

English achievement and student motivation in CLIL and EFL settings

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Motivation is a complex psychological construct regarded as one of the determinant factors in successful foreign language learning, which is why it regularly comes to the fore when trying to explain individual differences among language learners. In fact, one of the main objectives of many foreign language teachers in classrooms the world over is to increase student motivation, so that pupils may acquire a good command of English, the current main *lingua franca*. While many studies have been devoted to the role played by different orientations in this process, this paper focuses on the effect of the approach used in the foreign language classroom. Thus, attention is paid to the relationship between motivation and the language proficiency attained through two different approaches: Content and Language Integrated Learning (CLIL) and English as a Foreign Language (EFL), among 191 secondary school students. The results confirm the benefits of CLIL from both a motivational and a language competence perspective.

Keywords: CLIL; EFL; language competence; motivation

Introduction

Motivation is a direct determinant of L2 achievement and is in fact one of the individual variables to which more attention has been paid in second language acquisition literature. For decades motivation was regarded as a relatively stable learner trait, but from the 1990s onwards research on motivation has undergone a shift towards a more dynamic construct and one more grounded in the context where the learning takes place. Currently motivation is analysed with regards to aspects of the language-learning process closely associated with the classroom (Vandergrift 2005).

The language-learning process has both linguistic and non-linguistic outcomes, the former being related to knowledge and competence in the language and the latter to individual variables such as attitudes and motivation. As students progress in their learning, changes can be expected in their motivation and this leads to individual variations over time. This is one of the reasons why the concept of motivation is difficult to grasp.

Despite the perplexity, studies carried out in many different contexts have demonstrated that there is a clear correlation between motivation and language achievement. Masgoret and Gardner's (2003) meta-analysis of studies undertaken by

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Gardner and associates, in which 75 independent samples and more than 10,000 participants were analysed, concluded that this correlation is largely positive.

However, when examining the relationship between the scores in a listening test and motivation among 13- to 14-year-old Canadian high school students, Vandergrift (2005) found that the correlation between proficiency in L2 listening and intrinsic and extrinsic motivation was not as strong as expected. Consequently, the author concluded that a high degree of motivation is not necessarily a reliable predictor of proficiency in French as L2 listening comprehension. Since his research was focused on the listening skill, Vandergrift underscores that future studies should also examine the relationship between motivation and the other language skills.

The motivation–achievement relationship is consequently complex and the results obtained seem to indicate that, in addition, the strength of this interaction varies with age. Research studies carried out in very diverse contexts (Dewaele 2005; Gardner and Tremblay 1998; Lasagabaster and Huguet 2007) have demonstrated that the motivation to learn a foreign language can vary not only from language to language – even within the same group of learners – but also when different age groups are considered. In all these studies, the youngest group held significantly more positive attitudes and motivation towards the foreign language, whereas the oldest learners were less favourable.

However, the number of studies in which the temporal dimension of motivation has been examined is limited. Some studies (Chambers 1999; Williams, Burden, and Lanvers 2002) have demonstrated that motivation wanes in formal school settings over sustained periods. The explanation for this motivational decline could be psychologically based – older pupils' rejection of the school system brought about by a transition from a family identity to a more individual and peer group identity – and/or educational, linked to the different teaching methodologies used in primary and secondary education. In many European contexts of primary education young learners enjoy the oral-based approach, whereas in secondary education and high school, grammar and vocabulary take precedence and the methodology is much more teacher-centred. In this way, the students' initial curiosity and motivation is curbed or diminished by a student-unfriendly foreign language system.

This general decline in positive attitudes towards school subjects as students climb up the school ladder was verified in a survey involving 800 elementary students. Davies and Brember (2001) measured attitudes of second and sixth grade students using a Smiley-face Likert scale. They found that both males and females harboured significantly less positive attitudes in the highest grade, and concluded that the more years students spend studying a subject, the more disenchanted with it they become.

The conclusion to be drawn, therefore, is that a decline in attitudes towards the FL is due to both psychological and educational issues. This leads us to wonder whether the use of a Content and Language Integrated Learning (CLIL) type approach may help to avoid or at least diminish the effect of these psychological and educational factors.

It is remarkable that while many treatises have researched the relationship between motivational variables and second language acquisition, very few (Seikkula-Leino 2007) have focused on the comparison between English as a Foreign Language (EFL) and CLIL programmes. As a matter of fact, most work in the field has involved participants who studied foreign languages only as a school subject, in other words, in EFL contexts. Since many teachers complain that they have to confront

classes of students who find lessons boring and unchallenging, surely more research is needed here. Due to the social dimension of foreign language learning, the study of the broad macrocontext has received wide attention, whereas the microcontext of the classroom has been paid little heed. In this study, the impact of the methodological approach implemented is the main focus, as teachers are not so much interested in the nature of motivation itself, but rather in the methodology, strategies and techniques they can utilise in class in order to motivate their students.

Researchers may run the risk of becoming contemporary Argonauts on a quest for the golden fleece (represented by the 'theory of motivation'), as the search for a universally applicable theory of motivation may simply not be plausible. Many factors interact and they seem to play different roles across different ages, and in different contexts. Bearing all this in mind, in this article the focus is limited to how the foreign language approach implemented in the classroom affects motivation and achievement. The main drive therefore is to focus on the classroom-specific reality, as it exerts a definitive influence on foreign language motivation and achievement.

Content and Language Integrated Learning (CLIL) and English as a Foreign Language (EFL) programmes in Spain

The study of different types of provision of foreign language teaching presents itself as a potentially very promising field of research regarding the development of motivation. By focusing on different approaches, the researcher can probe their diverse effects. In this paper, the EFL and the CLIL approaches will be examined, compared and contrasted. Traditionally research studies have analysed motivation in a broad sense, whereas in the last two decades attention has been paid to classroom events and processes. Dörnyei (2002, 138) refers to this perspective of motivation as the 'situation-specific' approach and describes the differences between the former and the current perspective in the following way:

While the former macro perspective is more relevant from a social psychological perspective as it allows researchers to characterise and compare the motivational pattern of whole learning communities and then to draw inferences about intercultural communication and affiliation, the latter micro perspective is more in line with an educational approach whereby the significance of motivation is seen in its explanatory power of why learners behave as they do in specific learning situations.

This micro perspective happens to be of great interest to all those involved in the Spanish educational system. During the last few years there has been a widespread feeling of dissatisfaction with the state of English language teaching in Spain (Vez 2007). Despite the different measures put into practice to improve the situation, such as the early teaching of English (in many schools its learning starts as early as the age of four), students' language skills at the end of compulsory education are far below the desired level of competence, and this low command often puts them off from taking subjects taught through English at university level (Lasagabaster 2009). The reasons put forward vary and include different issues, but foreign language methodology is usually mentioned as one of the main hurdles.

The literature on L2 learning motivation has often indicated that the specific L2 learning contexts to which learners are exposed may have a definitive influence on their motivational levels (Bradford 2007; Clément and Kruidenier 1983; Dörnyei

2001). For instance, and as Pae (2008) has noted, in an English as a second language (ESL) learning context, English is mastered through direct exposure because students enjoy the possibility of having direct contact with native speakers, whereas in an EFL context, the learning of English usually occurs within the constraints of a formal classroom and with little (if any) opportunity to interact with an English-speaking community. Muñoz (2008) also argues that the amount and quality of the input of the two learning contexts vary considerably and may affect proficiency.

In the same vein, another distinction could be made when comparing CLIL and EFL contexts. It is believed that implicit learning can only be provided in second language naturalistic contexts, immersion (Dekeyser 2000) or CLIL programmes (Coyle 2008), where the exposure to the second language is much higher. This belief is shared not only by parents, but also by teachers and language planners, which is why most European governments have decided not only to lower the starting age of learning a foreign language, but also to implement CLIL programmes, which in most European countries are taught through English (Eurydice 2006a). Nevertheless, this is an issue which is becoming controversial in some contexts, such as the Basque Country, where the existence of two co-official languages (Basque and Spanish) and the ever increasing presence of the foreign language are leading to some linguistic friction. In this vein, Osa (2003) claims that the early presence of English can exert a negative influence on Basque command and language attitudes, as Basque (the minority language) will have less space in the curriculum. Similarly, Etxeberria (2004) warns against the assumption that what is valid for bilingual education is also good for trilingual learning (English is the L3 in the Basque bilingual context). Controversy has also erupted in other European countries such as Austria and Finland, where 'CLIL education has been widely welcomed as a positive development in mainstream, state-financed education even if it has also given rise to controversy and debate' (Dalton-Puffer and Nikula 2006, 242).

Despite these misgivings, the spread of CLIL programmes has been bolstered by the belief that even if the traditional teaching of the foreign language is of very high quality, optimal goals cannot be achieved due to lack of time, as 'in foreign language settings input is, by definition, limited and it is usually distributed in very small doses' (Muñoz 2008, 590). The positive linguistic and academic results obtained through immersion programmes led to a European initiative to develop CLIL, as this increased the exposure to the target language without taking up more time in an already crowded school timetable. CLIL 'provides opportunities for combining content and language learning in ways that are harder to put into practice in language classrooms' (Nikula 2007, 209).

CLIL programmes are becoming very fashionable in Spain because they are believed to represent the best way to augment the traditionally low foreign language command among Spanish students (see Ruiz de Zarobe and Lasagabaster 2010). Although these types of programmes are very recent (they have mushroomed in the last decade), there is a very clear-cut trend represented by English as the main language of instruction. As can be observed in other European countries (Eurydice 2006a), in Spain the appeal of English waxes at the same rate as interest in other foreign languages wanes.

Through CLIL, proficiency is to be developed in both the non-language subject and the language in which it is taught, while the same importance is attached to both (Marsh 2008). The objectives of the CLIL provision are as follows (Eurydice 2006a, 22):

- To prepare pupils for life in a more internationalised society and offer them better job prospects in the labour market (socio-economic objectives).
- To convey to pupils values of tolerance and respect vis-à-vis other cultures, through the use of the CLIL target language (sociocultural objectives).
- To enable pupils to *develop language skills* which emphasise effective communication, *motivating* pupils (my emphasis) to learn languages by using them for real practical purposes (linguistic objectives). This article pays particular attention to this.
- To enable pupils to develop subject-related knowledge and learning ability, stimulating the assimilation of subject matter by means of a different and innovative approach (educational objectives).

With a holistic perspective in mind, Coyle (2007) developed what she labelled as the 4Cs conceptual framework, which focuses on the interrelationship between content (subject matter), communication (language), cognition (learning and thinking) and culture (social awareness of the self and ‘otherness’). The underlying idea was to bring together different facets of CLIL, so that CLIL pedagogies were developed, and, in this way, also to foster research into its different aspects.

As far as foreign language competence is concerned, Egiguren (2006) compared the early implementation of an EFL approach with CLIL groups in the Basque Country (Spain) and observed that the early teaching of English may not be the only course of action to improve students’ English competence. This author compared two groups of students, the first one made up of students who started to learn English at the age of four, and the second one at eight, but the latter also had two hours per week of Arts taught in English. In this case, no differences were found when the participants’ proficiency in English was compared at the age of 10, which leads Egiguren to conclude that early teaching is not the only possibility when it comes to improving students’ command of English: in just a year and a half the late starters (who had participated in the CLIL classes) had already caught up with the early starters.

The findings obtained by Egiguren (2006) seem to support the implementation of CLIL programmes, since the particular features of formal settings such as school appear to benefit older learners in the short term due to their being at a more developed cognitive stage (which gives them an advantage when it comes to test-taking), whereas young learners cannot take advantage of the necessary exposure to and contact with the L2. Similarly, the implementation of a CLIL approach augments the presence of the foreign language in the curriculum without increasing students’ time commitment. This creates a context in which the foreign language is used to transmit information in real communicative situations and therefore language learning takes place in a more meaningful and efficient way. Lasagabaster (2008), in a study also conducted in the Basque Country, observed that students enrolled in CLIL programmes performed better in language proficiency tests than their EFL counterparts (similar results have also been obtained in Catalonia; see Navés and Victori 2010). Although motivation was mentioned as one of the key factors in these results, this variable was not controlled.

To my knowledge, CLIL literature in Spain encompasses no studies on motivation, despite the fact that among the purported benefits of CLIL mentioned by authors in different contexts (Dooly and Eastment 2008; Lasagabaster 2008; Lorenzo et al. 2007; Maljers, Marsh, and Wolff 2007), one of the most recurrently

quoted positive aspects of this approach is increased motivation. The study carried out by Seikkula-Leino (2007) in Finland seems to confirm the positive effect of CLIL on motivation, although this author also detected a low self-concept in foreign languages among CLIL pupils. Since different foreign language types of provision may lead to different motivation constructs and diverse levels of language competence, their examination becomes a highly topical issue.

In light of the reviewed literature on the relationship between L2 proficiency and motivation and the purported benefits of CLIL, two questions form the basis of this research: (1) What kind of relationship is there between motivation, different foreign language skills and overall English proficiency? (2) Does CLIL type provision lead to more positive linguistic and motivational outcomes than the traditional EFL approach?

Method

Participants

This is a cross-sectional study involving 191 language learners from the Basque Country, a bilingual community where both Basque and Spanish are official languages and taught at school from the outset. This means that English represents the L3 for all the participants. The Basque Country, one of the 17 autonomous communities that make up Spain, is characterised by the insignificant presence of English outside the school context, as films are still dubbed in Spain and students have very few opportunities to practice the foreign language in real communicative situations. The English language in Spain in general and in the Basque Country in particular fits within what Kachru (1992) calls the Expanding Circle, that is to say, a context wherein English is not employed for communication needs internal to a community.

The grasp of foreign languages among the Spanish population is among the lowest in the European Union (Eurydice 2006b), with just Hungary, Portugal, Italy, the UK and Ireland lagging behind. Since there is an enormous interest in improving students' foreign language command (which in reality means English), an increasing number of CLIL programmes have been implemented.

Two cohorts of students from four different secondary schools took part in this study. On the one hand, there were students who were enrolled in CLIL programmes and, on the other, students who followed an EFL approach and who only had exposure to EFL in the traditional way, for three hours per week. Therefore, students in CLIL classes received additional exposure to the foreign language: English classes plus the school subject taught in English.

The subjects included in the EFL group were 27 students and those in CLIL programmes 164. The mean age among the former was 15.4 and that among the latter 15.1. As for gender, male (51.9%) and female (48.1%) students were fairly balanced among the EFL group, whereas in the CLIL group the percentage of female participants (61.6%) was higher than that of male participants (38.4%). The CLIL type provision encompasses a very wide scope of experiences, as it may range from very limited projects, such as themes within a subject, to long-term implementations, such as whole subjects taught through a foreign language. The participants in this study would fit within the latter and were exposed to English in a school subject

(History, Geography, Social Sciences or Art, depending on the group), in addition to the traditional classes of EFL.

Instruments and procedure

Motivation questionnaire

A questionnaire consisting of 13 items was developed based on previous studies in the area of L2 motivation; all the items included in the questionnaire are detailed in the 'Results' section. The items were presented on a five-point Likert type scale going from 1 (strong disagreement) to 5 (strong agreement), and the only negative item was recoded before data analysis. Item 3 was negative towards the language-learning situation in an attempt to make students pay careful attention when filling out the questionnaire.

In the questionnaire, no reference was made to items relating to English native speakers and the global English user community because, as mentioned above, Spanish secondary education students have very few opportunities to speak English outside the foreign language classroom. Kormos and Csizér (2008) did find that integrativeness was only moderately related to attitudes to English as an international language among Hungarian secondary education students. Since the Hungarian context is similar to the Basque context in that it also fits within the Expanding Circle, in this study it was decided not to include this issue in the questionnaire and instead to focus more on questions related to the foreign language classroom, as the main objective is to compare two different approaches.

English achievement

Foreign language competence was measured via English tests corresponding to grammar, listening, speaking and writing. The grammar and the listening skills were measured using the standardised Oxford Placement Test. As for the written test, students were asked to write a letter to an English family with whom they were supposed to stay in the summer. They were given total freedom regarding the approach to use and could utilise the syntactic structures and vocabulary they thought best. The speaking test was based on the frog story (Mayer 1969), a widely used instrument in which students are asked to describe what is going on in a series of 24 pictures. The frog story has been used in many different contexts all over the world, with different languages and with children, teenagers and adults.

English achievement (overall competence) was determined by adding together the results obtained in the four tests (grammar, listening, speaking and writing). As different evaluation scales were used for the various tests, Z-scores were employed, as these allow comparison between numerical variables which have been measured according to different scales. The average mark for these newly calculated Z-scores (average score) is 0 (nought), and positive values indicate above-average scores while negative values represent those below the average. The tests carried out made it possible to measure communicative as well as linguistic competence. The tests related to the language skills are tests which measure global communication aspects, while the grammar test concentrates on measuring more specific linguistic aspects (Table 1).

Table 1. Results (minimum and maximum scores, mean score and standard deviation) obtained in the English tests by the whole sample.

Tests	Number	Minimum	Maximum	Mean	SD
Speaking	191	17	44	32.20	4.87
Writing	191	46	100	79.90	10.02
Grammar	191	26	90	53.41	11.99
Listening	191	23	85	64.53	9.19
English achievement	191	-7.44	7.43	0.55	2.82

All the language measures had been used in previous research with both CLIL and EFL classes in the Basque Country and therefore were known to be appropriate for the sample under scrutiny (Ruiz de Zarobe and Lasagabaster 2010).

The questionnaire and all the tests (apart from the speaking test) were written tests and completed in groups in a normal class session. The speaking test was undertaken on an individual basis in a separate class with just the examiner present and was recorded for later evaluation. The listening and grammar tests were marked following objective criteria, whereas the writing and speaking test were rated following a holistic approach. Thus the rating of the latter tests did not just count the number of mistakes or the presence of certain elements, but also took into account the communicative effect that the written and spoken texts produced in the reader/hearer.

Results

Motivation

First of all, factor analysis was performed in order to explore the interrelationships among the items included in the motivation questionnaire, as this type of analysis summarises the underlying patterns of correlation among the different variables by reducing the data into a smaller number of clusters (or factors) of related items. Due to the abstract and multidimensional character of motivation, factor analysis has been widely used to explore the internal architecture of L2 motivation. The items included in the questionnaire were thus subjected to the principal component analysis with a view to extracting the underlying factors.

In this case, factor analysis reduced the data into three factors, which accounted for 69.937% of the variance. The Varimax rotated factor matrix showed appreciable loadings (see Table 2).

Items relating to the interest in learning the foreign language and those that show an instrumental orientation correlate and load onto Factor I, which was labelled *interest and instrumental orientation* after considering the items comprised in it. The variables loading onto Factor II relate to the *attitudes towards learning English in class* (or *language-learning enjoyment*), whereas Factor III is defined by two variables and relates to the *effort* made.

The correlations between the three factors were significant and substantial, which attest to a fairly homogeneous disposition (see Appendix 1). Information about the internal consistency of the items comprised in each factor is as follows:

Interest and instrumental orientation: eight items, $\alpha = 0.907$

Attitudes towards learning English in class: three items, $\alpha = 0.816$

Effort: two items, $\alpha = 0.784$

Table 2. Factor analysis: Varimax rotated factor matrix.

Items	Factors		
	I	II	III
2. It is important to learn English	0.786		
4. I want to learn lots of English	0.603		
6. I am interested in learning English	0.519		
7. Learning English is a waste of time	0.562		
9. English will be very useful when it comes to obtaining a job	0.806		
10. I really want to learn English well	0.748		
11. I would like to speak and write English very well	0.753		
12. I want to have a good command of English to get a good job	0.799		
1. I like learning English		0.743	
3. Learning English is boring		0.834	
5. I enjoy English lessons		0.791	
8. I do my best to learn English			0.815
13. In English lessons I try to learn as much as I can			0.844
Total variance explained (%)	50.529	12.461	6.947

Motivation in English as a Foreign Language (EFL) and Content and Language Integrated Learning (CLIL) groups

The first objective was to compare motivation in EFL and CLIL students, taking into account the three factors mentioned above. The results for each of the two cohorts can be seen in Table 3.

The CLIL students appeared more motivated than their EFL counterparts in the three factors into which the data were reduced, as the differences between the accumulated means of the items comprised in each factor were statistically significant. In both cohorts the highest means for each of the items included in the questionnaire (see Appendix 2) were obtained in the following three items: ‘It is important to learn English’ (4.11 the EFL group and 4.69 the CLIL group; $t(189) = 4.57, p < 0.01$), ‘English will be very useful when it comes to obtaining a job’ (4.19 and 4.67, respectively; $t(189) = 3.50, p < 0.01$), and ‘I would like to speak and write English very well’ (4.15 and 4.62, respectively; $t(189) = 3.54, p < 0.01$), all of which are included in the first factor. Therefore, both groups recognised how important it has become to have a good command of English, displaying instrumental orientation. Intriguingly, the lowest mean (once the scores were reversed) had to do with the item ‘Learning English is boring’. In this case, as happened in every single item, the CLIL group was significantly more motivated to learn the language, but this was also their lowest mean. As these students also had

Table 3. Motivation in EFL and CLIL groups.

		Mean	SD	t-value
Interest and instrumental orientation	EFL	30.51	6.36	-4.106**
	CLIL	35.71	4.15	
Attitudes towards learning situation	EFL	7.77	3.27	-3.637**
	CLIL	10.15	2.19	
Effort	EFL	7.07	1.73	-2.906**
	CLIL	8.08	1.29	

** $p < 0.01$.

EFL classes (apart from the subject taught through CLIL), it may be that these classes influenced their opinions. This question will be further discussed in the 'Conclusions' section.

Motivation and language competence

In order to analyse the relationship between motivation and language competence, correlation analyses were performed, the results of which are presented in Table 4.

Although the motivation questionnaire was made up of only 13 items, the correlations of the three factors with English achievement were rather high and statistically significant. In fact, they all correlated significantly with the measure of the overall English achievement, indicating that students with greater motivation performed better on the English tests than their less motivated counterparts. However, there are some differences between the language skills examined in this study. The correlations between the grammar and writing tests are very high, especially the former, whereas this is not the case for the speaking and listening tests. Only the first factor, namely interest and instrumental orientation, actually correlates with these two tests, whereas in the case of Factors II and III none of the correlations are significant. The relationship between motivation and the oral skills seems to be less straightforward than that between motivation and written skills. The results obtained in this article coincide with those obtained by Vandergrift (2005), who also found little connection between proficiency in L2 listening and motivation.

This lack of correlation between the speaking and listening proficiency and the second and third factors would indicate that there is no evidence of any association between the students' attitudes towards the English class and the effort they make and their language achievement in these two skills. It could be argued that command of these skills doesn't require just extra effort, but rather some kind of extra

Table 4. Correlations between motivation and English proficiency tests ($N = 191$).

		Spoken total	Written test	Grammar test	Listening test	Overall achievement
Spoken test	Pearson	1.000				
	Sig.					
Written test	Pearson	0.583**	1.000			
	Sig.	0.000				
Grammar test	Pearson	0.427**	0.525**	1.000		
	Sig.	0.000	0.000			
Listening test	Pearson	0.352**	0.367**	0.367**	1.000	
	Sig.	0.000	0.000	0.000		
Overall achievement	Pearson	0.753**	0.812**	0.771**	0.702**	1.000
	Sig.	0.000	0.000	0.000	0.000	
Factor I	Pearson	0.145*	0.268**	0.403**	0.196**	0.339**
	Sig.	0.045	0.000	0.000	0.007	0.000
Factor II	Pearson	0.116	0.321**	0.417**	0.115	0.324**
	Sig.	0.111	0.000	0.000	0.115	0.000
Factor III	Pearson	0.086	0.230**	0.269**	0.044	0.210**
	Sig.	0.239	0.001	0.000	0.549	0.004

* $p < 0.05$ (bilateral); ** $p < 0.01$ (bilateral).

motivation to acquire them. This question will also be tackled later on in the ‘Conclusions’ section.

English competence in English as a Foreign Language (EFL) and Content and Language Integrated Learning (CLIL) groups

A second main interest in this study was to analyse the proficiency differences (if any) observed between those students enrolled in traditional EFL classes when compared to those exposed to a CLIL approach. Table 5 shows the results obtained by each cohort in the four English tests and in the overall achievement measure.

The differences between the means obtained by the two groups under scrutiny are significant in every single test and, consequently, in the overall English achievement measure. This is especially so in the grammar test, which would seem to confirm that in CLIL classes both language and content are worked on in a complementary and non-exclusive manner with no implied preference for either, but rather as mutually beneficial (Coyle 2007; Marsh 2008). The greater exposure to the foreign language brings about a neat language competence improvement, irrespective of the language skill concerned, although it has to be considered that in this study the reading skill was not analysed.

Conclusions

Much research has been devoted to identifying various motives and to the validation of motivational theories, whereas the effect of different teaching approaches has more often than not been disregarded. Although motivational strategies are fundamental and should therefore be analysed, it may be necessary to start by shedding light on the effects of a more general framework, that is, the methodological approach in which foreign language teaching takes place. Ideally this perspective will allow us to assess the effect of the different motivational hypotheses put forward as a result of the studies undertaken in recent decades.

The traditional teaching of foreign languages has been criticised for not providing sufficient input, an input that in addition is too often inauthentic, functionally restricted and therefore lacking a real communicative function. This obviously may have an impact on students’ motivation, especially in the long run. The results obtained in this study indicate that the two cohorts of students were highly motivated

Table 5. English achievement in EFL and CLIL groups.

		Mean	SD	t-value
Speaking	EFL	29.14	5.62	-3.127**
	CLIL	32.71	4.56	
Writing	EFL	73.07	16.13	-2.510**
	CLIL	81.03	8.15	
Grammar	EFL	38.11	5.83	-12.682**
	CLIL	55.93	10.81	
Listening	EFL	59.56	8.25	-3.103**
	CLIL	65.35	9.10	
Overall competence	EFL	-2.37	2.79	-6.406**
	CLIL	1.03	2.52	

** $p < 0.01$.

to learn English, but the students enjoying a CLIL experience were significantly more enthusiastic than those in traditional EFL classrooms. It can therefore be concluded that there is a strong relationship between the CLIL approach and motivation.

Although this study has some limitations, such as the fact that correlations do not indicate causation and the limited number of items included in the questionnaire on motivation (which in any case is supported by the high Cronbach α internal consistency reliability coefficients obtained in the case of the three factors and the percentage of variance explained by these factors), the results show consistency and allow us to draw attention to some clear-cut tendencies related to the foreign language teaching approach. Having to learn English in the traditional EFL classroom throughout all their compulsory education can be demotivating for learners (Chambers 1999; Davies and Brember 2001; Williams, Burden, and Lanvers 2002), whereas the focus on both content and language promoted by the CLIL type provision (Coyle 2008; Marsh 2008) seems to sustain motivation.

As for foreign language competence, CLIL seems to bear rich fruits in both the oral and written skills. One would expect, in any case, greater differences in the speaking test, but this lack of greater impact may be due to the fact that the students enrolled in CLIL had only been involved in this teaching methodology for two years. If the improvement in oral production is to be more definitive, students will probably need some more time so that the beneficial effects of CLIL are more salient.

The findings seem to be particularly informative when the correlations between language skills and motivation are considered. The reason for the lack of correlation between the second (attitudes towards learning English in class) and third (effort made) factors and the oral tests could be due to the fact that English is not used outside the formal learning context.

More research is needed to get to know whether a lack of contact with the target language community limits foreign language learning. In immersion classes in the Basque context, students can use Basque (the minority language in the Basque Country) outside class with native speakers, and they are similarly exposed to television in Basque. This is not the case with English, because students hardly ever or never use it outside the classroom and very few of them watch television in English.¹ There seems thus to be a need to facilitate contact with the target language beyond the limited exposure of the school setting in order to enhance students' oral skills.

Another question to bear in mind when comparing the two groups is the total contact time. CLIL students not only have English classes (language classes), but also a school subject which is taught in English. This means that they receive additional exposure to the foreign language. If these two types of provision are to be compared in the same conditions, it would be necessary for the two groups to be exposed to the language for the same number of hours, one group being taught English solely as a subject (EFL), and the other using just CLIL. Otherwise, there is the risk of conflating two variables at the same time in the CLIL groups: type of provision and exposure. This is definitely worth investigating, as by controlling these two variables more definitive conclusions may be reached.

These results cannot be generalised, because the implementation of CLIL hinges on so many factors: characteristics of the learner, personality of the teacher, composition of the class group, degree/type of support from the administration, etc. Its effectiveness needs testing in other diverse educational settings, and further and more in-depth research would make it possible to either corroborate or challenge the

present results. Last but not least, Dörnyei's (2009) most recent work on motivation has started to investigate learner identities and this is undoubtedly a course of action worth considering. Any forthcoming article which focuses on motivation either in language or CLIL settings needs to take this new theory (called the *L2 Motivational Self System*) into account, since it has considerable practical implications.

Pedagogical implications

Eurobarometers (surveys conducted on behalf of the European Commission) recurrently show that more than half of European students finish compulsory education with unsatisfactory foreign language skills. What makes this so significant is another piece of data from the same source: that when foreign language learning is not completed at school, it is rarely taken up later in life. The pedagogical conclusion of the present study seems straightforward. CLIL programmes should be boosted as they exert a very positive influence on learners' motivation, which goes hand in hand with increased foreign language achievement. CLIL methodology seems to be particularly motivating, especially for students who have spent several years learning EFL due to its ever earlier teaching.

The present results seem to indicate that the different types of tasks completed in a CLIL context tend to generate more positive motivational responses than those carried out in traditional EFL contexts and, therefore, they raise the students' language-learning interest through a more appropriate approach. The use of the foreign language to teach content thus seems to create a learning environment which is more alluring to students, although this study would be nicely complemented by a qualitative approach that would allow us to delve into the reasons for the students' preferences. The limitations of the present study also have to do with the impossibility of specifying the reasons behind students' demotivation in the EFL context, in contrast to the higher motivation in the CLIL programmes. Consequently, in-depth interviews may become an effective and complementary way to explore the dynamics of students' motivation. The implementation of qualitative research is of the utmost importance, as it will help researchers to pinpoint how motivation can be increased, and therefore, how to improve the foreign language-learning process.

Analysis of the effect of different methodological approaches on motivation and language competence will allow researchers to paint a clearer picture of what actually happens in the classroom, the dynamic character of motivation and how the foreign language-learning process can be boosted and improved. In this respect, CLIL may become a powerful tool, but more studies are needed to identify all its potentialities (as well as its weaknesses); especially longitudinal studies which will pave the way to understanding the relationship of motivation and language achievement with the passage of time. In any case, it can be concluded that the results obtained in this study seem to indicate that CLIL causes motivational levels to be not only sustained, but also even improved within a formal learning situation such as school and this is undoubtedly worth examining in more detail.

The results put forward in this article are of interest to stakeholders in many and varied contexts, since CLIL programmes are burgeoning all over Europe and this trend demands empirical evidence on which teachers, researchers and educational authorities can rely when decisions about its implementation have to be made.

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Note

1. Lasagabaster and Sierra (2010) point out that only 5% of first-year English Studies students at the University of the Basque Country watch TV programmes or films in the English original version (and this despite having chosen to study this particular degree). In the case of the participants in the present study, their exposure to English outside school (through music, the Internet or game consoles) was not controlled, but, bearing in mind the aforementioned scarce contact of English Studies undergraduates, it seems reasonable to conclude that secondary education students' exposure to the foreign language is rather scant.

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References

- Bradford, A. 2007. Motivational orientations in under-researched FLL contexts: Findings from Indonesia. *RELC Journal* 38, no. 3: 302–23.
- Chambers, G.N. 1999. *Motivating language learners*. Clevedon, UK: Multilingual Matters.
- Clément, R., and B.G. Kruidenier. 1983. Orientations in second language acquisition I. The effects of ethnicity, milieu and target language on their emergence. *Language Learning* 33, no. 3: 272–91.
- Coyle, D. 2007. Content and language integrated learning: Towards a connected research agenda for CLIL pedagogies. *The International Journal of Bilingual Education and Bilingualism* 10, no. 5: 543–62.
- Coyle, D. 2008. CLIL – a pedagogical approach from the European perspective. In *Encyclopedia of language and education. Second and foreign language education*, 2nd ed., vol. 4, ed. N. Van Deusen-Sholl and N.H. Hornberger, 97–111. New York: Springer Science + Business Media LLC.
- Dalton-Puffer, C., and T. Nikula. 2006. Pragmatics of content-based instruction: Teacher and student directives in Finnish and Austrian classrooms. *Applied Linguistics* 27, no. 2: 241–67.
- Davies, J., and I. Brember. 2001. The closing gap in attitudes between boys and girls: A five year longitudinal study. *Educational Psychology* 21, no. 1: 103–15.
- Dekeyser, R.M. 2000. The robustness of the critical period effect in second language acquisition. *Studies in Second Language Acquisition* 22, no. 4: 499–534.
- Dewaele, J.M. 2005. Sociodemographic, psychological and politico-cultural correlates in Flemish students' attitudes toward French and English. *Journal of Multilingual and Multicultural Development* 26, no. 2: 118–37.
- Dooly, M., and D. Eastment, eds. 2008. *'How we're going about it'. Teachers' voices on innovative approaches to teaching and learning languages*. Newcastle, UK: Cambridge Scholars.

- Dörnyei, Z. 2001. *Teaching and researching motivation*. Harlow: Longman.
- Dörnyei, Z. 2002. The motivational basis of language learning tasks. In *Individual differences and instructed language learning*, ed. P. Robinson, 137–58. Amsterdam/Philadelphia, PA: John Benjamins.
- Dörnyei, Z. 2009. The L2 motivational self system. In *Motivation, language identity and the L2 self*, ed. Z. Dörnyei and E. Ushioda, 9–42. Bristol: Multilingual Matters.
- Egiguren, I. 2006. Atzerriko hizkuntza goiztiarraren eragina gaitasun eleaniztunean. PhD diss., University of the Basque Country, Vitoria-Gasteiz.
- Etcheberria, F. 2004. Trilinguals at four? Early trilingual education in the Basque Country. In *Trilingualism in family, school and community*, ed. C. Hoffmann and J. Ytsma, 185–201. Clevedon, UK: Multilingual Matters.
- Eurydice. 2006a. *Content and Language Integrated Learning (CLIL) at school in Europe*. Brussels, Belgium: European Commission.
- Eurydice. 2006b. *Europeans and their languages. Special Eurobarometer 243*. Brussels, Belgium: European Commission.
- Gardner, R.C., and P.F. Tremblay 1998. Specificity of affective variables and the Trait/State conceptualization of motivation in second language acquisition. In *Social psychological perspectives on second language learning*, ed. R. Agnihotri, A.L. Khanna, and I. Sachdev, 31–52. New Delhi: Sage.
- Kachru, B.B. 1992. Teaching world Englishes. In *The other tongue: English across cultures*, 2nd ed., ed. B.B. Kachru, 355–65. Urbana, IL: University of Illinois Press.
- Kormos, J., and K. Csizér. 2008. Age-related differences in the motivation of learning English as a foreign language: Attitudes, selves, and motivated behaviour. *Language Learning* 58, no. 2: 327–55.
- Lasagabaster, D. 2008. Foreign language competence in content and language integrated courses. *The Open Applied Linguistics Journal* 1, no. 11: 30–41. <http://www.bentham.org/open/toalj/openaccess2.htm> (accessed June 1, 2009).
- Lasagabaster, D. 2009. English as a language of instruction in a bilingual university. In *Bi- and multilingual universities. European perspectives and beyond*, ed. C. Nickenig and D. Veronesi, 77–87. Bolzano, Italy: Bozen-Bolzano University Press.
- Lasagabaster, D., and Á. Huguet. 2007. *Multilingualism in European bilingual contexts. Language use and attitudes*. Clevedon, UK: Multilingual Matters.
- Lasagabaster, D., and Y. Ruiz de Zarobe. 2010. *CLIL in Spain: Implementation, results and teacher training*. Newcastle, UK: Cambridge Scholars.
- Lasagabaster, D., and J.M. Sierra. 2010. Immersion and CLIL in English: More differences than similarities. *ELT Journal* 64, no. 4: 367–75.
- Lorenzo, F., S. Casal, V. de Alba, and P. Moore, eds. 2007. *Models and practice in CLIL*. Logroño: Revista Española de Lingüística Aplicada.
- Maljers, A., D. Marsh, and D. Wolff, eds. 2007. *Windows on CLIL. Content and language integrated learning in the European spotlight*. Graz, Austria: European Centre for Modern Languages.
- Marsh, D. 2008. Language awareness and CLIL. In *Encyclopedia of language and education. Knowledge about language*, 2nd ed., vol. 6, ed. J. Cenoz and N.H. Hornberger, 233–46. New York: Springer Science + Business Media LLC.
- Masgoret, A.-M., and R.C. Gardner. 2003. Attitudes, motivation, and second language learning: A meta-analysis of studies conducted by Gardner and associates. *Language Learning* 53, no. 1: 123–63.
- Mayer, M. 1969. *Frog, where are you?* New York: Dial Press.
- Muñoz, C. 2008. Symmetries and asymmetries of age effects in naturalistic and instructed L2 learning. *Applied Linguistics* 29, no. 4: 578–96.
- Navés, M.T., and M. Victori. 2010. CLIL in Catalonia: An overview of research studies. In *CLIL in Spain: Implementation, results and teacher training*, ed. D. Lasagabaster and Y. Ruiz de Zarobe, 30–54. Newcastle, UK: Cambridge Scholars.
- Nikula, T. 2007. Speaking English in Finnish content-based classrooms. *World Englishes* 26, no. 2: 206–23.
- Osa, E. 2003. Ikastola eta eskoletan euskararen erabilera indartzeaz gogoeta [Reflections on how to boost the use of Basque in schools]. *Bat Soziolinguistika Aldizkaria* 49: 129–45.

- Pae, T.-I. 2008. Second language orientation and self-determination theory. A structural analysis of the factors affecting second language achievement. *Journal of Language and Social Psychology* 27, no. 1: 5–27.
- Ruiz de Zarobe, Y., and D. Lasagabaster. 2010. CLIL in a bilingual community: The Basque Autonomous Community. In *CLIL in Spain: Implementation, results and teacher training*, ed. D. Lasagabaster and Y. Ruiz de Zarobe, 12–29. Newcastle, UK: Cambridge Scholars.
- Seikkula-Leino, J. 2007. CLIL learning: Achievement levels and affective factors. *Language and Education* 21, no. 4: 328–41.
- Vandergrift, L. 2005. Relationships among motivation orientations, metacognitive awareness and proficiency in L2 listening. *Applied Linguistics* 26, no. 1: 70–89.
- Veiz, J.M. 2007. De políticas (y politiquillas) del EEES y competencias idiomáticas en el grado de maestro. *Lenguaje y Textos* 25: 13–42.
- Williams, M., R. Burden, and U. Lanvers. 2002. ‘French is the language of love and stuff’: Student perceptions of issues related to motivation in learning a foreign language. *British Educational Research Journal* 28, no. 4: 503–28.

Appendix 1. Intercorrelations of the three factors

		Interest and instrumental orientation	Attitudes towards learning situation	Effort
Interest and instrumental orientation	Pearson	1.000		
	Sig.			
Attitudes towards learning situation	Pearson	0.586**	1.000	
	Sig.	0.000		
Effort	Pearson	0.540**	0.544**	1.000
	Sig.	0.000	0.000	

** $p < 0.01$ (bilateral).

Appendix 2. Differences in the means of the items comprised in the motivation questionnaire between the English as a Foreign Language (EFL) and Content and Language Integrated Learning (CLIL) groups

Items	EFL (Mean*)	CLIL (Mean*)
1. I like learning English	2.56	3.70
2. It is important to learn English	4.11	4.69
3. Learning English is boring	2.52	3.18
4. I want to learn lots of English	3.22	4.23
5. I enjoy the English lessons	2.70	3.28
6. I am interested in learning English	3.41	4.18
7. Learning English is a waste of time	3.93	4.41
8. I do my best to learn English	3.70	4.24
9. English will be very useful when it comes to obtaining a job	4.19	4.67
10. I really want to learn English well	3.70	4.37
11. I would like to speak and write English very well	4.15	4.62
12. I want to have a good command of English to get a good job	3.81	4.57
13. In the English lessons I try to learn as much as I can	3.37	3.84

*All differences are significant at $p < 0.01$.