# CLIL in Galicia: Repercussions on academic performance 

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## AbSTRACT

There is a concern in Galicia (Spain) about possible negative effects on academic performance caused by the introduction of CLIL (content and language integrated learning) in schools. It has been said that when three languages coexist in the same context as vehicles of education, it is too much for the students, especially in primary education. In this study, the academic grades of 747 students from 13 primary schools in Galicia were analyzed over two consecutive school years. Data was gathered from students of all ages. The results reveal that the difference in performance for the CLIL and the non-CLIL groups cannot be considered significant; that is, there were no negative effects on academic performance caused by CLIL. Additionally considering the significant number of studies demonstrating the positive effects of CLIL in certain areas, it is concluded that the approach CLIL should be reinforced in schools.

Keywords:
CLIL; primary education; bilingual education; SLA; EFL.


#### Abstract

Resumen Hay una preocupación en Galicia (España) sobre los posibles efectos negativos en el rendimiento académico causada por la introducción del AICLE (aprendizaje integrado de contenidos y lenguas extranjeras) en las escuelas. Se ha dicho que cuando tres lenguas coexisten en el mismo contexto como vehículos de la educación, es demasiado para los estudiantes, especialmente en la educación primaria. En este estudio, se analizaron las calificaciones académicas de 747 estudiantes de 13 escuelas primarias en Galicia durante dos años escolares consecutivos. Los datos proceden de estudiantes de todas las edades. Los resultados revelan que no se puede considerar como significativa la diferencia en rendimiento para los grupos AICLE y los grupos no AICLE; es decir, no hubo efectos negativos en el rendimiento académico causados por el AICLE. Además teniendo en cuenta la cantidad importante de estudios que demuestran los efectos positivos del AICLE en ciertas áreas, se concluye que el enfoque de AICLE debe reforzarse en las escuelas.


Palabras Claves:
AICLE; educación primaria; educación bilingüe; SLA; EFL.

## INTRODUCTION

The term CLIL (content and language integrated learning) designates a learning approach in which the focus is on content and not only the language. Practice of this system is not new; there have been many approaches based on similar principles (for example, linguistic immersion). Indeed, in the past, these were very common practices. Medieval universities taught in Latin independently of the mother tongue of their students. In Arab-speaking countries a standard high register of Arabic, not used in family contexts, is taught. A similar situation obtains with for Mandarin Chinese.

However, the use of such approaches had practically disappeared in many developed Western countries, where-as the centuries passed, and thanks to the arrival of democracy-languages considered vulgar during the Middle Ages eventually achieved parity of status with the classical languages that had survived otherwise only as vehicles of culture and knowledge. Paradoxically, in many cases this contributed to a situation in which, as societies progressed in scientific development, they went backwards in language knowledge. It was very common in the Middle Ages that aristocratic families managed a number of languages on a daily basis. Marriages between aristocrats from different nationalities were quite common, because such marriages helped establish important political links. It was understood that the education of monarchs should necessarily include the learning of several languages so that they could communicate with their peers in neighbouring countries. Wright (2004, p. 22) mentions, as specially significant examples, the Court in the region of Bohemia, where each of the members of the family spoke a different language because of residence or marriage reasons, and the royal family of Luxembourg, a very similar case. In the case of university students, the use of texts in Latin and classical Greek was very common, partly due to the lack of translations and partly due to the value given to being able to read the original sources. Even at lower class levels, because of the needs of merchants, the use of more than one language was also common.

Linguistic borders in that time were not clear at all. The ability to understand the language of the neighbours simply diluted as the distances increased. With the birth of modern states, linguistic borders did start to appear

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more clearly, as languages were used as flags of national identity. Nevertheless, despite the efforts to justify the delimitation of states in this way, the borders were not clear at all for the populations:

> The only incontrovertible commonality seemed to be language $[\ldots]$ in the struggles to achieve separate statehood, the question of national language was central to consciousness raising within the group and to the gaining of recognition from others. (Wright, 2004, pp. 33-45)

As a result of this process, people from each country started using their standardized national languages more frequently for academic purposes and official administration, while rejecting classical languages as well as the languages from the neighbouring countries. As citizens in modern states the consequence of this process is that individuals can communicate fluently in only one or at most two languages; the second language is, now, most likely to be English. Likewise, today, application of CLIL is constantly increasing.

## Opinions about CLIL in Galicia

Having established the antecedents, I analyse the impact of CLIL on the contemporary Galician ELT community. There is, in general, support from the families involved, since in order to start a sección bilingüe ("bilingual section", the name given to CLIL classes in Spain) at a school, consent from all the families involved is required. However, opposition forces exist as well, mainly from the world of politics. Galicia is a region in which two languages coexist with particular relations of power and issues of linguistic politics are very sensitive.

Lasagabaster and Sierra (2009) (cited in Ruiz de Zarobe \& Lasagabaster, 2010, p. 24) suggest that the implementation of CLIL has a positive effect on the attitudes of children toward trilinguism. Achieving such positive attitudes is one of the main objectives of the policies carried out in regions like Euskadi (the Basque Country) or Galicia. Students have endorsed the importance of multilingualism in both the individual and social spheres, but this is especially the case among the CLIL groups Ruiz de Zarobe \& Lasagabaster, 2010, p. 24). In general, recent studies clearly support the idea that the CLIL programs have positive effects, either on the attitudes of the students involved towards learning additional languages or for their linguistic competence in the language used as a vehicle of instruction for the subjects included in the CLIL programs. In fact, more and more primary schools and high schools participate in secciones bilingües. The Public Administrations strongly support this approach, even though research supporting the superiority of CLIL as opposed to other approaches was scarce during the first stages of its application. Probably the fact that students in Spain systematically showed much lower levels of English than those in many other countries of the European Union, where the mastery of English is more necessary every day, pushed them to imitate other countries in their environment.

The impact of globalization, like climate change, was being increasingly felt in some parts of the world, especially in Europe during the period of rapid integration from 1990 to 2007. This impact highlighted the need for better language and communication educational outcomes. (Coyle, Hood, \& Marsh, 2010, p. 4)

Before anything, there is the principal objective of CLIL of improving the linguistic competence of the students, as the Common European Framework for Languages defines. (Poisel, 2007, p. 43)

This interest facilitated growth in the use of English and the wishes of governments for their population to master it become irreversible (Vázquez, 2007, p. 105). Additionally, many authors in recent decades, even though little research about CLIL existed, offered philosophical support for the teaching of languages through CLIL. Graddol (2006) described CLIL as "the ultimate communicative methodology".

CLIL is a dual-focused educational approach in which and additional language is used of the learning and teaching of both content and language. That is, in the teaching and learning process, there is a focus not only on content, and not only on language. Each is interwoven, even if the emphasis is greater on one or the other at a given time. CLIL is not a new form of language education. It is not a new form of subject education. It is an innovative fusion of both. CLIL is closely related to and shares some elements of a range of educational practices. Some of these practices-such as bilingual education and immersion-have been in operation for decades in specific countries and contexts; others, such as content-based language teaching of English as and Additional Language (EAL), may share some basic theories and practice but are not synonymous with CLIL since there are some fundamental differences. (Coyle, Hood \& Marsh, 2010, p. 1)

The CLIL approach is strongly related to constructivism as it links disconnected areas and develops cognitive and significant associations both inside and outside of school context (Casal Madinabeitia, 2007, p. 57).

## Research question

The present study's research question was: Does CLIL have a negative effect of on academic performance in the Galician or Spanish languages?

A study of the impact of CLIL on levels of performance achieved in curricular subjects conducted through English was carried out by Barreiro Gundín and San Isidro (2009, pp. 200-202) for the Consellería de Educación of Xunta de Galicia. A questionnaire was used to gather data about the opinions of the teachers involved in CLIL programs in secondary education; the study reached the following conclusion: "The contents taught in the different subjects via CLIL are assimilated in a similar fashion to what they are in non-CLIL contexts."

The same study also compared, transversely, the academic results of CLIL students and non-CLIL students. Some of the CLIL groups had been selected on the basis of their prior to their academic achievement, though in the case of rural schools, where there are no different groups for the same school year, all the students involved were included in the CLIL groups. Again, the data obtained seem to confirm the hypothesis of the present study, though they cannot be directly compared because the participants in Barreiro Gundin and San Isidro's (2009) study were students at the secondary level. It may be expected that the results for primary students should be similar, but a systematic verification is necessary.

Lasagabaster and Ruiz de Zarobe carried out a study (2010) in the Ikastolen Elkartea, a private school network in which Euskera (Basque) is the vehicle of instruction and Spanish is studied as a subject only. They explain:

Teaching of Social Sciences in English does not prevent students from explaining in Basque the contents they have learn in the foreign language (Ikastolen Elkarteko Eleanitz-Ingelesa Taldea, 2003, cited in Ruiz de Zarobe and Lasagabaster, 2010, p. 21)

A study similar to the present work was carried out by Egiguren (2006, cited in Ruiz de Zarobe and Lasagabaster, 2010, p. 22), although in this case the focus was on examining the impact studying English from early ages on the use of Basque and Spanish in the CLIL experiences was studied. No differences between the experimental and the control groups were found; thus, even though the setting is not the same, these conclusions also point in the same direction as the hypothesis of the present study.

Van de Craen, Mondt, Allain, and Gao (2007, p. 72) point out that there are no arguments to support the idea that CLIL could be harmful for the mother tongue. Indeed, some effects could be more positive than negative. The same authors warn that in regions where a majority and minority language cohabit, the fear of losing the minority language frequently appears as an argument in opposition to CLIL education. This is very much the case for the population on which the present study was focused.

## Contribution of this study to this field

As can be seen, research on this field is not yet very abundant. There are few studies, and most of these focus on secondary education. For the development of education practices that can genuinely offer improved outcomes, a solid theoretical framework that can motivate professionals to launch CLIL projects and families to support such initiatives is necessary. Nevertheless, at present, such a framework and such initiatives are at a practically experimental stage, with almost totally voluntary participation. A normalized and official implementation remains a long way off, especially given the political sensitivity of the issue in Galicia.

## METHOD

## Sampling

The present study was carried out through a longitudinal, two-groups design. The groups were organized hierarchically in two levels: classrooms and subjects. A level of significance $\alpha=0.05$ was desirable, and a power $1-\beta=0.90$.

To establish the minimum size of the sample needed to fulfill the defined criteria, I followed the recommendations of Welcowitz et al. (1981, cited in Jiménez Fernández, López-Barajas Zayas, \& Pérez Juste, 1991,

[^0]p. 437) with respect to the analysis of the test's power. The minimum number of elements for each group-in this case, classrooms-was calculated as follows:
\[

$$
\begin{aligned}
& n=2(\delta / \gamma) 2=2(3.60 / 0.50) 2=68 \\
& n=2(\delta / \gamma) 2=2(3.60 / 0.80) 2=40
\end{aligned}
$$
\]

The experimental group consisted of 13 classrooms in which at least one subject was taught through CLIL. The control group consisted of 44 classrooms in which no subjects were taught through CLIL. The selected schools were selected randomly from public schools in Galicia. There were urban and rural schools. In total, 13 schools were involved, and a total population of 747 students.

The independent variable was the existence of a CLIL subject. The dependent variables were the means of the marks obtained in the Galician-language and Spanish-language subjects. The same design for contrasts was used for each subject. The SPSS software was used.

Table 1 shows the longitudinal design mentioned above. The first measure of the dependent variable was the evaluation in the subject during the school year 2009-2010; the second was the evaluation during the year 20102011.

Table 1. Longitudinal design.

|  | Evaluations before | CLIL | Evaluations after |
| :--- | :--- | :--- | :--- |
| G. E. | $\mathrm{T}_{1}$ | X | $\mathrm{T}_{2}$ |
| G. C. | $\mathrm{T}_{1}$ | - | $\mathrm{T}_{2}$ |

## Variables

I chose a longitudinal model for this study, in contrast to that of Barreiro Gundín and San Isidro (2009), in which the data analyzed were gathered only at a specific moment. Roquet-Pugès (2011) followed a similar model, comparing the results obtained from a pre-test and a post-test on linguistic competence in English amongst a group of secondary students in a CLIL program with those of another group that had studied English as a foreign language. In this case, evaluations of the students were compared with those from the previous year. With the longitudinal study, a control on the effect of variables that would distort the results is sought. The students from different schools could obtain higher or lower marks due to factors such as socioeconomic level or the evaluation methods of their teachers. By comparing the variations in their evaluations instead of instant evaluations as they are given by the school, the effect of such factors can be reduced. In my opinion, the results of Barreiro Gundin and San Isidro (2009) could have been contaminated, as the results were not filtered to take into account that a great part of the schools select students more highly motivated towards the study of languages for participation in CLIL programs, and these frequently demonstrate better academic performance overall-as the authors themselves suggest. In fact, shown in the results of the present study, evaluations for the experimental group before the introduction of the independent variable (CLIL) were higher than evaluations in the control group. The same idea is reflected in Ruiz de Zarobe and Lasagabaster (2010, p. 25):

> It is important to point out, however, that CLIL experiences in Euskadi have been completed under the basis of voluntariety, which means that all of the students participating chose freely to take part in this approach. Most of the students in the previously mentioned research studies were selected before taking part in the CLIL lessons and, consequently, it is more likely that their academic achievement be higher than the average.

The dependent variable for this study was the evaluation before and after the introduction of CLIL. The data analysis indicates that the correlation between the variable and the evaluations over time is very low (see Table 4).

Table 2. Cross table for evaluations of Spanish language with respect to school year.

|  | Insuficiente | Suficiente | Ben | Notable | Sobresaliente |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3 | 30 | 47 | 43 | 64 | 20 | 204 |
| 4 | 23 | 36 | 35 | 54 | 22 | 170 |
| 5 | 26 | 27 | 41 | 54 | 19 | 167 |
| 6 | 31 | 40 | 38 | 63 | 34 | 205 |
| Total | 110 | 150 | 157 | 235 | 95 | 747 |

Table 3. Cross table for evaluations of Galician language with respect to school year.

|  | Insuficiente | Suficiente | Ben | Notable | Sobresaliente | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3 | 36 | 47 | 39 | 68 | 16 | 206 |
| 4 | 21 | 34 | 39 | 52 | 26 | 172 |
| 5 | 27 | 30 | 50 | 49 | 22 | 178 |
| 6 | 33 | 35 | 38 | 60 | 25 | 192 |
| Total | 117 | 146 | 166 | 229 | 89 | 747 |

Table 4. Correlation coefficients.

|  | Value | Asymp. Std. Err. | Approx T. | Approx. Sig. |
| :--- | :--- | :--- | :--- | :--- |
| R Pearson (Spa.) | 0.048 | 0.037 | 1.308 | 0.191 |
| R Pearson (Gal.) | 0.041 | 0.036 | 1.108 | 0.268 |
| N | 747 |  |  |  |

## Tests

Evaluation data from the students' schools was used as a measure. Other researchers have also used evaluations from participating schools to measure academic performance (González-Pienda, Núñez, \& Valle, 1992; Marsh, Parker, \& Barnes, 1984; Marsh, Smith, \& Barnes, 1985). This represents a problem, as evaluations from one school are not necessarily comparable with those from other schools. However, this problem can be corrected by using a longitudinal design, by which evaluations from one year can be compared with those from the previous year; that is, the variables within subjects can be analysed parallel to those between subjects.

Apart from this, the curriculum decreto (decree) on primary education in Galicia (Xunta de Galicia, 2007, p. 11671) defines a standard for evaluations, based on key competences, as recommended by the Council of Europe:

All the European countries are trying to identify the key competences and the best way to achieve them, evaluate them and certify them. It is suggested to set up a European system to compare and spread such definitions, methods and practices. (Council of Europe, 1995, p. 38)

Several studies on academic performance have supported the use of school evaluations as indicators (Blackorby, Chorost, Garza, \& Guzman, 2003; Blanco, González, \& Ordóñez, 2009). Even in countries with national measures for performance have chosen to use evaluations given by teachers-which, after all, are those that make the families worry when deciding whether or not their children should participate in CLIL programs.

Even though performance in standard tests receive a major attention in the studies about academic performance, the evaluations made by teachers through school marks represent a common measure tightly linked to the daily teaching-learning process [...] However [...] marks given by teachers have evident limitations [...] Despite those factors [...], marks in fact point a certain degree of success either with regard to teacher's standards as for the relative success compared with the rest of the children in the classroom [...] They are composed measures which take into account not only the mastery of the content by the students, but frequently by other factors, like participation in the classroom, attitudes, progress through time, etc. (Blackorby et al.,. 2003, p. 4.2)

Moreover, school marks are good indicators of school performance, regardless of whether their correlation with the latter is more or less noticeable.

Performance measurements in many research studies are linked with the instruments used to measure them. However, it would be expected that, even in the case we could not obtain precise measurements of the latent features (performance in Maths, for instance), the correlations of those repeated measures would be similar to those of the latent features (Blanco et al., 2009, p. 213).

## Hypothesis contrast

The null hypothesis for the present study was defined $\left(H_{0}: \mu_{A}=\mu_{B}\right)$ as the hypothesis I wanted to accept, contrasted with the alternative $\left(H_{1}: \mu_{A}<\mu_{B}\right)$. The significance level chosen was $\alpha=0.05$. I did not look for a more demanding $\alpha$ as the objective was precisely to demonstrate the null hypothesis; facilitating acceptance of the alternative hypothesis would reinforce the contrast. In other words, I tried to avoid a type II error. ${ }^{1}$ The probability of committing a type II error ( $\beta$ ) decreases when a value or the sample size is increased, or when decreasing the difference between the means of the groups. I did not use a higher $\alpha$ because this would increase too much the probability of committing a type I error.

## RESULTS

## Longitudinal study contrast (Table 1)

The first aspect to highlight, as can be observed in Table 6 and Table 7, is that the time variable makes a significant difference in the school marks ( $p<0.05$ ) in both the Galican-language and Spanish-language subjects. This means that marks obtained in one of the academic years were significantly different to those from the year in which the measures were taken. As noted previously (Table 4), even though this difference is significant, it does not correspond to any standard pattern.

It has also been corroborated that the difference between the means is significant with respect to the different educational levels at which each group of students was placed. (The groups selected corresponded to each one of the six educative levels in Galician primary education). In this case, the differences were not significant for Galician-language subjects, although it is very close to being so ( $p=0.052$, very close to the limit $p<0.05$ ). In Spanish, however, the differences were significant ( $p=0.018$ ).

Finally, there is no significant effect from the CLIL factor on any of the two subjects studied; in fact, it is very far from being significant ( $p=0.275$ y $p=0.152$ ). So we cannot reject the hypothesis $H_{0}: \mu_{A}=\mu_{B}$.

In Figure 1 and Figure 2, the variations from year 2009-2010 to year 2010-2011 for the experimental group, who studied a CLIL subject, and the control group, who did not study any, can be seen graphically. In both cases, the first of the measures is higher in the CLIL group, although, afterwards, the variation observed makes them come nearer to the marks of the non-CLIL group. However, the results of variance analysis between groups (Table 6 and Table 7) suggest that this effect is most likely coincidental.

Table 5. Longitudinal design dimensions.

|  | CLIL | Mean | Std. Dev. | N (groups) |
| :--- | :--- | :--- | :--- | :--- |
| Galician 2009/2010 | No | 6.3130 | 0.87141 | 44 |
| Galician 2009/2010 | Yes | 6.7523 | 1.00818 | 13 |
|  | Total | 6.4132 | 0.091404 | 57 |
| Spanish 2010/2011 | No | 6.0500 | 0.80447 | 44 |
| Spanish 2010/2011 | Yes | 6.1077 | 0.87277 | 13 |
|  | Total | 6.0632 | 0.81287 | 57 |
| Galician 2009/2010 | No | 6.2795 | 0.76976 | 44 |
| Galician 2009/2010 | Yes | 6.6808 | 0.99876 | 13 |
| Spanish 2010/2011 | Total | 6.3711 | 0.83514 | 57 |
| Spanish 2010/2011 | No | 5.9709 | 0.81434 | 44 |
|  | Yes | 6.1185 | 0.97504 | 13 |

Table 6. Variance analysis for Spanish marks

|  | F. | Sig. |
| :--- | :--- | :--- |
| time | 10.857 | 0.002 |
| time*level | 5.990 | 0.018 |
| time*CLIL | 2.108 | 0.152 |

${ }^{1}$ This error appears when a false null hypothesis is accepted.

Table 7. Variance analysis for Galician marks

|  | F. | Sig. |
| :--- | :--- | :--- |
| time | 8.645 | .005 |
| time*level | 3.940 | .052 |
| time*CLIL | 1.214 | .275 |



Figure 1. CLIL students vs. non-CLIL students in Galician.


Figure 2. CLIL students vs. non-CLIL students in Spanish.

## DISCUSSION

## Further research

The possibilities to reinforce this line of enquiry addressed in the present study are many. On the one hand, the present quantitative analysis would be deepened by combining it with qualitative data. However, this would require several years of research, since the difficulty of getting this kind of data in a backward manner is very significant. An alternative might be a cross-sectional, instead of longitudinal, study. This approach, however, would not solve the problems of the longitudinal design I have used; a sufficient guarantee of homogeneity of evaluation criteria in the school marks given by teachers would not be provided. By using evaluations from two consecutive years, I was able to correct for this, partially, since environmental factors in primary education tend to be more stable from one year to the next. Students usually stay for some years in the same classroom with the same teacher; indeed, they have the right to do so, according to the organic system of schools (Xunta de Galicia, 1997, p. 8508). Thus, a cross sectional study would be insufficient because students at different levels in the same year do not share environmental factors. As Rendón Duarte and Navarro Asencio (2007, p.1) recommend, this design could be strengthened by using a multilevel analysis, as primary education populations are organized hierarchically in various levels (classroom, school).

It would be interesting to study the effect of bilingual sections on the students' linguistic competence. However, at the moment, the possibility of measuring this competence in a satisfactory fashion seems remote.

Another important issue to take into account are the very concrete particularities of the population of the present study. The bilingual Galician context (sometimes identified as a diglossia) is substantially different from that of Autonomous Communities with an single official language (see Table 8). It is also different from other bilingual communities in two principal details. The first of these is the close genetic relationship between the two languages (Galician and Spanish), which share much of their grammatical structure and orthography, and are distinguished perhaps chiefly by vocabulary. This situation frequently leads to problems of interference in students' speech, as they find it very difficult to distinguish between them or use one consistently without drawing on resources from the other. The other distinguishing detail is the great number of bilingual speakers, much higher than any other Community with two official languages. These characteristics could well mitigate the value of the present study's conclusions in application to any other population. However, the extension of the sample to other Communities is another possibility for continuing this line of research.

Table 8. Use of co-official languages in Spain.

|  | Spanish | Co-official language | Both indistinctly | Source |
| :--- | :--- | :--- | :--- | :--- |
| Catalonia | $55 \%$ | $31.7 \%$ | $3.8 \%$ | (Generalitat de Cataluña, 2009, p. 33) |
| Galicia | $30.1 \%$ | $52 \%$ | $16.3 \%$ | (Instituto galego de estatística, 2008) |
| Basque country | $76.1 \%$ | $78.8 \%$ | $5.1 \%$ | (Gobierno del País Vasco, 2001) |

Nevertheless, the results of the present study suggest that further research might find it very difficult to reject the hypothesis that student marks differ significantly as an effect of the introduction of bilingual sections (CLIL). In any case, as previous studies have suggested, any such difference would probably favour CLIL groups. This would reinforce the ultimate objective of this research, because demonstrating that CLIL groups obtain better results would further support the expansion of the CLIL approach within schools.

## Conclusions

The text itself of the orde (act) concerning bilingual sections (Xunta de Galicia, 2011a) insists on various points that reflect the concerns of the Administrations with regards to the acceptance of CLIL subjects. ${ }^{2}$ It makes explicit that it is about bilingual sections in the strict sense; that is, that the teacher in such sections would use the two

[^1]languages. It even expresses that, in an initial stage, the mother tongue would be used more frequently and then the additional language would be introduced progressively. It also admits the possibility of reducing the content demands of the subject when it is taught by means of an additional language. De Graaf, Koopman, and Westhoff (2007) support this idea: "It is expected that a CLIL teacher selects the material for input to maintain a level of challenge but comprehensible for the student (scaffolding)." (p. 12)

These measures of prudence denote a high degree of experimentality and provisionality in the CLIL classrooms. The same happens with the linguistic competence in the additional language that is required of a teacher for them to join the program. Until 2011 (Xunta de Galicia, 2011a), five years after the beginning of the program in primary education and twelve years after the first experiences in secondary education, a CEFR B2 level was not demanded; acceptable certification could be, for instance, the advanced title from Official Schools of Language. ${ }^{3}$ In addition, the voluntary nature of the participation of teachers and students was not in accordance with the intention of balancing the number of hours of instruction in the three languages (Galician, Spanish, and English), as the decreto para o plurilingüismo states. It is not possible to extend the teaching of subjects in English to the level described in this decreto, in which the Administrations would commit to carrying out necessary measures to implement it, and it is necessary to count on other favourable factors to initiate the program. Explicit consent of the teachers, as well as of the Consello escolar (which represents the families, the administrative staff, and the local authorities) and of each affected student family, is required. This latter requisite is very hard to get in some schools, and it is hoped that disseminating the results of the present study may make it easier.

Despite the challenges, the number of participant schools increases each year. For these programs to acquire a character of officiality and stability, it is necessary to look for means of gaining the confidence of all involved groups: administrators, families, teachers, and society in general. It is possible that many teachers who are carrying out bilingual programs in the schools would lose their initial interest if they saw that the program would not be granted continuity for subsequent years, thus preventing them from pursuing more systematic work. In fact, even though the number of participant schools has increased, this has not been in answer to the demands of teachers. In conversations I have had with teachers in some of the participant schools, I found that some of them could not even initiate the programs, while others had to stop running CLIL programs because they could not fulfil certain requirements-usually the consent required of teachers and the Consello Escolar. If the Administrations do not demonstrate a stronger commitment, there is a grave risk of losing the favourable conditions of acceptation on part of many teachers.

The way to foster this commitment could be to make compulsory the teaching of subjects through additional languages in those schools where the teachers sufficiently well-trained to do so. I cannot find a reason for this to apply only for Galician and not for other languages. In fact, sometimes teachers are obliged to teach a subject in Galician despite not being prepared to do so. This is often the case teachers who have moved to Galicia from other Autonomous Communities and who have not had to certify their level of Galician during the initial years. In the case of primary schools, it is very common that the foreign language teachers are unable to complete the timetables for teaching the foreign language, though they must also teach other subjects. It would be much more logical if they taught at least some of these subjects in the language in which they normally teach and that they studied at university.

If Galicia really wishes to comply with the linguistic objectives of the European Union-that citizens should be able to use two official languages other than their mother tongue-I do not think sufficient reasons exist to justify the evident reluctance toward the a massive application of teaching subjects through other languages. The present study shows that it is very unlikely that students' academic achievement in their native language will be damaged by studying some subjects in an additional language. Other studies have likewise suggested that content knowledge is not negatively affected when studying the subject in an additional language. As mentioned previously, it is not difficult at all to find examples of countries in which the study of subjects in additional languages has worked very satisfactorily for many years. On a recent journey to Lebanon, I saw first-hand that the citizens speak Arab and French fluently, and very commonly English as well. The method they employed was the inclusion in the education system of subjects that are always taught in French. In the case of English, it is due

[^2]to schools and universities in which the language of instruction is English. I would not wish to be understood as claiming that the mere fact that CLIL can be made to work in some countries means that it would work in any country: social realities are very complex.

There are, in fact, also examples in which all the efforts to produce a bilingual population failed. In China, , in the late 1990s, the government decided that all Chinese citizens should speak a foreign language, preferably English. ${ }^{4}$ Nevertheless, during the celebration of the Olympic Games in Beijing in 2008, the lack of knowledge of English amongst Chinese citizens was a real organizational problem. ${ }^{5}$ Nevertheless, fear of failure should not serve as an excuse for failing to develop CLIL programs, as a great deal of recent research supports their potential benefits, there are people willing to develop them, and-as I hope the present study helps demonstrate-there is no reason to believe that they need have any negative impact on academic subject performance.

Based on previous research, we could expect that CLIL programs should be clearly beneficial for students in many respects. However, it seems that with more rigorous control of variables and deeper research, fewer differences are in fact observed amongst the means of different groups-with the exception of competence in the additional language, where we repeatedly observe a positive difference in favour of CLIL groups. I would argue that it is quite logical that such clear differences should not exist. There have been many digressions about the contents to be included in educational programs, and many modifications have been made in the students' subjects, but the perception of that they would not achieve the expected results have been a constant. This is due to a conception of education in which we believe that knowledge is directly transmitted to the students by a person who shows it to the students, and that they thus only learn that which is presented in a more explicit manner. In the age of Google, this idea is absurd.

What really is (or should be) learned in schools is what to do with the knowledge to which one is exposed, along with other abilities such as cooperation and the exchange of ideas. Rejecting the initial hypothesis, this latter idea is confirmed, as student performance-very commonly measured in terms of the knowledge they have acquired-it is not affected by changing the amount of time devoted to trying to transmit something concrete or the number of languages to which they are exposed. Their learning depends more on themselves and their interest in learning than it does on any other variable we could manipulate.

Following a model still dominant in most of the schools in the world, when teachers go into a classroom it might almost seem that knowledge is something scarce and difficult, practically impossible, to obtain unless a sufficiently qualified adult is standing in front of a group of youngsters who listen solicitously, willing to write down in their notebooks any data supposedly of value. But students know better: Knowledge is ubiquitous. Even many primary-age children can go to Google, search for information, and usually find it much faster than they could by asking the teacher. It is true that they may not have criteria to know what things are worth searching for, nor the wisdom to value (or make use of) what they find-but it is clear that they can access information; we do not need teachers to give it to them (Johnson, 2010).

Thus, everything points towards the only clear effect of CLIL classrooms in schools being one of improvement in additional languages competences. To date, no kind of negative effect has been demonstrated, and it is not easy to justify solely by means of logic that the cohabitance of several languages in the educational system should be negative from any point of view. It can only be concluded that it is advisable to keep on supporting the development of bilingual programs-and, indeed, CLIL-whenever and wherever possible.

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${ }^{4}$ An example of the policies tried is the program Beijing speaks English.
${ }^{5}$ On the possible causes of the failure of English language teaching in China, see the blog post from Tom (2011).
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[^0]:    González Gándara, D. (2015). CLIL in Galicia: Repercussions on academic performance. Latin American Journal of Content and Language Integrated Learning, 8(1), 13-24. doi:10.5294/laclil.2014.8.1.2 eISSN 2322-9721.

[^1]:    ${ }^{2}$ Research points in any case in the oppose sense, as it can be observed in the results obtained by Barreiro Gundín and San Isidro (2009), where the CLIL group showed a better acceptance of the activities developed in the subject than the control group.

[^2]:    ${ }^{3}$ Probably, it is arguable that this level is enough to provide warranties of quality for the program.

