

# Learning English and Learning Through English: Insights from Secondary Education

Maria Juan-Garau and Joana Salazar-Noguera

## 1 Introduction

One of the most significant social changes in the last decades is the increment of opportunities for people to have contact with speakers of languages other than their own and thus become bilingual or multilingual, which in turn results in opportunities for both individuals and societies, as Auer and Wei (2009) contend. According to these authors, '[f]ar from being a problem, multilingualism is part of the solution for our future' (2009: 12). Based on this premise, this chapter aims at presenting relevant background information regarding: (a) the implementation of multilingual education plans in the areas under scrutiny, the Balearic Islands and Catalonia, and (b) the research conducted within the COLE (Combination of Contexts for Learning)<sup>1</sup> project, with a view to help readers interpret the empirical studies in Chapters 8–14 that form Part II of this volume.

The empirical data analysed in the chapters that follow have been gathered in the Balearic Islands (Chapters 8–13) and Catalonia (Chapter “[CLIL in Context: Profiling Language Abilities](#)”), two officially Catalan–Spanish bilingual territories in Spain, where a myriad of other languages are also present. Part II of the volume provides evidence of the implementation in these territories of Content and Language Integrated Learning (CLIL) approaches to education, reflecting the general European strategy towards multilingualism (see, e.g., European Commission 2003, 2005, 2008; Pérez-Vidal 2009, 2015b; Lasagabaster 2015) and, in particular, the overwhelming spread of such a strategy in Spain in recent times (for a detailed

---

<sup>1</sup>In Spanish, ‘COLE’ is also a colloquial form for *colegio* (school).

M. Juan-Garau (✉) • J. Salazar-Noguera  
Departament de Filologia Espanyola, Moderna i Clàssica,  
Universitat de les Illes Balears (UIB), Ctra. Valldemossa Km. 7.5,  
07122 Palma de Mallorca, Spain  
e-mail: [maria.juan@uib.eu](mailto:maria.juan@uib.eu)

presentation of CLIL in this country see Lasagabaster and Ruiz de Zarobe 2010). In the remainder of this first section, the general sociolinguistic situation in the Balearic Islands and—to a lesser extent—Catalonia is presented, while Section 2 describes the education policies deployed in these regions to promote individual plurilingualism in an increasingly multilingual society. Section 3 focuses on the description of the research on CLIL carried out by COLE project researchers. Finally, some concluding remarks are put forward.

The Balearic Islands form an archipelago situated off the Spanish north-eastern coast in the Mediterranean Sea. They have approximately one million one hundred thousand inhabitants. Spanish and Catalan share status as official languages in the archipelago. According to the latest sociolinguistic survey (Xarxa Cruscat 2011), 93.2 % of the population reportedly understands Catalan, the community's autochthonous language, while 71.5 % can speak it and 54.9 % can write it (see also Melià 2011a). The languages used to teach, learn and interact at the primary and secondary school levels in the Balearic Islands are: Catalan, whose teaching and use has been promoted thanks to normalisation policies; Spanish, the official State language; and English, the main foreign language.

The first two, Catalan and Spanish, are closely related Romance languages, which have been in contact for years in the Balearic Islands resulting in linguistic interaction between them, with the influence of Spanish on Catalan being more perceptible than that of Catalan on Spanish due to the former language's weaker sociolinguistic position (Melià 2011a, b). Virtually every Catalan speaker in the community is bilingual in Catalan and Spanish, thus, Catalan—unlike Spanish—has no monolingual speakers.

Over the last decade, the Balearic Islands have welcomed a large number of immigrants with diverse linguistic origins. In fact, roughly half the population (53.7 %) was born in the archipelago, while a fourth (24.5 %) corresponds to newcomers from beyond Spanish borders and the remaining percentage (21.8 %) to internal immigration (Govern de les Illes Balears 2012a), placing the Balearic Islands among the regions with a higher rate of immigrants in the European Union. For most of these newcomers, Spanish has been the first language option when interacting with the local community. In fact, Spanish-speaking immigrants amount to 40.4 % of the total immigrant population in the Balearic Islands (Xarxa Cruscat 2011). They are followed by speakers of other Indo-European languages, such as English and German (31.8 %), and by speakers of other Romance languages, such as Romanian (14 %). Other world languages hold minor percentages. The Education Department facilitates the integration of immigrant children into the autochthonous culture of the Balearic Islands through the implementation of specific learning programmes to that end.

As regards the position of the English language, it is generally regarded as a foreign language by the majority of the population, despite the fact that there are numerous English-speaking residents (9.2 % of the total immigrant population) and tourists in the Balearic Islands. The study of a second foreign language, usually German or French, can be introduced as from the last cycle of primary education (ages 10 and 11). It is not compulsory, but fairly common, especially in secondary education. Despite the affluence of English speakers in the archipelago and the fact

that tourism concentrates most of the economic activity in the Balearics (Govern de les Illes Balears 2013a), attainment levels in English at the age of 16—end of compulsory secondary education (CSE)—are far from satisfactory. A recent report conducted by the Government of the Balearic Islands (Govern de les Illes Balears 2013b) shows that by the end of CSE only 37.5 % of the English learners in the archipelago have consolidated their communicative competence at the intermediate level, while 27.3 % are in the process of so doing and 35.1 % exhibit low or very low levels. By comparison, these learners perform much better in the two official languages, as can be expected, with over two-thirds of respondents showing communicative competence at an intermediate level—or above—and highly comparable degrees of attainment in Catalan (69.8 %) and Spanish (69.4 %).

The *First European Survey on Language Competences* (European Commission 2012) enables us to put the results just mentioned in relation to English competence into perspective. According to its final report, which gathered information on the foreign language proficiency of approximately 54,000 students (ages 14 and 15) across 16 European countries, Spanish students ranked third on the low-level end with regard to the proportion of participants that reached CEFR (Common European Framework of Reference for Languages) intermediate levels (B1 or B2). If we additionally take into account that, generally speaking, education indicators in the Balearics do not fare well when compared to the same indicators in the rest of Spain (e.g. the Balearic Islands held the lowest graduation rate in the country at the end of CSE as mentioned in the ISEIB 2011 report, Govern de les Illes Balears 2012b), it can be surmised that Balearic learners' English competence by the time they finish CSE is certainly below the European average.

Catalonia lies on the north-eastern coast of Spain. It is the largest and most populated of the territories in the Catalan-speaking area with a population of around 7.5 million inhabitants. According to the last official survey (Xarxa Cruscat 2011), 96.1 % of the population reportedly understands Catalan, the community's autochthonous language, while 80.9 % can speak it, and 63.9 % can write it.

As in the case of the Balearic Islands, education in Catalonia involves mostly three languages: Catalan, Spanish and English. The first two languages are official, while English is largely a foreign language not generally spoken in the environment, even though increasing internationalisation, particularly in the Barcelona metropolitan area and touristic resorts along the coast, has brought in a considerable English-speaking community.

Concerning language use in schools, legal orders establish Catalan as the main language of instruction in non-linguistic subjects. It is estimated that around 90 % of the teaching in primary schools is conducted in Catalan, a figure that goes down to roughly 50 % in the case of secondary education (Vila 2008).<sup>2</sup> Newly arrived

---

<sup>2</sup>By comparison, the use of Catalan as the language of instruction in the Balearic Islands is not as firmly established, particularly in primary education. Vila (2008) indicates that 57 % of primary schools use Catalan as the medium of instruction, while 26 % have a predominance of Catalan over Spanish, and the remaining 17 % just comply with the minimum requirement established for Catalan. According to this author, in secondary education the situation is better in that Catalan is used to teach between 60 and 80 % of the subjects.

students are entitled to receive special assistance with the autochthonous language. The foreign population in Catalonia constituted 15.7 % of the total population in 2012 (Idescat 2013). Almost 5 % of these immigrants are children and adolescents.

A recent report (Generalitat de Catalunya 2013) reveals that, by the end of CSE, most students have intermediate or advanced levels of competence in both Catalan and Spanish, with highly comparable mean scores (76.0 and 76.6, respectively), while their competence in English, with an average score of 69.8, lags a little behind. In the case of English, understandably, there is a higher proportion of learners with low or low-to-intermediate levels than in Catalan or Spanish. Students prove stronger in the foreign language as far as their receptive skills (i.e. listening and reading) go in comparison to writing.<sup>3</sup> The adoption of language policies geared towards educating plurilingual individuals in Catalonia and the Balearic Islands is discussed in the next section.

## 2 Multilingual Education Policies in the Territories Studied

### 2.1 *The Balearic Islands*

Basically since the Language Normalisation Act of 1986 was passed, stating that all schoolchildren should be able to use Catalan and Spanish correctly at the end of their compulsory education, Catalan started to progressively gain ground as the medium of instruction in the Balearic Islands. The language education model in the archipelago has thus been bilingual for nearly three decades in the sense that subject content is taught through two languages (Baker 2009). Hence, non-linguistic subjects are often taught through the medium of Catalan, so as to restore its rightful position as the community's autochthonous language, but also through Spanish. The proportion of Catalan/Spanish used in instruction, however, varies according to school type. State-run schools teach mostly through Catalan, while semi-private and private schools make comparatively more use of Spanish as the vehicle to transmit subject content (Consell Escolar de les Illes Balears 2009). At any rate, all schools had to transmit at least 50 % of all content subjects in Catalan (Decree 92/1997 of 4 July, known as 'Decree of Minimums') until very recently, as will be explained below. In addition to the community's two official languages, an increasing number of schools have been introducing a third language—English with few exceptions—as the medium of instruction of content areas. We can therefore talk about a multilingual language education model, as Cenoz (2009) defines it, being implemented nowadays. The development of multilingual programmes throughout time is described next.

Two primary state schools, *Na Caragol* in Artà (Majorca) and *Sa Graduada* in Maó (Minorca), started what was referred to as an 'English Section' in 1996 and

---

<sup>3</sup>Learners' speaking abilities were not tested as the population examined was very large (64,769).

1997, respectively, within the agreement between the Spanish Ministry of Education and Science and the British Council to develop an integrated Spanish-English curriculum. These English Sections constituted a pioneer CLIL initiative in the Balearic Islands at the time, which has continued to develop in the two aforementioned primary schools and has additionally expanded to their associated secondary schools, IES *Llorenç Garcias i Font* (Majorca) and IES *Cap de Llevant* (Minorca). Successful as its outcome has been (see Dobson et al. 2010),<sup>4</sup> this CLIL model is rather costly and has not spread further in the archipelago.

The possibility of an alternative model allowing for content-based foreign language teaching was first introduced by Decrees 119/2002 and 120/2002 (Conselleria d'Educació i Cultura 2002a, b). This model, known as the 'European Sections' programme and described below, was first launched as a pilot experience with 14 European Sections being implemented at primary and secondary education schools in the academic year 2004–2005 and it has grown exponentially since then. At present over 160 schools participate in this scheme, which has lately been subsumed under a new multilingual plan as explained below. European Sections have been implemented mostly at the primary school level, followed by compulsory secondary education. In recent times, they have started to appear in post-compulsory secondary education and vocational studies (see Pérez-Vidal and Juan-Garau 2010 for an account of CLIL programmes at different educational levels in the Catalan-speaking area). The foreign language chosen in primary education has always been English, while in secondary education there have also been some European Sections in French and, to a lesser extent, German.

As regards programme characteristics, according to the Order of 17 June 2009 (Conselleria d'Educació i Cultura 2009), a new European Section can be started to teach any non-linguistic area, subject or module of the curriculum totally or partially in the foreign language chosen. In primary schools, European Sections can be initiated as from year 1 (ages 6 and 7). In secondary education, a European Section in English can also be initiated as from year 1 (ages 12 and 13), while Sections in other languages can start in year 3 (ages 14 and 15). Learners need to have at least one hour per week of non-linguistic subject content delivered through English. Content teachers taking part in the programme need to prove a competence level in the foreign language equivalent to level B2 of the CEFR or above. Coordination between all the professionals involved in the programme and in particular between the content and foreign language specialists is emphasised. Conversation assistants, if available, help learners to improve their interaction skills in the target language.<sup>5</sup> In-service training for teachers joining the programme is prioritised. It includes

---

<sup>4</sup>Key programme characteristics include an early start (3/4 years of age), a whole-school approach, a significant amount of curricular time being allocated to teaching content subjects through English (40 % roughly), and the presence of supernumerary teachers—often native English speakers—to support the programme.

<sup>5</sup>Schools with European Sections are at an advantage in the assignment of a conversation assistant by the Education Department (i.e. *Conselleria d'Educació i Cultura*).

courses aimed at improving teachers' linguistic competence in English and CLIL methodology sessions.

As mentioned, European Sections have recently been subsumed under a new plurilingual education plan known as 'Integrated Treatment of Languages' (*Tractament Integrat de Llengües*, TIL). This plan, regulated by Decree 15/2013 (Consell de Govern 2013), was launched in the academic year 2013–2014. It introduces a major change with regard to the time allotted to the different languages of instruction in the curriculum. In so doing, it overrides the aforementioned 'Decree of Minimums' and proposes a trilingual policy based on equating, as far as possible, the presence of Catalan, Spanish and English in the transmission of curricular content.<sup>6</sup> Another significant difference with former CLIL programmes is that TIL is meant to be generalised to all schools and learners in the Balearic Islands except for higher-education institutions, which design their own language policies. The plan espouses a CLIL approach so as to attain adequate linguistic competence levels for learners to communicate effectively in the community's two official languages and at least one foreign language, preferably English. To partake in this scheme, content teachers are expected to hold a B2 level certificate in the foreign language or above.

TIL has encountered strong opposition from the education community as well as from ample social sectors on the grounds that both teachers and learners would first need to be linguistically prepared to meet the plan's challenges and that it poses a threat to the community's autochthonous language, among other considerations. As a result, a large number of schools have shown reluctance to take TIL's provisions on board, casting doubts on the outcomes of this multilingual plan. Given this state of affairs, The Supreme Court of the Balearic Islands has suspended the application of TIL as it stands (24 September, 2014). Multilingual programmes, however, are most likely to go ahead in the Balearics in future, possibly with redefined goals and designs.

## 2.2 Catalonia

In 2005, the Catalan Education Department launched the 'Plan of Action for the Promotion of Third Languages' in compulsory education (*Pla d'Impuls a les Terceres Llengües*). This large-scale plan was an unprecedented initiative in the history of policies to promote foreign languages in Catalonia. It included four main strands, one of which was the 'Experimental Foreign Language Plan' (*Pla Experimental de Llengües Estrangeres*, PELE), which sought to promote integrated school projects (CLIL plus project-based, orally focused modalities). This plan was a natural continuation of the 1999 CLIL ORATOR scheme, with

---

<sup>6</sup>A former attempt at implementing a similar trilingual plan was made in 2006. Decree 52/2006 (Conselleria d'Educació i Cultura 2006), known as 'Trilingualism Decree', was quite strongly contested as many feared that its enforcement would make Catalan lose ground. It was finally revoked on 6 June, 2008.

English as the main language (Pérez-Vidal and Escobar 2002). Earlier accounts of CLIL in Catalonia can be found in Pérez-Vidal (1997), Navés and Muñoz (1999) and Pérez-Vidal and Juan-Garau (2011b).

The 2005 plan has been given further impulse under the current ‘Framework for Plurilingualism in Catalonia’ (*Marc per al Plurilingüisme a Catalunya*), introduced in 2013 and addressed to state-funded schools. This framework has as its main goal the attainment of adequate competence levels in the different languages studied—namely Catalan, Spanish and at least one foreign language (mostly English), but preferably two. It attempts to meet the objectives set by the Europe 2020 strategy by helping learners reach B1 and A2 levels in their first and second foreign languages, respectively, at the end of CSE and upgrading those levels to B2 and B1 in post-obligatory secondary education. The framework also intends to consolidate Catalan’s prominent position as the main language of teaching, while enhancing foreign language teaching, as mentioned, and giving increased visibility to the heritage languages of newcomers. Possibly the main strand within this framework is the so-called Integrated Foreign Language Plan (*Pla Integrat de Llengües Estrangeres*, PILE). The PILE plan builds on PELE and other such previous initiatives to further the development of successful CLIL approaches in Catalonia. It is a pilot plan that progressively increases the presence of foreign languages in the curriculum ranging from at least 12 % of curricular content delivered through the foreign language in primary education to a minimum of 18 % in post-obligatory secondary education. In 2010–2011, as many as 1,345 infant or primary ( $n=1002$ ) and secondary education ( $n=343$ ) schools in Catalonia participated in a PELE programme including post-compulsory education and vocational studies, while 170 infant/primary ( $n=99$ ) and secondary education ( $n=71$ ) schools have joined a CLIL scheme following the first PILE call (2012–2013). All in all, with the experience already accrued with CLIL approaches and the new framework proposed, Catalan authorities are trying to move forward in response to the common European objective of making plurilingualism a reality.

### 3 The COLE Project

The present section attempts to provide descriptive information against which to interpret the results included in the second part of this volume (Chapters 8–14). These chapters specifically seek to measure the benefits, regarding the acquisition of communicative competence in English, derived from content-based language learning environments implementing a CLIL approach in comparison with formal instruction contexts in multilingual secondary education settings, and to provide some insights into learners’ affective variables. First of all, we provide a general overview of the COLE project, stating its general objectives, to subsequently give an account of all the relevant methodological information related to the participants and the collection of the data—analysed in the aforementioned chapters—which have been gathered as part of this project.

The COLE project is an ambitious and innovative research endeavour directed at comparing and contrasting the differentiated impact of three contexts of foreign language acquisition: conventional formal instruction (FI), the content and language integrated learning approach (CLIL) and study abroad in countries where the target language is spoken (SA). These are learning environments that increasing numbers of students experience throughout their education, often in combination. Therefore, investigating their complementary effects and benefits is of utmost relevance not just to families and to students themselves but also to programme administrators, language policymakers and society at large. Nevertheless, to our knowledge, no other project has focused on the complementarity of conventional foreign language instruction, CLIL and sojourns in the target-language country—taking on board the learners' various language learning, personal and social experiences—which underscores the new perspective envisaged by COLE researchers in trying to fill this gap. These programmes, particularly CLIL and SA, can be regarded as stepping-stones that can help students to communicate successfully in the international arena in a progressively globalised world. They are in fact anchored in European multilingual policies that favour internationalisation both at home and abroad (see Pérez-Vidal 2015b for a thorough account of such policies). Thus, the COLE state-funded project, based in Catalonia (Universitat Pompeu Fabra) and the Balearics (Universitat de les Illes Balears), reflects the vision just presented. Its coordinator and main researcher in Catalonia is Carmen Pérez-Vidal, while the main researcher in the Balearics is the first author of this chapter. The project attempts to uncover the linguistic and emotional impact of these three learning environments in the acquisition of English in bilingual (Spanish–Catalan) territories where various languages and cultures coexist. As mentioned in the previous paragraph, in the remainder of this volume we will present some of the main findings of the COLE project concerning the contrast between CLIL and FI learning contexts in secondary education settings. COLE project results as regards the SA context of acquisition in comparison with FI at the tertiary education level have recently appeared in another edited volume (Pérez-Vidal 2015a).

The COLE project builds on a previous project (SALA: Study Abroad and Language Acquisition), which compared the linguistic and sociocultural benefits of two learning contexts, SA and FI, in the short and long term, among university students followed longitudinally over a 2.5-year span (for a detailed account see Pérez-Vidal and Juan-Garau 2010; Pérez-Vidal 2015a). COLE expanded our previous research scope by collecting data from secondary education students in order to establish the relevance of initial language competence in subsequent language acquisition. With a view to improving foreign language competence—especially in English—more and more institutions in the Catalan language area and the rest of Spain, following European multilingual recommendations, had begun implementing CLIL language learning programmes (Pérez-Vidal and Juan-Garau 2010; Lasagabaster and Ruiz de Zarobe 2010). Hence, when the COLE project was launched (2007), it was also decided to include this content-based learning context in the study. Thus, with the COLE project, our aim was to further knowledge regarding language acquisition processes in different educational environments and to unveil the individual and contextual variables that boost or hinder these processes (Collentine and Freed 2004) so as to provide a rigorous, evidence-based



foundation for channelling human and monetary resources into a field of tremendous global relevance.

Within the COLE project, it was hypothesised that there would be a gradation or continuum of learning contexts ranging from instructed to naturalistic acquisition settings, with FI standing at the instructed end of the continuum, SA immersion at the naturalistic end and CLIL semi-immersion somewhere in between (see Pérez-Vidal 2011; Juan-Garau 2012). That is, SA—which is an essential part of European mobility policies (see Pérez-Vidal 2011, 2013)—would be expected to provide greater contact with the target language through natural, abundant exposure (Freed et al. 2004; DuFon and Churchill 2006; DeKeyser 2007; Regan et al. 2009), while FI would provide eminently formal, classroom focus on form but reduced language communication opportunities (DeKeyser 2000). In turn, CLIL instruction, a context encompassing both focus on meaning and form, would lie between FI and SA. This is so given that, although the CLIL class is essentially communicative, target-language exposure is often limited to the school context (Escobar Urmeneta 2006; Dalton-Puffer 2007; Lyster 2007; Pérez-Vidal 2007; Lasagabaster 2008; Ruiz de Zarobe and Jiménez Catalán 2009; Salazar-Noguera and Juan-Garau 2009; Lorenzo et al. 2010; Ruiz de Zarobe and Lasagabaster 2010; Llinares et al. 2013). Within the gradation hypothesis, the COLE project defends the combination and complementarity of the three learning contexts—FI, CLIL and SA—stating that each one affords different benefits and has a distinct learning potential that can often be activated in the other two. If the three learning contexts are present in a given language learner, this combined multilingual language profile will, ultimately, constitute an added value for career development. The project also advocates and studies virtual communication environments to foster the acquisition of English since they have become widespread at a social and educational level and they provide opportunities for internationalisation at home when SA periods are not feasible (see Jacob 2013; Prieto-Arranz et al. 2013; Pérez-Vidal 2015b). Finally, the project analyses language practice through the different contexts and its impact on employability (Alred and Byram 2002; Pérez-Vidal 2009; Moratinos-Johnston et al. 2014).

### ***3.1 COLE Project Research Design***

In this section we focus on the description of the COLE project research design, including participants and data collection procedures, pertinent to the analysis of the CLIL and FI contexts at the secondary school level, which is at the centre of this second part of the book. The COLE project uses a complex pre-test post-test longitudinal design to measure language abilities in English as a foreign language (EFL) as well as affective factors. Two cohorts of adolescent participants have been involved. They have either received a FI treatment on its own (control group) or a treatment that combines FI and CLIL (experimental group).

Both quantitative and qualitative data have been collected. On the one hand, quantitative data, which gauge participants' language proficiency, have provided insights into the COLE gradation hypothesis regarding the gains afforded by the

learning contexts under scrutiny. On the other hand, qualitative data have enabled us to enquire into individual learner differences relating to affective variables and programme characteristics. Qualitative data have been gathered through various instruments including questionnaires to enquire into participants' linguistic profiles; learner attitudes, beliefs and motivation; participants' linguistic practice and degree of contact with the target language and teachers' opinions regarding CLIL implementation. In our data analysis, the level of linguistic and affective impact has been the dependent variable and participation in the different language acquisition contexts, the independent one. Factors such as initial degree of proficiency and hours of exposure to the target language have also been scrutinised.

### 3.1.1 Participants

Regarding the COLE participants that we will report on in this second part of the volume, they are all bilingual Catalan–Spanish students, aged 13–16, for whom English is their main foreign language and hence generally constitutes their L3. They have neither exposure to English in their family environment nor a language disability.

The secondary school sample has been gathered from students participating in the European Sections programme in the Balearic Islands and a CLIL programme in Catalonia, as described in Section 2. Within the context of the Balearic Islands, data have been collected from a total of nine secondary education schools in Majorca,<sup>7</sup> which encompass EFL classrooms taught through FI instruction along with CLIL science or social science lessons delivered through English. These institutions are located in both urban and rural environments, thus providing a representative sample of schools on the island. In Catalonia, data were collected at a semi-private school that designed its specific CLIL programme in collaboration with research experts (see Chapter “[CLIL in Context: Profiling Language Abilities](#)”).

### 3.1.2 Data Collection Times

As shown in Table 1, longitudinal data for the main teenage sample covers a three-academic-year period. Data collection started at the beginning of the second year of CSE (T1), when students were 13 years old, coinciding with the onset of the CLIL programme. Data were collected again at the end of the second, third and fourth years (T2, T3 and T4, respectively).

### 3.1.3 Data Collection Instruments

As for the specific research tools used to collect the aforementioned data, a total of 13 tests and six questionnaires were administered in the same way at every research time. The battery of tests (see Table 2) was used to measure oral production and

---

<sup>7</sup>These include six secondary state-run schools and three semi-private schools.

**Table 1** Secondary school data for FI and CLIL acquisition contexts

Data collection times	Secondary school data			
	Beginning of second CSE	End of second CSE	End of third CSE	End of fourth CSE
	T1	T2	T3	T4
FI context	Start of academic year	Formal Instruction (1 academic year)	Formal Instruction (1 academic year)	Formal Instruction (1 academic year)
CLIL context	Start of academic year	CLIL + Formal Instruction (1 academic year)	CLIL + Formal Instruction (1 academic year)	CLIL + Formal Instruction (1 academic year)

**Table 2** Data collection instruments

	Data collection tests
Written comprehension	General reading test
	Specific reading test (science)
	Specific reading test (social science)
Written production	General written composition
	Specific written composition (science)
	Specific written composition (social science)
Oral comprehension	Listening comprehension (picture identification)
	Listening comprehension (news)
Oral production	Reading aloud test
	Role-play
	Oral narrative
Lexico-grammatical knowledge	Cloze
	Fill-in-the-gap tense-and-aspect test

comprehension, written production and comprehension and lexico-grammatical knowledge.<sup>8</sup> According to DeKeyser (2007), each context involves distinct linguistic benefits. Therefore, it makes sense to assess foreign language development through tools that evaluate the linguistic skills separately. The project adopts tests that both analyse discrete linguistic items as well as general items of linguistic knowledge (see Pérez-Vidal 2015a).

Regarding written comprehension, three tests were elaborated, one general reading test and two specific tests in accordance with the participants' content subject studied through the medium of English, either science or social science (history and

<sup>8</sup>Chapter "English Learners' Willingness to Communicate and Achievement in CLIL and Formal Instruction Contexts", given its focus on willingness to communicate (WTC), used specific instruments to measure that variable (i.e. WTC Scale and WTC-Meter), while Chapter "CLIL in Context: Profiling Language Abilities" used slightly different instruments to measure linguistic competence. Information on the instruments used is duly provided in both chapters.

geography). Each test, which had to be completed in 15 min, measured overall reading comprehension as well as various linguistic areas including grammar, discourse, syntax and lexical semantics. The general reading test consisted of ten multiple choice questions regarding information encoded in short written messages. Both specific reading tests included six true-false questions, which required a correction of the statement in case it was false, as well as a vocabulary task in which learners were asked to match words with their corresponding definitions. The science reading test dealt with reusing and recycling, while the social science test was related to the topic of moving from a rural to an urban environment.

Two tests were used to assess overall written production. A first general test asked students to write an email to an English friend, telling him or her about a film they had seen the previous weekend. They were requested to write, within a 25-min time span, their stories in the past and to include information related to the title, storyline, place, time, characters and personal opinion on the film, in addition to explaining what they had done afterwards. Participants were also required to write a short text on a topic related to the content subject they were studying through English. Specific written production tests were assigned 15 min each. The specific written composition for the CLIL science group dealt with the issue of recycling waste materials, whereas the specific written test for CLIL social science learners was about the advantages and disadvantages of urban life compared to the countryside.

Two listening tests, a picture identification test and a test based on four news items, assessed overall listening comprehension. The picture identification test included ten multiple choice questions and the news items test had to be answered by choosing the correct option from multiple choice items related to the four news stories recorded.

Oral production was assessed through three tests: a reading aloud test which consisted in reading a 200-word text aloud individually and assessed individual oral performance, mainly foreign accent, pronunciation errors and comprehensibility; a role-play, which assessed oral interaction in pairs; and an oral narrative with six picture prompts related to a bank robbery. The oral narrative test was individual and students had to tell the story as if they were reporting it, explaining what they had witnessed. Recordings for each participant or dyad, in the case of the role-play, were carried out in all oral production tests so as to evaluate different aspects of oral competence.

The cloze, with 15 items, and the fill-in-the-gap tense-and-aspect test, with 12 blanks, measured the students' lexico-grammatical competence in the foreign language.

Data collection instruments also included questionnaires, which were used to learn about participants' linguistic profile and also about their attitudes, beliefs and motivation with regard to learning languages and learning a content subject through the medium of English (CLIL). Likewise, questionnaires were distributed to the teachers in each of the FI and CLIL settings so that the different features of each programme could be documented. The following questionnaires were administered:

- Students' profile questionnaire
- Students' questionnaire on attitudes, beliefs and motivation (ABM)

- CLIL teachers' questionnaire
- FI teachers' questionnaire
- CLIL programme school coordinator questionnaire
- School headmaster questionnaire

Upon requesting informants to get involved in the project, they were informed about the fact that their anonymity would be preserved and that their final scores on all language tests would not sway their academic qualifications. Data were collected following written protocols for each task to ensure reliability and consistency in administration procedures at all data collection times. Accordingly, all tests were timed.

Regarding the validity of the tests used, they were all piloted with populations comparable to our target sample and adjusted when necessary. These tests enabled us to assess participants' linguistic skills in the two learning contexts scrutinised (FI and CLIL) and, as such, they are regarded to have been effective and ecologically valid in that they resembled the tasks learners are often asked to do in their English lessons. Further descriptive information on the specific research tools employed in the different chapters that follow is provided therein.

### 3.1.4 Overview of Findings

The empirical findings embedded in the second part of this book constitute part of the results from the COLE project and mainly touch upon the effects of the CLIL context compared longitudinally with the formal instruction context in the development of secondary education students' receptive skills (listening and reading), productive skills (writing and speaking) and lexico-grammatical competence in English. Affective factors are also considered. More specifically, Chapter "[Testing Progress on Receptive Skills in CLIL and Non-CLIL Contexts](#)" reports on the development of reading and listening comprehension skills, while Chapters "[Writing Development Under CLIL Provision](#)" and "[Does CLIL Enhance Oral Skills? Fluency and Pronunciation Errors by Spanish-Catalan Learners of English](#)" delve into the productive abilities by examining whether CLIL has a positive effect on the development of written competence and oral skills—with a focus on fluency and pronunciation errors—respectively. Chapter "[Lexico-Grammatical Development in Secondary Education CLIL Learners](#)" looks at lexico-grammatical growth. Chapters "[Exploring Affective Factors in L3 Learning: CLIL vs Non-CLIL](#)" and "[English Learners' Willingness to Communicate and Achievement in CLIL and Formal Instruction Contexts](#)", in turn, enquire into the development of affective factors, with the former focussing on motivational and attitudinal factors and the latter on willingness to communicate and its relationship with language achievement. Finally, Chapter "[CLIL in Context: Profiling Language Abilities](#)" provides evidence of the differential effects of CLIL on various areas of communicative competence. Overall, these findings point to an advantage in terms of linguistic progress for students that combine CLIL and FI over participants who learn English through FI exclusively.

## 4 Final Remarks

This chapter has provided an account of the multilingual education policies implemented in the communities where the COLE project, a state-funded research endeavour based in Catalonia and the Balearic Islands, takes place in the light of the strategies deployed in the rest of Spain and Europe. In fact, the educational experiences and research findings reported herein can inform similar experiences in comparable territories—such as the Basque Country, Galicia, Valencia, Friesland, Wales or Ireland—where multilingualism in education is encouraged (Cenoz and Gorter 2010; Gorter and Cenoz 2011). It has been shown that Catalonia and the Balearic Islands are putting into practice the European recommendations on multilingualism both through top-down and bottom-up educational initiatives, such as the implementation of content-based language learning approaches, particularly CLIL.

The COLE project has attempted to further knowledge through this volume concerning the impact of content-based instruction, following a CLIL model, in contrast with conventional foreign language instruction (FI). All in all, our research in this volume uncovers the performance and achievement of secondary-school students learning English in multilingual educational environments, where content-based language learning policies are in place, over a 3-year-period. In so doing, we intend to contribute, on the one hand, cutting-edge data regarding linguistic benefits in the contexts mentioned and, on the other hand, new insights into the implementation of CLIL models—an area where further research is clearly needed—and into possible ways of channelling resources in order to improve language learning models at large.

**Acknowledgements** We gratefully acknowledge funding from the Spanish Ministry of Economy and Competitiveness through HUM2007-66053-C02-01/02, FFI2010-21483-C02-01/02 and FFI2013-48640-C2-1/2-P and from the Catalan Government (SGR2005-01086/2009-140/2014-1563).

## References

- Alred, G., & Byram, M. (2002). Becoming an intercultural mediator: A longitudinal study of residence abroad. *Journal of Multilingual and Multicultural Development*, 23, 339–352.
- Auer, P., & Wei, L. (2009). Introduction: Multilingualism as a problem? Monolingualism as a problem? In P. Auer & L. Wei (Eds.), *Handbook of multilingualism and multilingual communication* (pp. 1–12). Berlin: Mouton de Gruyter.
- Baker, C. (2009). Becoming bilingual through bilingual education. In P. Auer & L. Wei (Eds.), *Handbook of multilingualism and multilingual communication* (pp. 131–152). Berlin: Mouton de Gruyter.
- Cenoz, J. (2009). *Towards multilingualism through education. Basque educational research from an international perspective*. Bristol: Multilingual Matters.
- Cenoz, J., & Gorter, D. (2010). The diversity of multilingualism in education. *International Journal of the Sociology of Language*, 205, 37–53.
- Collentine, J., & Freed, B. (2004). Learning context and its effects on second language acquisition. *Studies in Second Language Acquisition*, 26(2), 153–171.

- Consell de Govern. (2013). Decret 15/2013 de 19 d'abril. *Butlletí Oficial de les Illes Balears* 53.
- Consell Escolar de les Illes Balears. (2009). *Informe del sistema educatiu de les Illes Balears (2006/07)*. <http://www.baleareweb.net/ceib/sistema/documents.htm> Accessed 21 Sept 2013.
- Conselleria d'Educació i Cultura. (2002a). Decret 119/2002 de 27 de setembre. *Butlletí Oficial de les Illes Balears* 120.
- Conselleria d'Educació i Cultura. (2002b). Decret 120/2002 de 27 de setembre. *Butlletí Oficial de les Illes Balears* 120.
- Conselleria d'Educació i Cultura. (2006). Decret 52/2006 de 16 de juny. *Butlletí Oficial de les Illes Balears* 87.
- Conselleria d'Educació i Cultura. (2009). Ordre de 17 de juny de 2009. *Butlletí Oficial de les Illes Balears* 98.
- Dalton-Puffer, C. (2007). *Discourse in content and language integrated learning (CLIL)*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- DeKeyser, R. M. (2000). The robustness of critical period effects in second language acquisition. *Studies in Second Language Acquisition*, 22, 499–533.
- DeKeyser, R. M. (2007). Study abroad as foreign language practice. In R. M. DeKeyser (Ed.), *Practicing in a second language: Perspectives from applied linguistics and cognitive psychology* (pp. 209–226). Cambridge: Cambridge University Press.
- Dobson, A., Pérez Murillo, M. D., & Johnstone, R. (2010). *Bilingual education project. Spain evaluation report*. Madrid: Ministerio de Educación and British Council.
- DuFon, M. A., & Churchill, E. (Eds.). (2006). *Language learners in study abroad contexts*. Clevedon: Multilingual Matters.
- Escobar Urmeneta, C. (Ed.). (2006). Algunes formes d'intervenció en la formació plurilingüe. In L. Nussbaum and V. Unamuno (Eds.), *Usos i competències multilingües d'escolars d'origen immigrant* (pp. 135–166). Bellaterra: Servei de Publicacions de la UAB.
- European Commission. (2003). *Promoting language learning and linguistic diversity: An action plan 2004–2006*. [http://ec.europa.eu/languages/eu-language-policy/action-plan-for-languages\\_en.htm](http://ec.europa.eu/languages/eu-language-policy/action-plan-for-languages_en.htm). Accessed 8 Sept 2013.
- European Commission. (2005). *A new framework strategy for multilingualism*. [http://ec.europa.eu/education/languages/eulanguagepolicy/doc99\\_en.htm](http://ec.europa.eu/education/languages/eulanguagepolicy/doc99_en.htm). Accessed 8 Sept 2013.
- European Commission. (2008). *Inventory of community actions in the field of multilingualism*. [http://ec.europa.eu/education/languages/eu-language-policy/index\\_en.htm](http://ec.europa.eu/education/languages/eu-language-policy/index_en.htm). Accessed 8 Sept 2013.
- European Commission. (2012). *First European survey on language competences: Final report*. <http://ec.europa.eu/languages/eslc/index.html>. Accessed 15 Sept 2013.
- Freed, B. F., Segalowitz, N., & Dewey, D. P. (2004). Context of learning and second language fluency in French: Comparing regular classroom, study abroad, and intensive domestic immersion programs. *Studies in Second Language Acquisition*, 26(2), 275–301.
- Generalitat de Catalunya. (2013). *Avaluació de l'educació secundària obligatòria 4t ESO*. <http://www20.gencat.cat/docs/Educacio/Home/Consell%20superior%20d%27avalua/Pdf%20i%20altres/prova%20avaluacio%20eso%202013/rodadeprensa.pdf>. Accessed 20 Sept 2013.
- Gorter, D., & Cenoz, J. (2011). Multilingual education for European minority languages. The Basque Country and Friesland. *International Review of Education*, 57(5–6), 651–666.
- Govern de les Illes Balears. (2012a). *Informe 2011: Situació de la immigració a les Illes Balears*. <http://observatori.immigraibalears.com/spip.php?article164>. Accessed 15 Sept 2013.
- Govern de les Illes Balears. (2012b). *Indicadors del sistema educatiu de les Illes Balears (ISEIB) 2011*. [http://iaqse.caib.es/infopub\\_1.htm](http://iaqse.caib.es/infopub_1.htm). Accessed 14 Sept 2013.
- Govern de les Illes Balears. (2013a). *El moment econòmic de les Illes Balears*. <http://www.caib.es/sacmicrofront/contenido.do?idsite=279&cont=6670&lang=ca&camp=yes>. Accessed 15 Sept 2013.
- Govern de les Illes Balears. (2013b). *Avaluació de competències bàsiques 2012 Illes Balears: 4t ESO*. [http://iaqse.caib.es/infopub\\_1.htm](http://iaqse.caib.es/infopub_1.htm). Accessed 15 Sept 2013.
- Idescat. (2013). Total and foreign population series. 2000–2012 Catalonia. <http://www.idescat.cat/poblacioestrangera/?b=0&lang=en>. Accessed 20 Sept 2013.

- Jacob, K. (2013). *A transcultural approach to EIL in secondary education: a case study*. Unpublished doctoral dissertation, Universitat de les Illes Balears.
- Juan-Garau, M. (2012). Context matters: Variability across three SLA learning settings. In E. Piechurska-Kuciel & L. Piasecka (Eds.), *Variability and stability in foreign and second language learning contexts* (Vol. I, pp. 220–242). Newcastle upon Tyne: Cambridge Scholars Publishing.
- Lasagabaster, D. (2008). Foreign accent competence in content and language integrated courses. *The Open Applied Linguistics Journal*, 1, 30–41.
- Lasagabaster, D. (2015). Different educational approaches to bi- or multilingualism and their effect on language attitudes. In M. Juan-Garau & J. Salazar-Noguera (Eds.), *Content-based language learning in multilingual educational environments* (pp. 13–30). Berlin: Springer.
- Lasagabaster, D., & Ruiz de Zarobe, Y. (Eds.). (2010). *CLIL in Spain: Implementation, results and teacher training*. Newcastle upon Tyne: Cambridge Scholars.
- Llinares, A., Morton, T., & Whitakker, R. (2013). *The roles of language in CLIL*. Cambridge: Cambridge University Press.
- 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*, 20(11), 1–25.
- Lyster, R. (2007). *Learning and teaching languages through content: A counterbalanced approach*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Melià, J. (2011a). La llengua catalana a les Balears. Algunes dades recents sobre usos i coneixement. *Lluc: Revista de Cultura i Idees*, 878, 3–7.
- Melià, J. (2011b). L'estatus de les llengües d'Espanya: Illes Balears. In *Actes del I simposi internacional sobre situació i perspectives del plurilingüisme a Europa* (pp. 165–170). València: Acadèmia Valenciana de la Llengua.
- Moratinos-Johnston, S., Pérez-Vidal, C., Juan-Garau, M., & Salazar-Noguera, J. (2014). A case-study of the linguistic profile and self-perception of multilingual students. In A. Díaz, M. C. Fumero, M. P. Lojendio, S. Burgess, E. Sosa & A. Cano (Eds.), *Communication, cognition & cybernetics. Proceedings of the 31st International AESLA conference*. La Laguna: Universidad de La Laguna.
- Navés, T., & Muñoz, C. (1999). Implementation of CLIL in Spain. In D. Marsh & G. Langé (Eds.), *Implementing content and language integrated learning: A research-driven TIE-CLIL foundation course reader* (pp. 145–158). Jyväskylä: University of Jyväskylä.
- Pérez-Vidal, C. (1997). Language teacher training and bilingual education in Spain. In P. Van de Craen & D. Wolff (Eds.), *Language teacher training and bilingual education technical report*. Lille: University of Lille III.
- Pérez-Vidal, C. (2007). The need for focus on form in content and language integrated approaches: An exploratory study. In F. Lorenzo, S. Casal, V. de Alba & P. Moore (Eds.), *Models and practices in CLIL* (pp. 39–54). Revista Española de Lingüística Aplicada (RESLA), Monographic volume.
- Pérez-Vidal, C. (2009). The integration of content and language in the classroom: A European approach to education. The second time around. In E. Dafouz & M. Guerrini (Eds.), *CLIL across educational levels: Experiences from primary, secondary and tertiary contexts* (pp. 3–16). Madrid: Santillana Educación/Richmond Publishing.
- Pérez-Vidal, C. (2011). Language acquisition in three different contexts of learning: Formal instruction, study abroad and semi-immersion (CLIL). In Y. Ruiz de Zarobe, J. M. Sierra, & F. Gallardo del Puerto (Eds.), *Content and foreign language integrated learning: Contributions to multilingualism in European contexts* (pp. 25–35). Bern/Berlin: Peter Lang.
- Pérez-Vidal, C. (2013). Perspectives and lessons from the challenge of CLIL experiences. In C. Abello-Comtesse, P. Chandler, M. D. López-Giménez, & R. Chacón-Beltrán (Eds.), *Bilingual and multilingual education in the XXI century* (pp. 52–82). Clevedon: Multilingual Matters.



- Pérez-Vidal, C. (2015a). Study abroad and language acquisition: The SALA project. In C. Pérez-Vidal (Ed.), *Language acquisition in study abroad and formal instruction contexts* (pp. 17–57). Amsterdam: John Benjamins.
- Pérez-Vidal, C. (2015b). 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). Berlin: Springer.
- Pérez-Vidal, C., & Escobar, C. (2002). Spain. In M. Grenfell (Ed.), *Modern languages across the curriculum* (pp. 114–130). London: Routledge-Falmer.
- Pérez-Vidal, C., & Juan-Garau, M. (2010). To CLIL or not to CLIL? From bilingualism to multilingualism in Catalan/Spanish communities in Spain. In D. Lasagabaster & Y. Ruiz de Zarobe (Eds.), *CLIL in Spain: Implementation, results and teacher training* (pp. 115–138). Newcastle upon Tyne: Cambridge Scholars.
- Pérez-Vidal, C., & Juan-Garau, M. (2011a). The effect of context and input conditions on oral and written development: A study abroad perspective. *International Review of Applied Linguistics in Language Teaching*, 49(2), 157–185.
- Pérez-Vidal, C., & Juan-Garau, M. (2011b). Trilingual primary education in Catalonia. In I. Bangma, C. van der Meer, & A. Riemersma (Eds.), *Trilingual primary education in Europe: Some developments with regard to the provisions of trilingual primary education in minority language communities of the European Union* (pp. 68–92). Leeuwarden: Mercator European Research Centre on Multilingualism and Language Learning.
- Prieto-Arranz, J. I., Juan-Garau, M., & Jacob, K. (2013). Re-imagining cultural identity: Transcultural and translanguing communication in virtual third-space environments. *Language, Culture and Curriculum*, 26(1), 19–35.
- Regan, V., Howard, M., & Lemée, I. (2009). *The acquisition of sociolinguistic competence in a study abroad context*. Clevedon: Multilingual Matters.
- Ruiz de Zarobe, Y., & Jiménez Catalán, R. (2009). *Content and language integrated learning. Evidence from research in Europe*. Clevedon: Multilingual Matters.
- Ruiz de Zarobe, Y., & Lasagabaster, D. (2010). CLIL in a bilingual community: The Basque autonomous community. In D. Lasagabaster & Y. Ruiz de Zarobe (Eds.), *CLIL in Spain: Implementation, results and teacher training* (pp. 12–29). Newcastle upon Tyne: Cambridge Scholars Publishing.
- Salazar-Noguera, J., & Juan-Garau, M. (2009). *Aprendizaje integrado de lengua inglesa y contenidos multiculturales on-line*. Palma: Ediciones UIB.
- Vila, F. X. (2008). Language-in-education policies in the Catalan language area. *AILA Review*, 21, 31–48.
- Xarxa Cruscat. (2011). *Informe sobre la situació de la llengua catalana*. <http://www.observatoridelallengua.cat/observatori.php?llengua=ca>. Accessed 14 Sept 2013.