

## **AICLE A TRAVÉS DE LAS LENGUAS: RESULTADOS DE LA INVESTIGACIÓN EN DOS COMUNIDADES BILINGÜES**

Resumen: El Aprendizaje Integrado de Contenidos en Lengua Extranjera (AICLE) se ha aceptado en los últimos años como uno de los enfoques educativos preferidos para desarrollar el multilingüismo en Europa. España ha seguido asimismo esta tendencia, aunque su implantación difiere según las comunidades, bien sean monolingües bien bilingües, ya que en este último caso el aprendizaje de la lengua extranjera, normalmente el inglés, debe acomodarse a las dos lenguas ya existentes en la comunidad.

El objeto de este artículo es llevar a cabo una comparación de la competencia lingüística obtenida en dos comunidades bilingües, el País Vasco y Cataluña, en dos entornos educativos distintos: por un lado, un acercamiento tradicional al aprendizaje del inglés como asignatura (no-AICLE) y, por otro, un entorno integrado AICLE. En concreto, analizaremos la competencia escrita que estudiantes de educación secundaria obtienen en estas dos comunidades cuando se analizan variables distintas. En primer lugar, compararemos el enfoque educativo desarrollado en las dos comunidades (AICLE y no-AICLE) y, en segundo lugar, estudiaremos la influencia del número de horas de instrucción en dos grupos de edad distintos. Los resultados vienen a corroborar cómo la cantidad de instrucción en lengua extranjera influye de forma significativa en los resultados en competencia escrita, sea cual sea el enfoque educativo seguido en el aula.

Palabras clave: AICLE, instrucción, comunidades bilingües, competencia escrita



## **CLIL ACROSS LANGUAGES: RESEARCH OUTCOMES IN TWO BILINGUAL COMMUNITIES**

Abstract: Content and Language Integrated Learning (CLIL) seems to be fully accepted as the preferred approach at present to promote multilingualism in Europe. Spain has also followed this trend, although the way it has been implemented varies depending on the community involved, whether monolingual or bilingual, since in the latter case the foreign language, usually English, adds to two previous languages.

The aim of this paper is to carry out a comparison of the linguistic competence attained in two bilingual communities, namely the Basque Country and Catalonia, two settings where we find both educational approaches: on the one hand, a traditional English as a Foreign Language (non-CLIL) strand and, on the other, the CLIL strand. More precisely, we will analyse the written competence that secondary students reach in these two communities when different variables are considered. Firstly, we will compare the educational approach followed in the communities (CLIL versus non-CLIL) and, secondly, we will analyse the influence of the number of hours of instruction in two different age groups. Our results demonstrate that the amount of instruction has an important bearing on written competence, irrespective of the approach followed in the classroom.

Keywords: CLIL; instruction; bilingual communities; written competence.



## CLIL ACROSS LANGUAGES: RESEARCH OUTCOMES IN TWO BILINGUAL COMMUNITIES

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### 1 Introduction

For a number of years we have witnessed how Content and Language Integrated Learning (CLIL), a generic umbrella term for bilingual, content-based education, has become a preferred educational approach for the promotion of languages and multilingualism in the European landscape. Spain has also followed these latest developments, implementing this educational approach in different ways, depending on the community involved.

One of the main differences encountered among the communities when analysing the CLIL approach is that between monolingual and bilingual communities, as both of them are found in the Spanish scenario and, in the case of the bilingual communities, the languages that already need to be accommodated in the curriculum. In the case of Catalonia and the Basque Country, both are autonomous communities in Spain in which Spanish co-exists with another official language, Catalan and Basque.

Although the implementation of CLIL in Spain is relatively new, these programmes have benefited from the experience gathered in programmes for the normalisation of Basque and Catalan as official languages. In the case of Catalonia, already before the implementation of the Educational Reform in 1990, immersion programmes (Catalan-Spanish) were set up for primary and secondary education (Arnau, 2000; Artigal, 2000; Sanz, 2000), where in the first years of primary education all the subjects (with the exception of the Spanish language) were taught in Catalan, and Spanish was gradually introduced in the curriculum. Results showed that by the end of secondary education pupils had a good command of both Catalan and Spanish, and no statistically significant



differences were found between those students in immersion programmes and their Spanish counterparts (Navés and Victori, 2010; Prats, 2003).

In the Basque Country, the *Basic Law on the Standardisation of Basque* was passed in 1982, and three linguistic models were established to learn in Spanish and/or Basque: (i) Model A: all subjects, apart from the Basque language and literature and modern languages, are taught in Spanish; (ii) Model B: both Spanish and Basque are used to teach all the subjects, and (iii) Model D: all subjects, except Spanish language and literature and modern languages, are taught in Basque. Model D has become the preferred model in the Basque Community, as it provides the best programme for balanced bilingualism (Cenoz, 1991).<sup>15</sup>

In sum, the experience obtained by the implementation of bilingual programmes in both communities has provided a blueprint for the adoption of CLIL programmes recently. The fact that CLIL is becoming a widespread practice in Catalonia and the Basque Country can be appreciated in the number of programmes that have adopted this approach in the last years. In Catalonia the first innovative projects began in the 90s but it was not until 1999 that state-funded schools were offered the possibility to follow a CLIL strand (see Navés and Victori, 2010, for an account of the implementation of CLIL programmes in primary and secondary education in Catalonia). In the Basque Country, apart from the early introduction of the foreign language in formal instruction, when children are 4 years old, the Department of Education, Universities and Research of the Basque Country began a *Plurilingual Experience* in 12 schools of the Basque Community in the year 2003 (see Ruiz de Zarobe and Lasagabaster, 2010, for an account of CLIL provision in the Basque Autonomous Community). Due to the success of this pioneer programme, the Plurilingual Experience has been extended to 40 schools in a project that has been termed the *Trilingual Framework* (Order of May 18<sup>th</sup>, 2010).

In both communities the general trend has been to offer one or two non-language subjects in the foreign language, although there is a number of individual institutions that offer alternative CLIL curricula, with the integration of more subjects in the foreign language. Any non-language subject can be taught in English, and subjects vary between schools; however, these subjects are very often from the social sciences and creative subjects such as music, arts and crafts and physical education.

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<sup>1</sup> In the Basque educational system there is no Model C, because no letter “c” exists in the Basque alphabet.

As for the research undertaken in the last years in relation to CLIL outcomes, the majority of the studies carried out (Celaya, 2008; Dafouz and Guerrini 2009; Dalton-Puffer, Nikula and Smit, 2010; Lasagabaster and Ruiz de Zarobe 2010; Llinares and Whittaker, 2010; Ruiz de Zarobe, 2007 and 2008; Ruiz de Zarobe and Jiménez Catalán 2009; Ruiz de Zarobe, Sierra and Gallardo del Puerto, 2011), point to the success of CLIL programmes in most of the competencies analysed, although there are some skills that seem to benefit more than others (Dalton Puffer, 2008; Ruiz de Zarobe, 2011). Dalton-Puffer (2008) suggested that some skills and competencies showed significant gains in CLIL, among them a) receptive skills, b) vocabulary, c) morphology, d) fluency and e) emotive/affective factors, while other skills: a) syntax, b) writing, c) informal/non-technical language, d) pronunciation, and e) pragmatics, showed inconclusive results.

More recently Ruiz de Zarobe (2011) looked at new evidence on the field based on some of the latest developments in the European scenario, and included those areas where clear gains were observed: a) reading, b) receptive vocabulary, c) speaking (fluency, risk-taking associated with low affective filter), d) writing (fluency and lexical and syntactic complexity), e) some morphological phenomena, and f) emotive/affective outcomes, and areas which did not seem to be favourably affected by CLIL: a) syntax, b) productive vocabulary, c) informal/non-technical language, d) writing (accuracy, discourse skills) and d) pronunciation (degree of foreign accent).

However, very little research has been undertaken comparing the linguistic competence attained in two bilingual communities, in our case the Basque Country and Catalonia, to check possible differences of CLIL effects depending on the learners' L1, school subject, distribution of hours and other related factors. Thus, our aim in this study is to analyse the linguistic competence, and more precisely the written competence that secondary students reach in both communities where we find both educational approaches: a traditional English as a Foreign Language (non-CLIL) strand and, the CLIL strand. Our aim will be twofold:

1. We will compare the results obtained in both educational approaches (CLIL versus non-CLIL).
2. We will analyse the influence of the number of hours of instruction in two different age groups.

## 2. The study

### 2.1. Participants

The study was conducted both in the Basque Country and Catalonia, with a selection of participants in different grades, with diverging hours of instruction and with different approaches to CLIL. All in all we chose a total of 91 students from two different grades: Grade 9 (3 ESO) and Grade 10 (4 ESO) students, who are 15 and 16 years of age, respectively. The number of hours of instruction in and through English also differed, as can be appreciated in Table 1.

Table 1: Participants of the study

GROUPS	N	GRADE	AGE	HOURS OF INSTRUCTION
CATALONIA (CLIL : 1 subject)	23	9 (3 ESO)	15	667
CATALONIA (CLIL : 2 subjects)	26	10 (4 ESO)	16	774
BASQUE COUNTRY (CLIL : 1 subject)	24	9 (3 ESO)	15	875
BASQUE COUNTRY (NO CLIL)	18	10 (4 ESO)	16	792
TOTAL N	91			

The Catalan group consisted of students from 3 ESO who had received regular instruction in English as a Foreign Language (EFL) 3 hours per week plus a curricular subject through CLIL: *Natural Sciences*. The students from 4 ESO, apart from the

subject through CLIL in 3 ESO, had had two more subjects through English: *Scientific Terminology* and *Greek Mythology*.

In the case of the Basque Country, the group from 3 ESO had received instruction in EFL 3 hours per week. At the age of 14, just before 3 ESO, they entered a CLIL programme in which a curricular subject, *Social Science*, was taught through English for 3 hours per week. On the other hand, in 4 ESO, a group was chosen who had only received 3 hours of English per week, following a conventional EFL programme, without any CLIL approach to the foreign language. The selection of this sample was due to the fact that in order to compare it with the Catalan sample in the same grade (4 ESO), we required a group with a similar number of hours of instruction. Furthermore, this also gave us the possibility to compare both approaches, CLIL vs. non-CLIL, in 4 ESO, that is, at the end of compulsory education.

## 2.2. Instruments and procedure

In order to collect the data, participants were asked to complete a written production task: a composition with a different topic (“My life: past, present and future expectations” in the case of Catalonia and “Write a letter to a host family” in the Basque Country), and with a difference in the allotment of time (a maximum of 15 minutes in Catalonia and 20 minutes in the Basque Country). However, as previous research had suggested (Celaya and Ruiz de Zarobe, 2010), these differences did not seem to have a significant influence in the results as could be appreciated in the number of open class words produced in each cohort in the research aforementioned.

These compositions were written in the natural classroom setting, within regularly scheduled classes. This same instrument has been used in previous research (see, for instance, Celaya and Navés, 2009; Ruiz de Zarobe, 2010), as it was one of the instruments used in two larger projects undertaken in both autonomous communities.

A holistic approach was applied to evaluate written competence: each scale consisted of four bandings that ranged from ‘excellent’ to ‘very poor’, and which were double marked both in Catalonia and the Basque Country.

Compositions were scored using the following categories (Jacobs et al., 1981): content (max=30), organization (max=20), vocabulary (max=20), language use (max=25), and

mechanics (max=5). These five scales were used to have an overall account of the written assignment:

- a) Content (30 points): this category considers the development and comprehension of the topic as well as the adequacy of the content of the text.
- b) Organisation (20 points): several factors are considered here, such as the organisation of ideas, the structure and cohesion of the paragraphs and the clarity of exposition of the main and secondary ideas.
- c) Vocabulary (20 points): this category deals with the selection of words, expressions and their usage. The appropriateness of the register used is also taken into account.
- d) Language usage (25 points): the use of grammar categories is taken into account, e.g. tense, number, subject-verb agreement, in addition to word order and the use of complex syntactic structures.
- e) Mechanics (5 points): this category includes the evaluation of punctuation, spelling, and the use of capitalisation.

### 2.3. Results and discussion

The following table displays the results obtained in both communities in the five scales analysed for written production.

Table 2: Summary of results

	<b>CATALONIA (3 ESO)</b>	<b>BC* (3 ESO)</b>	<b>CATALONIA (4 ESO)</b>	<b>BC* (4 ESO)</b>
<b>CONTENT</b>	<b>20.04</b>	<b>24.75</b>	<b>22.15</b>	<b>25.3</b>
<b>ORGANIZATION</b>	<b>13.67</b>	<b>15.8</b>	<b>15.41</b>	<b>16.6</b>
<b>VOCABULARY</b>	<b>11.47</b>	<b>15.8</b>	<b>12.75</b>	<b>16.6</b>
<b>LANGUAGE USE</b>	<b>14.84</b>	<b>17.8</b>	<b>15.59</b>	<b>19.4</b>
<b>MECHANICS</b>	<b>3.39</b>	<b>3.9</b>	<b>3.84</b>	<b>4.3</b>

\* BC = Basque Country

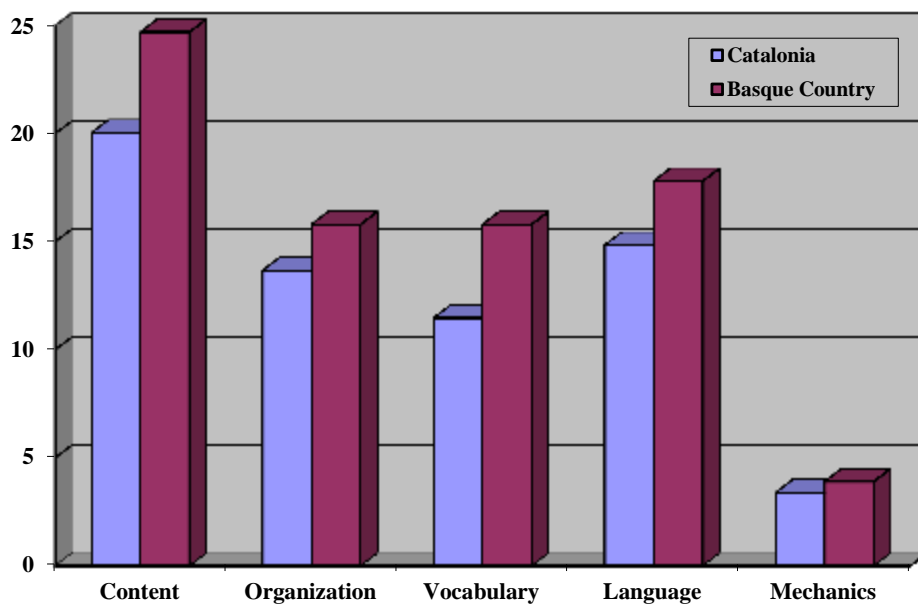
As can be seen in Table 2, the students in the Basque Country systematically obtain higher results in the five areas, that is, both when the same grades are compared (3 ESO



and 4 ESO, respectively), but also in the case of 3 ESO in the Basque Country in relation to 4 ESO in Catalonia.

The results at grade 3 in both contexts are presented in Figure 1.

Figure 1: Results in 3 ESO

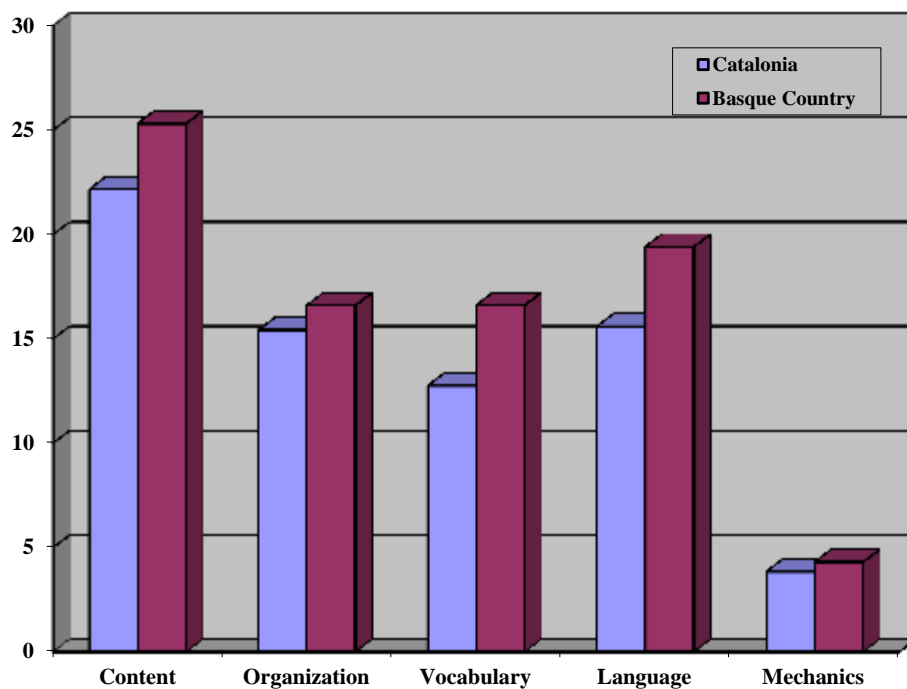


Although both cohorts followed a similar CLIL approach and belonged to the same age group, the hours of instruction differed, being higher in the Basque Country cohort (667 vs. 875). Figure 1 shows how the Basque group produced better results in the five categories under analysis, which suggests that the amount of instruction may have a bearing on the results.

Out of all the categories analysed, there are three scales where these differences are more outstanding: content, vocabulary and language use. The other two categories: organisation and mechanics, which rely more on the organisation and structure of the text and on the evaluation of punctuation and spelling do not seem to be affected so much by the context.

When students were one year older, our data allowed us to compare CLIL and non-CLIL strands. Figure 2 below shows these results.

Figure 2: Results in 4 ESO



In this case, although once again both groups belong to the same grade and age, we are comparing two different strands: CLIL in Catalonia vs. non-CLIL in the Basque Country, with a slight difference in the number of hours of instruction (774 in Catalonia vs. 792 in the Basque Country). It is interesting to point out that, even if the Basque cohort yields higher results than the Catalan group, once again (see Figure 1) differences were not so large in organization and mechanics as in the other three aspects. This may lead us to conclude that the amount of instruction can affect the results in written production, but mainly in categories that rely more on content, vocabulary and language use, rather than the structure and organization of the text.

These results also provide an interesting insight on the role of instruction and CLIL. In previous research (see for instance, Ruiz de Zarobe, 2008, Ruiz de Zarobe and Jiménez Catalán, 2009; among other studies), the good results obtained in CLIL were sometimes

indirectly related to the fact that students following a CLIL strand had undergone more hours of instruction in and through English. The fact that students in CLIL programmes outperformed their non-CLIL counterparts could be sometimes attributed to both the approach and the amount of instruction in the foreign language. However, this study shows that, despite not following a CLIL approach, the results were still better when the amount of instruction in the foreign language increased, although that instruction had been carried out in a conventional non-CLIL classroom, without any integrated approach to content and language.

In view of such observations, it may be argued that the role of the amount of instruction in the foreign language is important, influencing significantly the outcomes in both age groups, irrespective of the approach followed in the classroom.

### 3. Conclusions

The aim of this paper has been to carry out a comparison of the linguistic competence attained in two bilingual communities, namely the Basque Country and Catalonia, two settings where we find both educational approaches: on the one hand, a traditional English as a Foreign Language (non-CLIL) strand and, on the other, the CLIL strand. More precisely, we have analysed the written competence that secondary students reach in these two communities when different variables are considered. Firstly, we have compared the educational approach followed in the communities (CLIL versus non-CLIL) and, secondly, we have analysed the influence of the number of hours of instruction in two different age groups.

Our results confirm that there is a positive relationship between the amount of exposure through English and the linguistic outcomes in written production, confirming previous research in the field (Ruiz de Zarobe, 2010). When both CLIL cohorts were compared in Catalonia and the Basque Country, those with a higher amount of hours of instruction through English, that is, the Basque cohort, obtained better results in the five scales of the written production task, even though both groups had followed a similar CLIL approach and belonged to the same age group. Out of all the characteristics under analysis, differences were more relevant in those categories that rely on content, vocabulary and language use, rather than those that analyse the organisation and structure of the text.



Quite interestingly, the outcomes were also more positive in those groups that followed a more traditional approach to the language (non-CLIL), but where the amount of exposure to English increased. In previous research (see, for instance, Ruiz de Zarobe and Jiménez Catalán, 2009, for a compendium of some of these studies), the positive results that were obtained using a CLIL approach could sometimes be attributable to both the educational approach itself and to the fact that under this approach, students had a higher amount of exposure to the foreign language. It was difficult, if not impossible, to define which factor influenced more. However, the results of our research here point to the fact that students with more exposure to English achieve higher levels of proficiency in written competence, even though that exposure has been in non-CLIL classrooms, without any integrated approach to the language. Thus, the amount of exposure has a greater bearing on the results than the approach itself.

In sum, this study serves as evidence that there may be other factors involved in the linguistic outcomes of both educational approaches: CLIL vs. non-CLIL. Not only does the approach affect the outcomes, but sometimes other factors such as the amount of exposure to the language may play an important role in the results. Further empirical research will help us confirm these results, not only in relation to written competence, but also in a more general competence of the foreign language.

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