

Exploring the impact of CLIL on high school learners' Spanish L1 vocabulary production

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Abstract

The present paper attempts to explore the effects that further exposure to English (L2) through CLIL programmes can have on learners' productive vocabulary in Spanish (L1). To this end, a comparative study of 21 CLIL and traditional EFL learners' Spanish L1 vocabulary production was conducted by means of a lexical availability task (LAT). The results showed no statistically significant differences in terms of vocabulary size. However, CLIL learners outperformed their non-CLIL peers in token production within the four prompts. Additionally, both learner cohorts produced similar lexical items. Nonetheless, CLIL learners elicited some exclusive words related to the English culture in Spanish. These findings go along with previous studies that denied any potential menace of CLIL on learners' L1.

Keywords: Content and Language Integrated Learning (CLIL), English as a Foreign Language (EFL), multilingualism, Spanish (L1), vocabulary production

Introduction

Content and Language Integrated Learning (CLIL) can be defined as “a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language” (Coyle et al. 2010, p. 1). This educational approach was firstly implemented in Europe during the 1990s as a means to reinforce the presence of English at the classroom. However, the different linguistic contexts across Europe have resulted in a great diversity of CLIL programmes adapting to the needs and characteristics of the area where it is implemented. In La Rioja, the region where data was collected, we can distinguish between two ways of implementing CLIL.: Bilingual Sections and Schol Language Innovations Projects (Jiménez Catalán & Geoghegan 2023).

Although several research studies addressing the impact of CLIL can be spotted on a wide array of linguistic aspects in English L2, the effects that CLIL may have on learners' mother tongue is still underexplored. In fact, we are only aware of three previous papers that examine the impact of CLIL on learners' L1 in terms of literacy (San Isidro & Lasagabaster 2018), verbal intelligence and motivation (Pérez Cañado 2018), and students' results in the Spanish Language subject tests (Navarro-Pablo & López Gándara 2019). The results of these studies evinced a positive influence of CLIL programmes at both primary and secondary education levels, as researchers acknowledged improvement in L1

proficiency, greater motivation and higher metalinguistic awareness, denying any potential menace of CLIL on learners' L1. Nevertheless, research is still needed to examine the effects of CLIL on learners' L1 lexical competence.

Methodology

11 CLIL and 10 traditional EFL 8th-grade learners were tested their productive vocabulary in Spanish L1 by means of a lexical availability task (LAT) in order to ascertain learners' vocabulary size (RQ1), and to account for differences and similarities in learners' most available words (RQ2). Learners were explained the instructions for completing the task in Spanish. Afterwards, they were provided two minutes to write as many words as came to their minds in response to four prompts: 'Comida y bebida', 'Amor y felicidad', 'Celebraciones y festivos', and 'Educación Física'. The results from the LAT were then coded and processed in a Microsoft Excel file according to the CLIL variable following the same protocols used in previous research on lexical availability (see Geoghegan 2023). Finally, LexPro was employed to conduct data analysis.

Results

To address RQ1 related to learners' productive vocabulary size in Spanish L1, Table 1 includes the type and token production, as well as the type-token ratio (TTR). When it comes to type and token production, CLIL learners outperformed their non-CLIL peers. However, the differences were not statistically significant ($p = 0.13, 0.13, 0.1, 0.08$; respectively). As regards lexical diversity, the TTR values show greater lexical diversity in favour of traditional EFL learners. Nevertheless, we may take those values with caution due to the small sample of participants.

Table 1. Descriptive results in Spanish L.

Prompt	CLIL learners			Non-CLIL learners		
	Types	Tokens	TTR	Types	Tokens	TTR
'Comida y bebida'	135	265	0.5	112	206	0.54
'Amor y alegría'	85	129	0.65	63	80	0.78
'Celebraciones y festivos'	72	129	0.55	51	90	0.56
'Educación Física'	80	160	0.5	56	102	0.54

Pertaining to RQ2, Table 2 displays the top ten most available responses of CLIL and non-CLIL learners in the four prompts. The shared words appear highlighted in bold. In this respect, learners shared four words in the 'Comida y bebida' prompt, five words in 'Educación Física', and six words in the rest of the prompts. As concerns non-shared words, CLIL learners produced some cultural-specific L2 terms (e.g., *pizza*, *Halloween*). In addition, as shown by the figures in

brackets, CLIL learners' most available words were more repeated by the group members suggesting a more homogeneous and solid productive vocabulary.

Table 2. Most available words elicited by group per prompt.

Prompt	CLIL learners	Non-CLIL learners
'Comida y bebida'	Agua (8), hamburguesa (6), manzana (7), pizza (6), cocacola (7), fresa (6), plátano (6), pera (7), arroz (4), ensalada (4).	Agua (9), hamburguesa (7), cocacola (6), arroz (6), lechuga (5), fanta (4), paella (4), pollo (4), chocolate (4), leche (5).
'Amor y alegría'	Familia (8), amigo (8), sentimiento (3), fútbol (3), abrazo (4), felicidad (4), feliz (2), corazón (4), beso (2), deporte (2).	Amigo (4), familia (4), sonrisa (3), corazón (2), beso (3), diversión (2), felicidad (2), tristeza (2), abrazo (2), jugar (2).
'Celebraciones y festivos'	Semanasanta (9), navidad (7), sanmateo (8), sanbernabé (7), fiestasdepueblo (5), halloween (5), cumpleaños (5), verano (4), sanjosé (3), pascua (4).	Navidad (8), semanasanta (7), pascua (5), sanmateo (4), cumpleaños (6), verano (4), sanbernabé (3), fiesta (4), añonuevo (2), diadelniño (2).
'Educación Física'	Fútbol (11), baloncesto (9), tenis (7), voleibol (5), correr (6), acrosport (5), baile (7), atletismo (6), pádel (5), gimnasiarítmica (5).	Fútbol (9), baloncesto (9), correr (5), tenis (7), voleibol (7), bádminton (5), jugar (3), saltar (3), pádel (3), balón (7).

Discussion and conclusions

Having analysed the results from the LAT, it is time to answer the previously formulated RQs. RQ1 dealt with possible differences in terms of vocabulary size in Spanish L1. With this respect, one may affirm that CLIL learners possess a more extensive vocabulary than their non-CLIL peers. However, those differences are not statistically significant. These results thus appear to converge with previous studies evidencing an advantage for the CLIL group in terms of Spanish L1 competence. As regards RQ2, CLIL learners retrieve more homogeneous responses than their non-CLIL counterparts. Additionally, the two groups curiously shared more words in open-nature than in taxonomic prompts which may reflect similar extralinguistic and cultural experiences among learners (Mora & Sifrar Kalan 2025).

As the sample of participants was limited to 21 students, results should be viewed as exploratory rather than conclusive. Thus, findings may serve to establish hypotheses within future larger-scale studies. Additionally, this paper opens future research lines such as exploring learners' productive vocabulary across their whole linguistic repertoire. In this regard, oncoming studies could cross-linguistically compare CLIL and non-CLIL learners' productive vocabulary, as well as to explore whether these findings apply to other European CLIL settings.

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