Penguin Books.

Ife, A., Vives-Boix, G., and Meara, P. (2000). The impact of study abroad on vocabulary development among different proficiency groups. *Spanish Applied Linguistics, 4*(1), 55-84.

Infante, D., Benvenuto, G., & Lastrucci, E. (2008). Integrating content and language at primary school in Italy: Ongoing experimental research. *International CLIL Research Journal, 1*(1), 74-82.

Ioannou-Georgiou, S. (2012). Reviewing the puzzle of CLIL. *ELT Journal*, *66*(4), 495-504. https://doi.org/10.1093/elt/ccs047

Israel, H. F. (2013). Language Learning Enhanced by Music and Song. *Literacy Information and Computer Education Journal*, *Special 2*(1), 1360-1366. https://doi.org/10.20533/licej.2040.2589.2013.0180

Jacobs, H., Zinkgraf, S., Wormuth, D., Hearfiel, V., & Hughey, J. (1981). *Testing ESL Composition: A Practical Approach*. Longman Higher Education.

Jäppinen, A. K. (2005). Thinking and Content Learning of Mathematics and Science as Cognitional Development in Content and Language Integrated Learning (CLIL): Teaching Through a Foreign Language in Finland. *Language and Education*, *19*(2), 147-168. https://doi.org/10.1080/09500780508668671

Jensen, S. H. (2017). Gaming as an English Language Learning Resource among Young Children in Denmark. *CALICO Journal*, *34*(1), 1-19. https://doi.org/10.1558/cj.29519

Jessner, U. (2013). Dynamics of Multilingualism. In C. A. Chapelle (Ed.), *The Encyclopedia of Applied Linguistics* (pp. 1798-1805). Wiley-Blackwell. https://doi.org/10.1002/9781405198431.wbeal0347

Jexenflicker, S., & Dalton-Puffer, C. (2010). The CLIL differential: Comparing the writing of CLIL and non-CLIL students in higher colleges of technology. In C. Dalton-Puffer, T.

Nikula, & U. Smit (Eds.), *AILA Applied Linguistics Series* (pp. 169-190). John Benjamins. https://doi.org/10.1075/aals.7.09jex

Jiménez-Catalán, R. M., Ruiz de Zarobe, Y., & Cenoz, J. (2006). Vocabulary profiles of English foreign language learners in English as a subject and as a vehicular language. *Vienna English Working Papers:Special Issue: Current Research on CLIL 1, 15(1)*, 23-27.

Jiménez-Catalán, R. M., & Fernández-Fontecha, A. (2015). Lexical phrases in compositions by CLIL and non-CLIL EFL learners. In D. Marsh, M. L. Pérez Cañado, & J. Ráez Padilla (Eds.), *Spanish CLIL in Action: Voices from the Classroom* (pp. 186-199). Cambridge Scholars.

Juan-Garau, M., & Salazar-Noguera, J. (2015). Introduction: The Relevance of CLIL Education in Achieving Multilingualism on the Global Stage. In M. Juan-Garau & J. Salazar-Noguera (Eds.), *Content-based Language Learning in Multilingual Educational Environments* (pp. 1-10). Springer. https://doi.org/10.1007/978-3-319-11496-5_1

Kasper, G., & Roever, C. (2005). P*ragmatics in Second Language Learning. In Handbook of Research in Second Language Teaching and Learning.* Routledge.

Khanam, Z. (2020). Social Media Use and Academic Performance: A Study on Undergraduate Accounting Students of Bangladesh. *Asian Journal of Accounting Perspectives*, *13*(2), 78-95. https://doi.org/10.22452/AJAP.vol13no2.5

Knoch, U. (2011). Rating scales for diagnostic assessment of writing: What should they look like and where should the criteria come from? *Assessing Writing*, *16*(2), 81-96. https://doi.org/10.1016/j.asw.2011.02.003

Knoch, U., Rouhshad, A., Oon, S. P., & Storch, N. (2015). What happens to ESL students' writing after three years of study at an English medium university? *Journal of Second Language Writing*, *28*, 39-52. https://doi.org/10.1016/j.jslw.2015.02.005

Kobayashi, H., & Rinnert, C. (2023). *Developing Multilingual Writing: Agency, Audience, Identity*. Springer. https://doi.org/10.1007/978-3-031-12045-9

Kondo, S. (2001). Instructional Effects on Pragmatic Development: Refusal by Japanese EFL Learners. *Publications of Akenohoshi Women's Junior College. 19*, 33-51.

Koolstra, C. M., & Beentjes, J. W. J. (1999). Children's vocabulary acquisition in a foreign language through watching subtitled television programmes at home. *Educational Technology Research and Development*, *47*(1), 51-60. https://doi.org/10.1007/BF02299476

Kramsch, C. (2012). Language, Culture, and Context. In C. A. Chapelle (Ed.), *The Encyclopedia of Applied Linguistics*, *27*(1), 30-50. Blackwell Publishing. https://doi.org/10.1002/9781405198431.wbeal0661

Krashen, S. (1977). The Monitor Model for second language performance. In M. Burt, H. Dulay, & M. Finocchiaro, (Eds.), *Viewpoints on English as a Second Language* (pp. 152-161) Regents.

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

Krashen, S. (1985). *The input hypothesis: Issues and implications.* Longman.

Kuckartz, U. (2016). *Qualitative Inhaltsanalyse: Methoden, Praxis, Computerunterstützung Grundlagentexte Methoden.* Beltz Juventa.

Kuiken F., Vedder I., Gilabert R. (2010). Communicative adequacy and linguistic complexity in L2 writing. In I. Bartning, M. Martin, & I. Vedder (Eds.), *Communicative proficiency and linguistic development: Intersections between SLA and language testing research* (pp. 81-100). Eurosla Monographs Series 1.

Kuiken F., & Vedder I. (2014). Rating written performance: What do raters do and why? *Language Testing*, *31*(3), 329-348.

Kuiken, F., & Vedder, I. (2017). Functional adequacy in L2 writing: Towards a new rating scale. *Language Testing*, *34*(3), 321-336. https://doi.org/10.1177/0265532216663991

Kuiken, F., & Vedder, I. (2018). Assessing functional adequacy of L2 performance in a task-based approach. In N. Taguchi & Y. Kim (Eds.), *Task-Based Language Teaching* (pp. 266-285). John Benjamins. https://doi.org/10.1075/tblt.10.11

Kuiken, F., & Vedder, I. (2022). The assessment of functional adequacy in language performance. *Journal on Task-Based Language Teaching and Learning*, *2*(1), 1-7. https://doi.org/10.1075/task.21009.kui

Kuppens, A. H. (2010). Incidental Foreign Language Acquisition from Media Exposure. *Learning, Media and Technology*, *35*, 65-85. https://doi.org/10.1080/17439880903561876

Langford-Morris, C. H. (1938). Foundations of the theory of signs. International encyclopaedia of unified science. *Journal of Symbolic Logic*, *3*(4), 158-178. https://doi.org/10.2307/2267781

Lasagabaster, D. (2008). Foreign Language Competence in Content and Language Integrated Courses. *The Open Applied Linguistics Journal*, *1*(1), 31-42. http://dx.doi.org/10.2174/1874913500801010030

Lasagabaster, D. (2021). Learning language by studying content. In E. Macaro & R. Woore, (Eds.), *Debates in Second Language Education* (pp. 89-105). Routledge. https://doi.org/10.4324/9781003008361-7

Lasagabaster, D., & Huguet, Á. (2007). *Multilingualism in European bilingual context*. Multilingual Matters.

Lasagabaster, D., & Sierra, J. (2009). Language attitudes in CLIL and traditional EFL classes. *International CLIL Research Journal*, *1*(2), 4-17.

Lasagabaster, D., & Ruiz de Zarobe, Y. (2010). *CLIL in Spain: Implementation, results and teacher training*. Cambridge Scholars.

Lasagabaster, D., & Doiz, A. (2015). A Longitudinal Study on the Impact of CLIL on Affective Factors. *Applied Linguistics*, *38*(5) 688-712. https://doi.org/10.1093/applin/amv059

Leech, G. N. (1983). *Principles of pragmatics*. Routledge.

Levinson, S. C. (1983). *Pragmatics.* Cambridge University Press.

Lin, A. M. Y., & He, P. (2017). Translanguaging as Dynamic Activity Flows in CLIL Classrooms. *Journal of Language, Identity & Education*, *16*(4), 228-244. https://doi.org/10.1080/15348458.2017.1328283

Llanes, À. (2012). The short- and long-term effects of a short study abroad experience: The case of children. *System*, *40*(2), 179-190. https://doi.org/10.1016/j.system.2012.05.003

Llanes, À., & Muñoz, C. (2009). A short stay abroad: Does it make a difference? *System*, *37*(3), 353-365. https://doi.org/10.1016/j.system.2009.03.001

Llanes, À., & Muñoz, C. (2013). Age Effects in a Study Abroad Context: Children and Adults Studying Abroad and at Home: Age Effects in a Study Abroad Context. *Language Learning*, *63*(1), 63-90. https://doi.org/10.1111/j.1467-9922.2012.00731.x

Llanes, À., & Serrano, R. (2014). The effectiveness of classroom instruction 'at home' versus study abroad for learners of English as a foreign language attending primary school, secondary school and university. *The Language Learning Journal*, *45*(4), 434-446. https://doi.org/10.1080/09571736.2014.923033

Llanes, À., Tragant, E., & Serrano, R. (2015). Examining the role of learning context and individual differences in gains in L2 writing performance: The case of teenagers on an intensive study-abroad programme. *The Language Learning Journal*, *46*(2), 201-216. https://doi.org/10.1080/09571736.2015.1020332

Llanes, À., Mora, J. C., & Serrano, R. (2017). Differential effects of SA and intensive AH courses on teenagers' L2 pronunciation: Spanish/Catalan teenagers' L2 pronunciation. *International Journal of Applied Linguistics*, *27*(2), 470-490.

https://doi.org/10.1111/ijal.12151

Llinares, A., & Whittaker, R. (2007). Talking and Writing in a Foreign Language in CLIL contexts: A Linguistic Analysis of secondary school learners of geography and history. *Revista Española de Lingüística Aplicada, 1, 83-94.*

Llinares, A., & Whittaker, R. (2010). Writing and speaking in the history class: A comparative analysis of CLIL and first language contexts. In C. Dalton-Puffer, T. Nikula, & U. Smit (Eds.), *AILA Applied Linguistics Series* (pp. 125-124). John Benjamins. https://doi.org/10.1075/aals.7.07lli

Llinares, A., Morton, T., & Whittaker, R. (2012). *The roles of language in CLIL*. Cambridge University Press.

Llinares, A., & Pastrana, A. (2013). CLIL students' communicative functions across activities and educational levels. *Journal of Pragmatics*, *59*, 81-92. https://doi.org/10.1016/j.pragma.2013.05.011

Llinares, A., & Dalton-Puffer, C. (2015). The role of different tasks in CLIL students' use of evaluative language. *System*, *54*, 69-79. https://doi.org/10.1016/j.system.2015.05.001

Llinares, A. & Morton, T. (2017). *Applied Linguistics Perspectives on CLIL*. John Benjamins. https://doi.org/10.1075/lllt.47

Llinares, A. & Nashaat-Sobhy, N. (2021) What is an ecosystem? Defining science in primary school CLIL contexts. *Language Teaching for Young Learners*, *3*(2), 337-362.

Llinares, A., & Nikula, T. (2023). CLIL students' production of cognitive discourse functions: comparing Finnish and Spanish contexts. *Language and Education*, 1-20.

Llinares, A., & McCabe, A. (2023). Systemic functional linguistics: The perfect match for content and language integrated learning. *International Journal of Bilingual Education and Bilingualism*, *26*(3), 245-250. https://doi.org/10.1080/13670050.2019.1635985

Lo, Y. Y., & Lin, A. M. Y. (2019). Teaching, learning and scaffolding in CLIL science classrooms. *Journal of Immersion and Content-Based Language Education*, *7*(2), 151-165. https://doi.org/10.1075/jicb.00006.lo

Long, M. (1980). *Input, interaction, and second language acquisition* [Unpublished doctoral dissertation]. UCLA.

Long, M. (1983). Native speaker/non-native speaker conversation and negotiation of comprehensible input. *Applied Linguistics, 4(*2), 126-141.

Lorenzo, F. (2007). The sociolinguistics of CLIL: Language planning and language change in 21st century Europe. *Revista Espanola de Linguistica Aplicada, 1*(1)*,* 27-38. https://doi.org/10.1075/jicb.00006.lo

Lorenzo, F., Casal, S., & Moore, P. (2010). The Effects of Content and Language Integrated Learning in European Education: Key Findings from the Andalusian Bilingual Sections Evaluation Project. *Applied Linguistics*, *31*(3), 418-442. https://doi.org/10.1093/applin/amp041

Luarn, P., Lin, Y-F., & Chiu, Y-P. (2015). Influence of Facebook brand-page posts on online engagement. *Online Information Review*, *39*(4), 505-519. https://doi.org/10.1108/OIR-01-2015-0029

Lyster, R. (2007). *Learning and Teaching Languages Through Content: A counterbalanced approach*. John Benjamins. https://doi.org/10.1075/lllt.18

Lyster, R., & Ranta, L. (1997). Corrective feedback and learner uptake: Negotiation of Form in Communicative Classrooms. *Studies in Second Language Acquisition*, *19*(1), 37-66. https://doi.org/10.1017/S0272263197001034

MacFarlane, A., & Wesche, M. B. (1995). Immersion Outcomes: Beyond Language Proficiency. *The Canadian Modern Language Review*, *51*(2), 250-274. https://doi.org/10.3138/cmlr.51.2.250

Malaney, G. D. (2004). Student Use of the Internet. *Journal of Educational Technology Systems*, *33*(1), 53-66. https://doi.org/10.2190/VQRQ-YQX6-ARKL-7D2T

Mañoso-Pacheco, L. (2023). Teachers' Code-Switching in Bilingual Primary Education: A Literary Review of its Pedagogical Functions. In J. L. Estrada Chichón & F. Zayas Martínez (Eds.), *Advances in Early Childhood and K-12 Education* (pp. 22-40). IGI Global. https://doi.org/10.4018/978-1-6684-6179-2.ch002

Martí, O., & Portolés, L. (2019). Spokes in the Wheels of CLIL for Multilingualism or How monolingual ideologies limit teacher training. *English Language teaching, 12*(2), 17-36. https://doi.org/10.5539/elt.v12n2p17

Martí, O., & Portolés, L. (2022). The effect of individual factors on L3 teachers' beliefs about multilingual education. *Language, Culture and Curriculum, 35*(4), 353-370. https://doi.org/10.1080/07908318.2021.1999463

Martínez-Adrián, M., & Gutiérrez-Mangado, M. J. (2015). Is CLIL instruction beneficial in terms of general proficiency and specific areas of grammar? *Journal of Immersion and Content-Based Language Education*, *3*(1), 51-76. https://doi.org/10.1075/jicb.3.1.03adr

Martínez-Lahuerta, A. (2017). Analysis of the effect of CLIL programmes on the written competence of secondary education students. *Revista de Filología, 35*(1), 169-184.

Martín-Laguna, S., & Alcón-Soler, E. (2018). Development of discourse-pragmatic markers in a multilingual classroom: A mixed method research approach. *System*, *75*, 68-80. https://doi.org/10.1016/j.system.2018.03.009

Martín-Laguna, S. (2020). *Tasks, Pragmatics and Multilingualism in the Classroom: A Portrait of Adolescent Writing in Multiple Languages*. Multilingual Matters. https://doi.org/10.21832/9781788923651

Martín-Laguna, S. (2022). The multilingual turn in pragmatics: is the use of hedges and attitude markers shared across languages in trilingual writing? *Applied Pragmatics, 4*(1), 63-91. https://doi.org/10.1075/ap.20024.mar

Martinsen, R. A., Baker, W., Bown, J., & Johnson, C. (2011). The Benefits of Living in Foreign Language Housing: The Effect of Language Use and Second-Language Type on Oral Proficiency Gains. *The Modern Language Journal*, *95*(2), 274-290. https://doi.org/10.1111/j.1540-4781.2011.01180.x

Mary-Coonan, C. (2007). Insider Views of the CLIL Class Through Teacher Self-observation-Introspection. *International Journal of Bilingual Education and Bilingualism*, *10*(5), 625-646. https://doi.org/10.2167/beb463.0

Mattheoudakis, M., Alexiou, T., & Laskaridou, C. (2014). To CLIL or Not to CLIL? The Case of the 3rd Experimental Primary School in Evosmos. In N. Lavidas, T. Alexiou, & A-M. Sougari (Eds.), *Major Trends in Theoretical and Applied Linguistics, 3,* 215-234. https://doi.org/10.2478/9788376560915.p13

May, S. (2014). *The Multilingual Turn: Implications for SLA, TESOL, and Bilingual Education*. Routledge. https://doi.org/10.4324/9780203113493

McNamara T., & Roever C. (2007). *Testing: The social dimension*. Blackwell.

Mehisto, P., & Asser, H. (2007). Stakeholder Perspectives: CLIL Programme Management in Estonia. *International Journal of Bilingual Education and Bilingualism*, *10*(5), 683-701. https://doi.org/10.2167/beb466.0

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

Menezes, E., & Juan-Garau, M. (2015). English Learners' Willingness to Communicate and Achievement in CLIL and Formal Instruction Contexts. In M. Juan-Garau & J. Salazar-Noguera (Eds.), *Content-based Language Learning in Multilingual Educational Environments* (pp. 221-236). Springer. https://doi.org/10.1007/978-3-319-11496-5_13

Merino, J. A., & Lasagabaster, D. (2017). The effect of content and language integrated learning programmes' intensity on English proficiency: A longitudinal study. *International Journal of Applied Linguistics*, *28*(1), 18-30. https://doi.org/10.1111/ijal.12177

Merisuo-Storm, T. (2006). Development of Pupils' Writing Skills in Bilingual Education. *The International Journal of Learning: Annual Review*, *12*(1), 128-133. https://doi.org/10.18848/1447-9494/CGP/v12i01/47324

Merisuo-Storm, T., & Soininen, M. (2014). The Interdependence between Young Students' Reading Attitudes, Reading Skills, and Self-Esteem. *Journal of Educational and Social Research*, *4*(2), 122-130. https://doi.org/10.5901/jesr.2014.v4n2p122

Met, M. (1999). *Content-based instruction: Defining terms, making decisions.* National Foreign Language Center.

Meyer, O., Coyle, D., Halbach, A., Schuck, K., & Ting, T. (2015). A pluriliteracies approach to content and language integrated learning: Mapping learner progressions in knowledge construction and meaning-making. *Language, Culture and Curriculum*, *28*(1), 41–57. https://doi.org/10.1080/07908318.2014.1000924

Milton, J. (2009). *Measuring Second Language Vocabulary Acquisition*. Multilingual Matters. https://doi.org/10.21832/9781847692092

Mitchell, R., Tracy-Ventura, N., & McManus, K. (2017). *Anglophone students abroad: Identity, social relationships and language learning*. Routledge.

Morini, G., & Blair, M. (2021). Webcams, Songs, and Vocabulary Learning: A Comparison of In-Person and Remote Data Collection as a Way of Moving Forward With Child-Language Research. *Frontiers in Psychology*, *12*(1), 702-819. https://doi.org/10.3389/fpsyg.2021.702819

Morton, T., & Nashaat-Sobhy, N. (2023). Exploring Bases of Achievement in Content and Language Integrated Assessment in a Bilingual Education Program. *TESOL Quarterly*, *57*(1), 1-27. https://doi.org/10.1002/tesq.3207

Muñoz, C. (2006). The Effects of Age on Foreign Language Learning: The BAF Project. In C. Muñoz (Ed.), *Age and the Rate of Foreign Language Learning* (pp. 1-40). Multilingual Matters. https://doi.org/10.21832/9781853598937-003

Muñoz, C. (2011). Input and long-term effects of starting age in foreign language learning. *IRAL - International Review of Applied Linguistics in Language Teaching*, *49*(2), 113-133. https://doi.org/10.1515/iral.2011.006

Muñoz, C. (2014). The interaction of L1 timing, onset age and input in second/foreign language acquisition. *Linguistic Approaches to Bilingualism*, *4*(3), 369-373. https://doi.org/10.1075/lab.4.3.12mun

Muñoz, C. (2022). Audio-visual input in L2 learning. *Language, Interaction and Acquisition*, *13*(1), 125-143. https://doi.org/10.1075/lia.22001.mun

Muñoz, C., & Cadierno, T. (2021). How do differences in exposure affect English language learning? A comparison of teenagers in two learning environments. *Studies in Second Language Learning and Teaching*, *11*(2), 185-212. https://doi.org/10.14746/ssllt.2021.11.2.2

Muñoz, C., Cadierno, T., & Casas, I. (2018). Different Starting Points for English Language Learning: A Comparative Study of Danish and Spanish Young Learners: Different Starting Points. *Language Learning*, *68*(4), 1076-1109. https://doi.org/10.1111/lang.12309

Muñoz, C., Pattemore, A., & Avello, D. (2022). Exploring repeated captioning viewing as a way to promote vocabulary learning: Time lag between repetitions and learner factors. *Computer Assisted Language Learning*, *35*(1) 1-27. https://doi.org/10.1080/09588221.2022.2113898

Muñoz, C., Pujadas, G., & Pattemore, A. (2021). Audio-visual input for learning L2 vocabulary and grammatical constructions. *Second Language Research*, *39*(1), 13-37. https://doi.org/10.1177/02676583211015797

Murphy, T. (2001). The emergence of texture: An analysis of the functions of the nominal demonstratives in an English interlanguage corpus. *Language Learning & Technology, 5(*3), 152-173. https://dx.doi.org/10.1257/0002828042001943

Murphy, V. (2019). Multilingualism in primary schools. In Y. Bayyurt & S. Akcan (Eds.), *The Routledge Handbook of Teaching English to Young Learners* (pp. 110-124). Routledge.

Nashaat-Sobhy, N. (2018). Pragmatics in CLIL: A comparison of CLIL and non-CLIL students' requests. *Revista Española de Lingüística Aplicada/Spanish Journal of Applied Linguistics*, *31*(2), 467-494. https://doi.org/10.1075/resla.16040.nas

Navés, T., Torras, M. R., & Celaya, M. L. (2003). Long-term effects of an earlier start: An analysis of EFL written production. *EUROSLA Yearbook*, *3*, 103-129. https://doi.org/10.1075/eurosla.3.08nav

Navés, T. & Victori, M. (2010). CLIL in Catalonia: an Overview of Research Studies. In D. Lasagabaster & Y. Ruiz de Zarobe (Eds.), *CLIL in Spain: Implementation, Results and Teacher Training* (pp. 30-54). Cambridge Scholars Publishing.

Nieto-Moreno de Diezmas, E. (2022). Literacy Development in L1 in Bilingual Education: Evidence From Research on CLIL in Primary School. In I. R. Management Association (Ed.), *Research Anthology on Bilingual and Multilingual Education* (pp. 327-351). IGI Global. https://doi.org/10.4018/978-1-6684-3690-5.ch018

Nightingale, R. (2014). Well I Never!: Formulaic Language as a Pragmatic Resource in Child Entertainment Media. In D. Gabryś-Barker & A. Wojtaszek (Eds.), *Studying Second Language Acquisition from a Qualitative Perspective* (pp. 203-218). Springer. https://doi.org/10.1007/978-3-319-08353-7_14

Nightingale, R. (2016). *The effect of out-of-school media contact on language attitudes in multilingual adolescents: A complex psychosociolinguistic system* [Unpublished doctora dissertation]. Universitat Jaume I. https://doi.org/10.6035/14018.2016.252200

Nikula, T. (2008). Learning pragmatics in content-based classrooms. In E. Alcón-Soler & A. Martínez-Flor (Eds.), *Investigating Pragmatics in Foreign Language Learning, Teaching and Testing* (pp. 94-113). Multilingual Matters. https://doi.org/10.21832/9781847690869-007

Nikula, T., & Marsh, D. (1998). Terminological considerations regarding content and language integrated learning. *Language Teaching Research, 2*(1), 21-24. https://doi.org/10.4018/978-1-6684-3690-5.ch018

Nikula, T., Dalton-Puffer, C., Llinares, A., & Lorenzo, F. (2016). More Than Content and Language: The Complexity of Integration in CLIL and Bilingual Education. In T. Nikula, E. Dafouz, P. Moore, & U. Smit (Eds.), *Conceptualising Integration in CLIL and Multilingual Education* (pp. 1-26). Multilingual Matters. https://doi.org/10.21832/9781783096145-004

Ojeda-Alba, J. O. (2009). Themes and Vocabulary in CLIL and non-CLIL Instruction. In Y. Ruiz de Zarobe & R. M. Jiménez-Catalán (Eds.), *Content and Language Integrated Learning* (pp. 130-156). Multilingual Matters. https://doi.org/10.21832/9781847691675-011

Olsson, E., & Sylvén, L. (2015). Extramural English and academic vocabulary. *Apples Journal of Applied Language Studies*, *9*(2), 77-103. https://doi.org/10.17011/apples/urn.201512234129

Orcasitas-Vicandi, M. (2022). Towards a multilingual approach in assessing writing: Holistic, analytic and cross-linguistic perspectives. *International Journal of Bilingual Education and Bilingualism*, *25*(6), 2186-2207. https://doi.org/10.1080/13670050.2021.1894089

Orcasitas-Vicandi, M., & Perales-Fernández-de-Gamboa, A. (2022). Promoting pedagogical translanguaging in pre-service teachers' training: material design for a multilingual context with a regional minority language. *International Journal of Multilingualism*, 1-21. https://doi.org/10.1080/14790718.2022.2029866

Ortega, L. (2013). SLA for the 21st Century: Disciplinary Progress, Transdisciplinary Relevance, and the Bi/multilingual Turn: SLA for the 21st Century. *Language Learning*, *63*, 1-24. https://doi.org/10.1111/j.1467-9922.2012.00735.x

Otto, A., & Cortina-Pérez, B. (2023). *Handbook of CLIL in Pre-primary Education*. Springer. https://doi.org/10.1007/978-3-031-04768-8

Otto, A., & Estrada, J. L. (2019). Towards an Understanding of CLIL Assessment Practices in a European Context: Main Assessment Tools and the Role of Language in Content Subjects. *Journal of Innovation and Research in Plurilingual and Pluricultural Education*, *2*(1), 31-42. https://doi.org/10.5565/rev/clil.11

Pallotti, G. (2009). CAF: Defining, Refining and Differentiating Constructs. *Applied Linguistics*, *30*(4), 590-601. https://doi.org/10.1093/applin/amp045

Pattemore, A., & Muñoz, C. (2020). Learning L2 constructions from captioned audio-visual exposure: The effect of learner-related factors. *System*, *93*, 102-303. https://doi.org/10.1016/j.system.2020.102303

Pavia, N., Webb, S., & Faez, F. (2019). Incidental vocabulary learning through listening to songs. *Studies in Second Language Acquisition*, *41*(04), 745-768. https://doi.org/10.1017/S0272263119000020

Pavlovic, B. R., & Markovic, J. D. (2012). CLIL in Serbian classrooms. In R. Popovic & V. Savic (Eds.), *Content and Language Integrated Learning in Teaching Young Learners* (pp. 2-18). Faculty of education in Jagodina. City Press.

Pavón-Vázquez, V. (2020). Describing the Implementation of Language Policies in Internationalised Higher Education: The Case of Spain. In Z. Anikina (Ed.), *Integrating Engineering Education and Humanities for Global Intercultural Perspectives* (pp. 82-91). Springer. https://doi.org/10.1007/978-3-030-47415-7_9

Pérez, M. C., & Basse, R. (2015). Analysing Errors of CLIL and non-CLIL Primary School Students in their Written and Oral Productions: A Comparative Study. *Procedia - Social and Behavioral Sciences*, *173*, 11-17. https://doi.org/10.1016/j.sbspro.2015.02.023

Pérez-Cañado, M. (2012). CLIL research in Europe: Past, present, and future. *International Journal of Bilingual Education and Bilingualism*, *15*, 1-27. https://doi.org/10.1080/13670050.2011.630064

Pérez-Vidal, C. (2007). The need for focus on form (FoF) in content and language integrated approaches: An exploratory study. *Revista Española de Linguistica Aplicada,1*(1), 39-54.

Pérez-Vidal, C. (2008). El enfoque integrado de contenidos y lenguas en Europa: Principios sociales educativos y psicolingüísticos. Aula de innovación educativa, *168* ,7-16.

Pérez-Vidal, C., & Juan-Garau, M. (2009). The effect of Study Abroad (SA) on written performance. *EUROSLA Yearbook*, *9*, 269-295. https://doi.org/10.1075/eurosla.9.13per

Pérez-Vidal, C., & Juan-Garau, M. (2011). The effect of context and input conditions on oral and written development: A Study Abroad perspective. *IRAL - International Review of Applied Linguistics in Language Teaching*, *49*(2), 157-185. https://doi.org/10.1515/iral.2011.008

Pérez-Vidal, C., & Barquin, E. (2014). Comparing progress in academic writing after formal instruction and study abroad. In C. Pérez-Vidal (Ed.), *AILA Applied Linguistics Series* (pp. 217-234). John Benjamins. https://doi.org/10.1075/aals.13.11ch9

Pérez-Vidal, C. (2015). Languages for All in Education: CLIL and ICLHE at the Crossroads of Multilingualism, Mobility and Internationalisation. In M. Juan-Garau & J. Salazar-Noguera (Eds.), *Content-based Language Learning in Multilingual Educational Environments* (pp. 31-50). Springer. https://doi.org/10.1007/978-3-319-11496-5_3

Pérez-Vidal, C., & Roquet, H. (2015). CLIL in Context: Profiling Language Abilities. In M. Juan-Garau & J. Salazar-Noguera (Eds.), *Content-based language learning in multilingual educational environments* (pp. 237-255). Springer. https://doi.org/10.1007/978-3-319-11496-5_14

Pérez-Vidal C., & Lasagabaster, D. (2021). Writing in CLIL. In R. Manchón & C. Polio (Eds.) *The Routledge Handbook of Writing.* Routledge.

Piesche, N., Jonkmann, K., Fiege, C., & Keßler, J.-U. (2016). CLIL for all? A randomised controlled field experiment with sixth-grade students on the effects of content and language integrated science learning. *Learning and Instruction*, *44*, 108-116. https://doi.org/10.1016/j.learninstruc.2016.04.001

Pinter, A. (2019). Research issues with young learners. In S. Garton & F. Copland (Eds.), *The Routledge Handbook of Teaching English to Young Learners* (pp. 411-424). Routledge.

Pinter, A., & Zandian, S. (2014). 'I don't ever want to leave this room': benefits of researching 'with' children. *ELT journal, 68*(1), 64-74. https://doi.org/10.1093/elt/cct057

Pladevall-Ballester, E., & Vallbona, A. (2016). CLIL in minimal input contexts: A longitudinal study of primary school learners' receptive skills. *System*, *58*, 37-48. https://doi.org/10.1016/j.system.2016.02.009

Portolés, L., & Martín-Laguna, S. (2012). Code switching in classroom discourse: A multilingual approach. In E. Alcón-Soler & P. Safont (Eds.), *Discourse and language learning across L2 instructional settings* (pp. 295-319). Brill. https://doi.org/10.1163/9789401208598

Portolés, L. (2014). Analysing prospective teachers' attitudes towards three languagesin two different sociolinguistic and educational settings. In A. Otwinowska & G. De Angelis (Eds.), *Teaching and learning in multilingual contexts: sociolinguisticand educational perspectives* (pp. 50-75). Multilingual Matters.

Portolés, L. (2015). *Multilingualism and very young learners. An analysis of pragmatic awarenessand language attitudes.* De Gruyter. DOI: 10.1515/9781501500022.

Portolés, L., & Safont, P. (2018). Examining authentic and elicited data from a multilingual perspective. The real picture of child requestive behaviour in the L3 classroom. *System*, *75*, 81-92. https://doi.org/10.1016/j.system.2018.03.012

Portolés, L. (2020). El multilingüisme a l'escola: Tendències educatives i nous reptes. *Caplletra. Revista Internacional de Filologia*, *68*, 125-147. https://doi.org/10.7203/caplletra.68.16474

Portolés, L., & Martí, O. (2020). Teachers' beliefs about multilingual pedagogies and the role of initial training. *International Journal of Multilingualism*, *17*(2), 248-264. https://doi.org/10.1080/14790718.2018.1515206

Portolés, L., & Safont, P. (2020). Presentació del monogràfic «Retrat de l'educació multilingüe». *Caplletra. Revista Internacional de Filologia*, *68*, 119-123. https://doi.org/10.7203/caplletra.68.16472

Prieto-Arranz, J. I., Rallo Fabra, L., Calafat-Ripoll, C., & Catrain-González, M. (2015). Testing Progress on Receptive Skills in CLIL and Non-CLIL Contexts. In M. Juan-Garau & J. Salazar-Noguera (Eds.), *Content-based Language Learning in Multilingual Educational Environments* (pp. 123-137). Springer. https://doi.org/10.1007/978-3-319-11496-5_8

Pujadas, G., & Muñoz, C. (2020). Examining adolescent EFL learners' TV viewing comprehension through captions and subtitles. *Studies in Second Language Acquisition*, *42*(3), 551-575. https://doi.org/10.1017/S0272263120000042

Rallo-Fabra, L., & Jacob, K. (2015). Does CLIL Enhance Oral Skills? Fluency and Pronunciation Errors by Spanish-Catalan Learners of English. In M. Juan-Garau & J. Salazar-Noguera (Eds.), *Content-based Language Learning in Multilingual Educational Environments* (pp. 163-177). Springer. https://doi.org/10.1007/978-3-319-11496-5_10

Rasulo, M., De Meo, A., & De Santo, M. (2017). Processing Science Through Content and Language Integrated Learning (CLIL): A Teacher's Practicum. In A. W. Oliveira & M. H. Weinburgh (Eds.), *Science Teacher Preparation in Content-Based Second Language Acquisition* (pp. 305-322). Springer. https://doi.org/10.1007/978-3-319-43516-9_17

Reitbauer, M., Fürstenberg, U., Kletzenbauer, P., & Marko, K. (2018). Towards a Cognitive-Linguistic Turn in CLIL: Unfolding Integration. *Latin American Journal of Content & Language Integrated Learning*, *11*(1), 87-108. https://doi.org/10.5294/laclil.2018.11.1.5

Reynolds, C. R., & Kamphaus, R. W. (2003). *Handbook of Psychological and Educational Assessment of Children: Intelligence, Aptitude, and Achievement.* Guilford. https://doi.org/10.1177/0734282906293685

Roever, C., & McNamara, T. (2007). Language testing: The social dimension. *International Journal of Applied Linguistics*, *16*(2), 242-258. https://doi.org/10.1111/j.1473-4192.2006.00117.x

Rose, N. (1999). *Powers of Freedom: Reframing Political Thought*. Cambridge University Press. https://doi.org/10.1017/CBO9780511488856

Ruiz de Zarobe, Y. (2008). CLIL and foreign language learning: A longitudinal study in the Basque country. *International CLIL Research Journal*, *1*(1), 60-73.

Ruiz de Zarobe, Y., & Jiménez-Catalán, R. M. (2009). *Content and language integrated learning: Evidence from research in Europe*. Multilingual Matters.

Ruiz de Zarobe, Y. (2010). Written production and CLIL: An empiricial study. In C. Dalton-Puffer, T. Nikula, & U. Smit (Eds.), *AILA Applied Linguistics Series* (pp. 191-210). John Benjamins. https://doi.org/10.1075/aals.7.10rui

Ruiz de Zarobe, Y. (2011). Which language competencies benefit from CLIL? An insight into Applied Linguistics research. *Content and Foreign Language Integrated Learning. Contributions to Multilingualism in European Contexts*, *11*(1)129-153.

Ruiz de Zarobe, Y. (2013). CLIL implementation: From policy-makers to individual initiatives. *International Journal of Bilingual Education and Bilingualism*, *16*(3), 231-243. https://doi.org/10.1080/13670050.2013.777383

Ruiz de Zarobe, Y. (2017). Language Awareness and CLIL. In J. Cenoz, D. Gorter, & S. May (Eds.), *Language Awareness and Multilingualism* (pp. 149-159). Springer. https://doi.org/10.1007/978-3-319-02240-6_13

Safont, P. (2005). *Third Language Learners: Pragmatic Production and Awareness*. Multilingual Matters. https://doi.org/10.21832/9781853598043

Safont, P. (2007). Language use and language attitudes in the Valencian Community. In D. Lasagabaster & A. Huguet (Eds.), *Multilingualism in European Bilingual Contexts: Language Use and attitudes* (pp. 90-116). Multilingual Matters.

Safont, P. (2021). 'In English!' teachers' requests as reactions to learners' translanguaging discourse. *Language, Culture and Curriculum*, *35*(3), 317-333. https://doi.org/10.1080/07908318.2021.1979578

Safont, P. (2023). Multilingual cyberpragmatics in instructional settings. Exploring gender and age effects in Catalan, Spanish and English email requests. *International Journal of Multilingualism*, *20*(1) 1-23. https://doi.org/10.1080/14790718.2023.2187811

Safont, P., & Alcón-Soler, E. (2012). Teachability of request act peripheral modification devices in third language learning contexts. In M. Economidou-Kogetsidis & H. Woodfield (Eds.), *Pragmatics & Beyond New Series* (pp. 275-314). John Benjamins. https://doi.org/10.1075/pbns.217.09saf

Safont, P., & Portolés, L. (2016). Pragmatic functions of formulaic speech in three different languages: A focus on early L3 learners of English. *Journal of Immersion and Content-Based Language Education*, *4*(2), 225-250. https://doi.org/10.1075/jicb.4.2.04saf

Sagasta, M. P. (2003). Acquiring writing skills in a third language: The positive effects of bilingualism. *International Journal of Bilingualism*, *7*(1), 27-42. https://doi.org/10.1177/13670069030070010301

San Isidro, X. (2010). An Insight into Galician CLIL: Provision and Results. En D. Lasagabaster & Y. Ruiz de Zarobe (Eds.), *CLIL in Spain: Implementation, results and teacher training* (pp. 55-78). Cambridge Scholars Publishing.

San Isidro, X., & Lasagabaster, D. (2018). The impact of CLIL on pluriliteracy development and content learning in a rural multilingual setting: A longitudinal study. *Language Teaching Research*, *23*(5), 584-602. https://doi.org/10.1177/1362168817754103

San Isidro, X., & Lasagabaster, D. (2019). Code-switching in a CLIL multilingual setting: A longitudinal qualitative study. *International Journal of Multilingualism*, *16*(3), 336-356. https://doi.org/10.1080/14790718.2018.1477781

Sánchez-Hernández, A. (2018). A mixed-methods study of the impact of sociocultural adaptation on the development of pragmatic production. *System*, *75*, 93-195. https://doi.org/10.1016/j.system.2018.03.00

Sánchez-Hernández, A., & Alcón-Soler, E. (2019). Pragmatic gains in the study abroad context: Learners' experiences and recognition of pragmatic routines. *Journal of pragmatics*, *146*, 54-71.
https://doi.org/10.1016/j.pragma.2018.08.00

Sanz, C. (2008). Predicting enhanced L3 learning in bilingual contexts: The role of biliteracy. In C. Pérez-Vidal, A. Bel, & M. Juan-Garau, (Eds.), *A portrait of the young in the new multilingual Spain* (pp. 220-240). Multilingual Matters.
https://doi.org/10.21832/9781847690241-014

Saussure, F. D. (1959). *Course in general linguistics.* Philosophical Library.

Sasaki, M. (2007). Effects of Study-Abroad Experiences on EFL Writers: A Multiple-Data Analysis. *The Modern Language Journal*, *91*(4), 602-620.
https://doi.org/10.1111/j.1540-4781.2007.00625.x

Sato, T. (2012). The contribution of test-takers' speech content to scores on an English oral proficiency test. *Language Testing*, *29*(2), 223-241.
https://doi.org/10.1177/0265532211421162

Savignon, S. J. (1983). *Communicative competence: Theory and classroom practice ; texts and contexts in second language learning*. Addison-Wesley.

Seikkula-Leino, J. (2007). CLIL Learning: Achievement Levels and Affective Factors. *Language and Education*, *21*(4), 328-341. https://doi.org/10.2167/le635.0

Serra, C. (2007). Assessing CLIL at Primary School: A Longitudinal Study. *International Journal of Bilingual Education and Bilingualism*, *10*, 582-602.
https://doi.org/10.2167/beb461.0

Serra, J., & Feijóo, S. (2022). Teacher translanguaging in CLIL primary education: Do teachers' perceptions match their real practices? *Journal for the Study of Education and Development*, *45*(2), 280-310. https://doi.org/10.1080/02103702.2021.2009294

Serrano, R., Llanes, À., & Tragant, E. (2011). Analyzing the effect of context of second language learning: Domestic intensive and semi-intensive courses vs. study abroad in Europe. *System*, *39*(2), 133-143. https://doi.org/10.1016/j.system.2011.05.002

Serrano, R., & Muñoz, C. (2007). Same hours, different time distribution: Any difference in EFL? *System*, *35*(3), 305-321. https://doi.org/10.1016/j.system.2007.02.001

Sheela, S. K., & Ravikumar, K. (2016). The importance of exposure in learning English as a second language-Strategies to be employed to improve student's language exposure in the context of rapid changes in the field of technology. *Research Journal of English Language and Literature*, *4*(2), 770-774.

Skehan, P. (2009). Modelling Second Language Performance: Integrating Complexity, Accuracy, Fluency, and Lexis. *Applied Linguistics*, *30*(4), 510-532. https://doi.org/10.1093/applin/amp047

Soler, D., Gonzalez-Davies, M., & Inesta, A. (2017). What makes CLIL leadership effective? A case study. *ELT Journal*, *71*, 478-490. https://doi.org/10.1093/elt/ccw093

Sotoca-Sienes, E., & Muñoz Hueso, A. C. (2014). La repercusión del bilingüismo en el rendimiento académico en alumnos de colegios públicos de la Comunidad de Madrid. *Revista Complutense de Educación*, *25*(2), 481-500. https://doi.org/10.5209/rev_RCED.2014.v25.n2.41732

Spada, N., & Lightbown, P. M. (1999). Instruction, First Language Influence, and Developmental Readiness in Second Language Acquisition. *The Modern Language Journal*, *83*(1), 1-22. https://doi.org/10.1111/0026-7902.00002

Strobl, C., & Baten, K. (2021). Writing development during study abroad: The role of language contact and social networks. *Study Abroad Research in Second Language Acquisition and International Education*, *6*(1), 124-162. https://doi.org/10.1075/sar.19015.str

Stoller, F. (2006). Establishing a Theoretical Foundation for Project-Based Learning in Second and Foreign Language Contexts. In G. H. Beckett & P. C. Miller (Eds.), *Project-Based Second and Foreign Language Education: Past, Present, and Future* (pp. 19-40). Information Age.

Stotz, D., & Meuter, T. (2003). Embedded English: Integrating content and language learning in a Swiss primary school project. *Le Bulletin Suisse de Linguistique Appliquée, 77,* 83-101.

Sudha, S., & Kavitha, E. S. (2016). The Effect of Social networking on Students' Academic Performance: the perspective of faculty members of Periyar University, Salem. *Library Philosophy and Practice (ejournal)*, *1455*.

Sundqvist, P., & Wikström, P. (2015). Out-of-School Digital Gameplay and In-School L2 English Vocabulary Outcomes. *System, 51*, 65-76. https://doi.org/10.1016/j.system.2015.04.001

Sundqvist, P., & Sylvén, L. K. (2016). *Extramural English in Teaching and Learning: From Theory and Research to Practice*. Palgrave Macmillan. https://doi.org/10.1057/978-1-137-46048-6

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235-253). Newbury House.

Swain, M. (1995).Three functions of output in second language learning. In G. Cook & B. Seidlhofer (Eds), *Principles and practice in applied linguistics: Studies in honour of H.G. Widowson* (pp. 125-144). Oxford University Press.

Swain, M. (1998). Focus on form through conscious reflection. In C. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 64-81). Cambridge University Press.

Swain, M., & Lapkin, S. (1984). *Evaluating bilingual education: A Canadian case study*. Multilingual Matters.

Sylvén, L. K. (2004). *Teaching in English or English Teaching? On the effects of content and language integrated learning on Swedish learners´ incidental vocabulary acquisition* [Unpublished doctoral dissertation]. University of Gotherburg.

Sylvén, L. K. (2013). CLIL in Sweden - why does it not work? A metaperspective on CLIL across contexts in Europe. *International Journal of Bilingual Education and Bilingualism*, *16*(3), 301-320. https://doi.org/10.1080/13670050.2013.777387

Sylvén, L. K., & Sundqvist, P. (2012). Gaming as extramural English L2 learning and L2 proficiency among young learners. *ReCALL*, *24*(3), 302-321. https://doi.org/10.1017/S095834401200016X

Taguchi, N. (2019). *The Routledge Handbook of Second Language Acquisition and Pragmatics*. Routledge. https://doi.org/10.4324/9781351164085

Teddick, D. J., Christian, D., & Fortune, T. W. (2011). *Immersion education: Practices, policies, possibilities*. Multilingual Matters.

Teddick, D. J., & Lyster, R. (2020). *Scaffolding Language Development in Immersion and Dual Language Classrooms*. Routledge. https://doi.org/10.4324/9780429428319

Thomas, J. (1983). Cross-Cultural Pragmatic Failure. *Applied Linguistics*, *4*(2), 91-112. https://doi.org/10.1093/applin/4.2.91

Usó-Juan, E. & Martínez-Flor, A. (2006). Approaches to language learning and teaching: Towards acquiring communicative competence through the four skills. In E. Usó-Juan & A. Martínez-Flor (Eds.), *Current trends in the development and teaching of the four language skills* (pp. 3-26). Mouton de Gruyter.

Usó-Juan, E. U., & Martínez-Flor, A. (2008). Teaching learners to appropriately mitigate requests. *ELT Journal: An International Journal for Teachers of English to Speakers of Other Languages*, *62*(4), 349-357.

Vallejos, C., & Sanz, C. (2021). L2 Writing in Study-Abroad Contexts. In R. M. Manchón & C. Polio, *The Routledge Handbook of Second Language Acquisition and Writing* (pp. 254-267). Routledge. https://doi.org/10.4324/9780429199691-27

Van de Craen, P., Mondt, K., Allain, L., & Gao, Y. (2007). Why and how CLIL works: An outline for a CLIL theory. *Vienna English Working Papers, 16*(3), 70-78.

Van Den Poel, D., & Leunis, J. (1999). Consumer Acceptance of the Internet as a Channel of Distribution. *Journal of Business Research*, *45*(3), 249-256. https://doi.org/10.1016/S0148-2963(97)00236-1

Van der Leij, A., Bekebrede, J., & Kotterink, M. (2010). Acquiring reading and vocabulary in Dutch and English: The effect of concurrent instruction. *Reading and Writing*, *23*(3-4), 415-434. https://doi.org/10.1007/s11145-009-9207-5

Verspoor, M., De Bot, K., & Xu, X. (2015). The effects of English bilingual education in the Netherlands. *Journal of Immersion and Content-Based Language Education*, *3*(1), 4-27. https://doi.org/10.1075/jicb.3.1.01ver

Vikneswaran, T., & Krish, P. (2016). Utilising social networking sites to improve writing: A case study with Chinese students in Malaysia. *Technology, Pedagogy and Education*, *25*(3), 287-300. https://doi.org/10.1080/1475939X.2015.1030441

Villabona, N., & Cenoz, J. (2022). The integration of content and language in CLIL: A challenge for content-driven and language-driven teachers. *Language, Culture and Curriculum*, *35*(1), 36-50. https://doi.org/10.1080/07908318.2021.1910703

Webb, S. (2015). Extensive viewing: language learning through watching television. In D. Nunan & J.C. Richards (Eds.), *Language Learning Beyond the Classroom* (pp. 159-168). Routledge.

White, J., & Turner, C. (2005). Comparing Children's Oral Ability in Two ESL Programmes. *The Canadian Modern Language Review*, *61*(4), 491-517. https://doi.org/10.3138/cmlr.61.4.491

Whittaker, R., Llinares, A., & McCabe, A. (2011). Written discourse development in CLIL at secondary school. *Language Teaching Research*, *15*(3), 343-362. https://doi.org/10.1177/1362168811401154

Williams, D. L., Crittenden, V. L., Keo, T., & McCarty, P. (2012). The use of social media: An exploratory study of usage among digital natives: The use of social media. *Journal of Public Affairs*, *12*(2), 127-136. https://doi.org/10.1002/pa.1414

Zaytseva, V. (2016). *Vocabulary acquisition in study abroad and formal instruction: An investigation on oral and written lexical development* [Unpublished doctoral dissertation]. Universitat Pompeu Fabra.

Zhao, J., & Dixon, L. Q. (2018). *English-medium instruction in Chinese universities: Perspectives, discourse and evaluation*. Routledge.

APPENDICES

APPENDIX 1.

CAMBRIDGE ASSESSMENT TEST

Cambridge Assessment English

Centre Number		Candidate Number	

A2 Flyers

You will need colored pens or pencils.

My name is: ....

Part 1: Listen and write. There is one example.

Dad, NEW HOMES office phoned today…

	About a:	house
1	Address:	12 ....Street
2	It's near the:	....
3	Smaller bathroom is:	....
4	Garden has:	a ....
5	There's a music room in:	the ....

Part 2: Listen and ✓ the box. There is one example.

What is Frank doing?

A   B   C

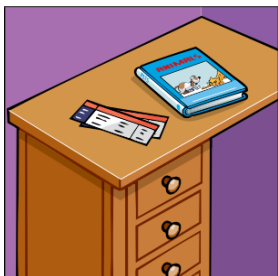1   Which shirt does Frank want to take on holiday?

A ☐   B ☐   C ☐

2   Where are the tickets?

A ☐   B ☐   C ☐

277
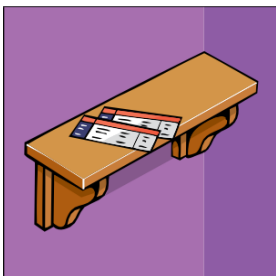
3   What time do they have to arrive at the airport?
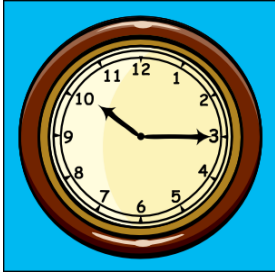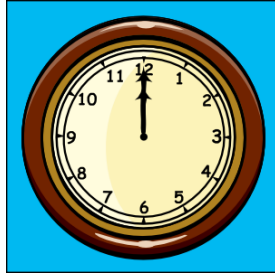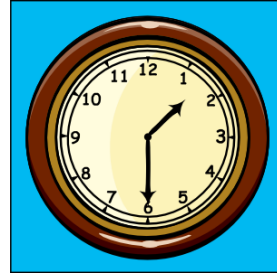
A   ☐   B   ☐   C   ☐

4   Who is going to look after their pets?

A   ☐   B   ☐   C   ☐

5   Where are they going to have lunch?
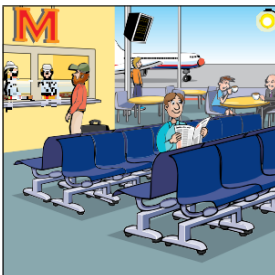
A   ☐   B   ☐   C   ☐

Reading

Read the story. Choose a word from the box. Write the correct word next to numbers 1–5. There is one example.
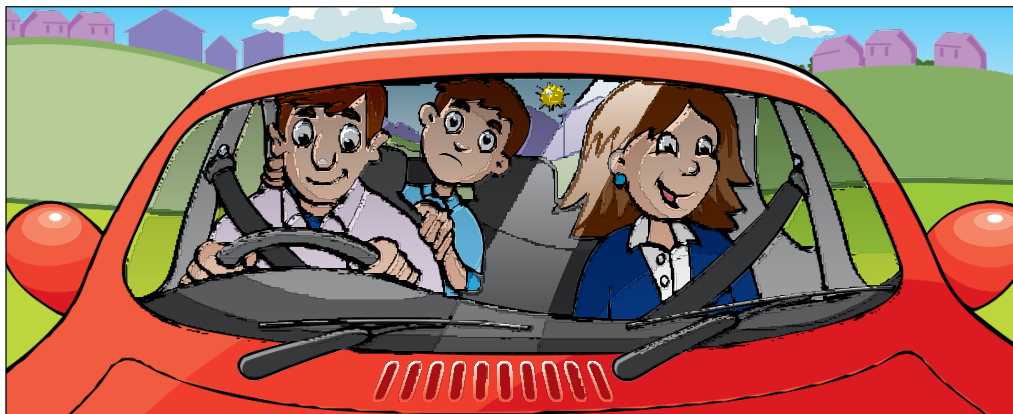
example				
decided	*piece*	*felt*	*air*	*bridge*
built	*sure*	*ready*	*key*	*nicer*

David's parents .... decided .... *to move to a new house. But*

David didn't want to live in another town and he

(1) sad about leaving all his friends. Last

Tuesday, David's family drove to their new house. David was unhappy.

He just sat quietly and looked out of the window.

When they arrived at the house, David's dad gave him a

(2) 'Go and open the front door with this,

David,' he said. 'Mum and I will bring in some of the boxes.'

David went inside. The house was much (**3**) ....than their old one and from a window upstairs he could see some boys in a park. He could see a forest too and a (**4**) .... across a river.

'I can play football in that park and go for great walks in that forest, and perhaps I can fish in that river,' he thought. There was no park, forest or river near his old house.

David began to smile. 'I'm (**5**)...I'm going to be happy here!'

(**6**) **Now choose the best name for the story.**

Tick one box.

David's dad gets a new job ☐

David's first day in his new school ☐

A new home for David ☐

Writing
Look at the three pictures. Write about this story. Write 20 ormore words.

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………
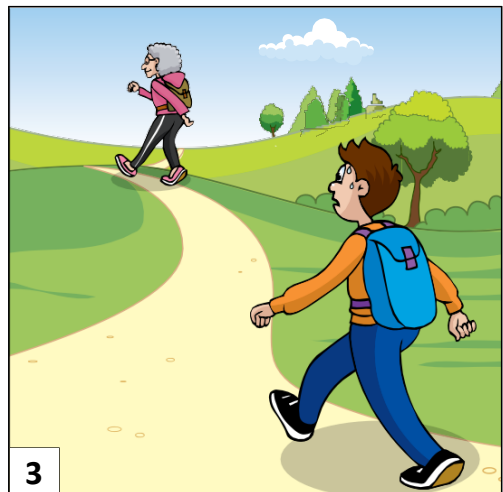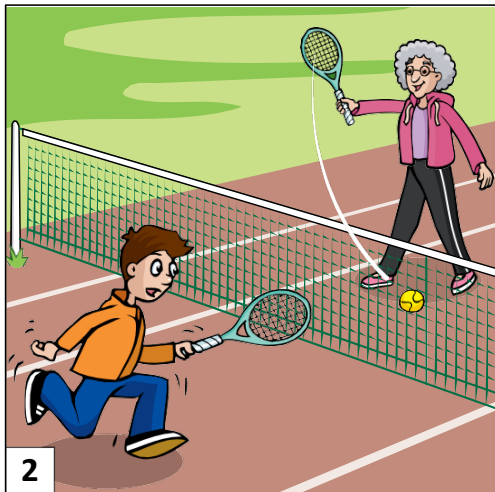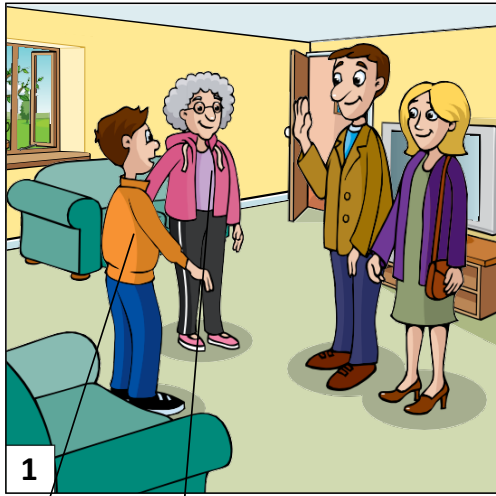
APPENDIX 2. TASKS

Catalan task

EXPLICA **ELS DOS PRIMERS PROCESSOS** DEL CICLE DE L'AIGUA AMB UN MÀXIM DE **150** PARAULES

IDEES DE PARAULES QUE POTS UTILITZAR:

- Condensació
- Evaporació
- Cicle de l'aigua
- Líquid i gasós

Núvols
Canvi d'estat
Aigua del mar
Llacs o boscos

NORMES:

- Tens **20 minuts** per a fer la tasca
- No està permès utilitzar llibres ni diccionaris
- La tasca és **individual**

Spanish task

EXPLICA **LOS DOS ÚLTIMOS PROCESOS** DEL CICLO DEL AGUA
CON UN MÁXIMO DE **150** PALABRAS

IDEAS DE PALABRAS QUE PUEDES UTILIZAR:

- Precipitación   Lluvia o nieve
- Transpiración   Plantas
- Mar y ríos   Cambio de estado
- Ciclo del agua   Acuífero

NORMAS:

- Tienes **20 minutos** para hacer la tarea
- No puedes utilizar libros ni diccionarios
- La tarea es **individual**

English task

EXPLAIN **WHAT IS WATER POLLUTION** AND WHAT ARE THE **SOLUTIONS**. USE A MAXIMUM OF **150** WORDS

IDEAS OF WORDS THAT YOU CAN USE:

- Recycle   Garbage
- Industrial waste   Shower
- Aquatic life   Contamination
- Illness   People

RULES:

- You have **20 minutes** to do the task
- You cannot use books or dictionaries
- It is an individual task

APPENDIX 3. QUESTIONNAIRE

CUESTIONARIO DE INFORMACIÓN GENERAL

Edad: ....

Nacionalidad: ....

Curso: ....

Sexo: ....

Nacionalidad: ....

Años en España (en caso de extranjero): ....

Lengua o lenguas que se hablen en tu casa: ....

Colegio: ....

Sobre los padres

Profesión del Padre: ....   **Profesión de la madre:** ....

¿Qué lenguas habla tu padre? ....   **¿Qué lenguas habla tu madre?** ....

Estancias en el extranjero

¿Has estado alguna vez en algún país de habla inglesa? (Ej.: Reino Unido, Estados Unidos, Canadá, Australia etc.)   (Sí)   (No)

Si has contestado que sí, explica que has hecho allí: ....

¿Has estado en algún otro país?   (Sí)   (No)

¿Si has contestado que sí, en cuál? ....

Preguntas sobre las lenguas (Justifica las respuestas)

¿Te gusta hablar en inglés? (Sí) (No)

¿Por qué?: ....

¿Te gustaría que todas las clases fueran en inglés? (Sí) (No)

¿Por qué?: ....

¿Te gusta hablar en catalán? (Sí) (No)

¿Por qué?: ....

¿Te gustaría que todas las clases fueran en catalán? (Sí) (No)

¿Por qué?: ....

¿Te gusta hablar en español? (Sí) (No)

¿Por qué?: ....

¿Te gustaría que todas las clases fueran en español? (Sí) (No)

¿Por qué?: ....

Contacto del Inglés fuera del colegio

¿Vas a la academia o repaso de inglés fuera del colegio? (Sí) (No)

¿Si has contestado que Sí, cuantos días a la semana?: ....

¿Vas en grupo o particulares?: ....

¿Ves la tele, películas, series en inglés?

| Todos los días | A veces | Muy ocasionalmente | Nunca |

¿Ves la tele, películas, series en español?

| Todos los días | A veces | Muy ocasionalmente | Nunca |

¿Ves la tele, películas, series en catalán?

| Todos los días | A veces | Muy ocasionalmente | Nunca |

Utilizas estos idiomas fuera del colegio

Inglés: (Sí) (No) **Si has contestado que Sí, ¿Cuándo?** ....

Español: (Sí) (No) **Si has contestado que Sí, ¿Cuándo?** ....

Catalán: (Sí) (No) **Si has contestado que Sí, ¿Cuándo?** ....

APPENDIX 4. THE RATING SCALE

Content: Is the number of information units provided in the text adequate and relevant?

0	1	2	3	4	5
The number of ideas is not all adequate and insufficient and the ideas are unrelated to each other.	The number of ideas is scarcely adequate and the ideas lack consistency.	The number of ideas is somewhat adequate, even though they are not very consistent.	The number of ideas is adequate and they are sufficiently consistent.	The number of ideas is very adequate and they are very consistent with each other.	The number of ideas is extremely adequate and they are very consistent with each other.

Comprehensibility: How much effort is required to understand text purpose and ideas?

0	1	2	3	4	5
The text is not at all comprehensible. Ideas and purposes are unclearly stated and the efforts of the reader to understand the text are ineffective.	The text is scarcely comprehensible. Its purposes are not clearly stated and the reader struggles to understand the ideas of the writer. The reader has to guess most of the ideas and purposes.	The text is somewhat comprehensible. Some sentences are hard to understand at the first reading. A second reading helps to clarify the purposes of the text and the ideas conveyed but some doubts persist.	The text is comprehensible. Only a few sentences are unclear but are understood, without too much effort, after a second reading.	The text is easily comprehensible and read smoothly. Comprehensibility is not an issue.	The text is very easy easily comprehensible and highly readable, The ideas and the purposes are clearly stated.

Coherence and Cohesion: Is the text coherent and cohesive?

0	1	2	3	4	5
The text is not at all coherent. The text is not at all cohesive. Connectives are hardly ever used and ideas are unrelated.	The text is scarcely coherent. The writer often uses unrelated progressions; when coherence is achieved, it is often done through repetitions. The text is not very cohesive. Ideas are not well linked by connectives which are rarely used.	The text is somewhat coherent. Unrelated progres-sions and/or repetitions are frequent. More than two sentences in a row can have the same subject (even when the subject is unders-tood). The text is somewhat cohesive. Some connectives are used, but they are mostly con-junctions.	The text is coherent. Unrelated progress-sions are somewhat rare, but the writer sometimes relies on repetitions to achieve coherence. The text is cohesive. The writer makes good use of connectives. Sometimes not limitation this to con-junctions.	The text is very coherent: When the writer introduces a new topic, it is usually done by using connective phases. Repetitions are very infrequent. The text is very cohesive and ideas are well-linked by adverbial and /or verbal connecti-ves.	The writer ensures extreme coherence by integrating new ideas in the text with connectives or connective phases. The structure of the text is extremely cohesive, thanks to skilful use of connectives (especially linking chunks, verbal constructors and adverbials) often used to describe relation-ships between ideas.

Spelling, Punctuation and Grammar (SPAG)

0	1	2	3	4	5
The text is not grammatically correct and punctuation and spelling are not effective.	The text is scarcely grammatically correct and punctuation and spelling are hardly used.	The text is somewhat grammatically correct, punctuation and spelling are sometimes used.	Most of the text is grammatically correct but some spelling and punctuation are observed.	Almost all the text is grammatically correct and a few spelling and punctuation errors are observed.	The text is all grammatically correct. None spelling and punctuation errors are observed.