

Preservice Physical Education teachers' attitudes towards teaching in Foreign Languages. Expectations and training needs

MIRIAM NOEL GARCÍA-NUÑEZ

RAÚL FRAGUELA-VALE

MARÍA BOBADILLA-PÉREZ

Universidade da Coruña

Received: 05/03/2023 Accepted: 03/07/2023

DOI: <https://doi.org/10.30827/portalin.viVII.29160>

ISSN paper edition: 1697-7467, ISSN digital edition: 2695-8244

ABSTRACT: Spanish education authorities are promoting multilingualism through bilingual and multilingual programmes, with an increasing focus on teaching Physical Education (PE) through the use of Content and Language Integrated Learning (CLIL) in schools. Although there have been several studies exploring the effects of this interaction, most focus on the perceptions of practising teachers or on the evaluation of bilingual programmes, leaving a gap in relation to initial teacher training. The aim of this quantitative study is to understand prospective PE teachers' perceptions of their training needs and their readiness to teach PE through a FL. For this purpose, a cross-sectional, descriptive and correlational design was used involving 160 students in their third and fourth year of the degree course in Primary Education with a specialisation in PE at the University of A Coruña. Data were collected through a quantitative questionnaire. The results of the study indicate that students do not feel competent in the use of a FL and consider that they do not receive sufficient training to use it as a vehicle for instruction in PE. Despite this lack of competence, students do not demand further training in CLIL due to their low perceived proficiency in a FL.

Key words: CLIL, Physical Education, Preservice teachers, Plurilingualism, Linguistic Competence.

Actitudes de futuros docentes de Educación Física hacia la enseñanza en lengua extranjera. Expectativas y necesidades formativas

RESUMEN: Las autoridades educativas españolas están promoviendo el multilingüismo a través de programas bilingües y plurilingües, con una creciente atención a la enseñanza de la Educación Física (EF) mediante el uso del Aprendizaje Integrado de Contenidos y Lenguas Extranjeras (AICLE) en las escuelas. Aunque ha habido varios estudios que exploran los efectos de esta interacción, la mayoría se centran en las percepciones de los profesores en ejercicio o en la evaluación de los programas bilingües, dejando un vacío en relación con la formación inicial del profesorado. El objetivo de este estudio cuantitativo es comprender las percepciones de los futuros profesores de educación física sobre sus necesidades de formación y su preparación para enseñar educación física a través de una FL. Para ello, se utilizó un diseño transversal, descriptivo y correlacional en el que participaron 160 estudiantes de tercer y cuarto curso de la licenciatura en Educación Primaria con especialidad en Educación Física de la Universidad de A Coruña. Los datos se recogieron a través de un cuestionario

cuantitativo. Los resultados del estudio indican que los estudiantes no se sienten competentes en el uso de un FL y consideran que no reciben la formación suficiente para utilizarlo como vehículo de instrucción en Educación Física. A pesar de esta falta de competencia, los estudiantes no demandan más formación en AICLE debido a su baja competencia percibida en una LE.

Palabras clave: AICLE, Educación Física, Profesores en formación, Plurilingüismo, Competencia Lingüística.

1. INTRODUCTION

In the past two decades, the European Higher Education Area (EHEA) has made significant strides in enhancing the quality of higher education systems in Europe, thereby increasing their competitiveness on a global scale. The development of foreign language (FL) competences among students is crucial for their academic, personal, and professional growth. Moreover, the promotion of FL has gained increasing importance in pre-university education, as evidenced by the three Educational Laws - LOE (2006), LOMCE (2013), and LOMLOE (2020). While the former two laws aimed to promote plurilingualism, the latter takes a step further by establishing it as a key competence. To develop this competence within bilingual programs, the Content and Language Integrated Learning (CLIL) methodology has been advocated by educational administrators. Studies (Lasagabaster, 2008; Pérez-Cañado and Lancaster, 2017; Barreto et al., 2021; Bolarín-Martínez et al., 2019) have demonstrated the benefits of CLIL to teach non-linguistic subjects such as Physical Education (PE) in a FL, because it is adaptable and allows educators to employ appropriate strategies for the specific context in which it is implemented.

However, most of the research on initial teacher training in FLs indicates that there is a need to reevaluate the training needs of future teachers in this context. Barrios and Milla-Lara (2020) stress the importance of understanding the perspectives of the actors involved in the implementation of these programmes. Codó (2020) emphasises the democratisation of CLIL and its role in pedagogical reform and discusses the need for a more critical examination of CLIL in different contexts. Couto-Cantero and Bobadilla-Pérez (2017) highlight both the achievements and challenges faced in bilingual education in Galicia. Salvador-García and Chiva-Bartoll (2017) highlight the relevance of promoting the implementation of CLIL methodology through Physical Education (PE). Jover et al. (2016) mention the inadequacy of training in Spanish-English bilingual programmes in the initial training of primary education teachers. In addition, he also points to the lack of preparation of trainers, the low level of English of students and the lack of coordination between universities and schools. The study by Fernández-Viciana and Fernández-Costales (2019) reveals that there is a relationship between communicative competence in English and perceived linguistic self-efficacy. As communicative competence increases so does confidence in the teacher's ability to teach English. Furthermore, it highlights the importance of addressing trainee teachers' perceived teacher self-efficacy, linguistic and methodological competence, and how these perceptions may influence their future teaching practice. Abarca et al. (2018) conclude that there is a need to improve the approach and methodology used to learn FLs in Spain, especially with regard to the development of oral communicative competence. Furthermore, Martínez-Hita et

al. (2022) highlight Spain's low ranking in global proficiency in English, which underlines the need to provide meaningful LE instruction from an early age and to implement effective methodologies in educational settings.

There is a growing body of research on CLIL teaching competencies (Pérez-Cañado, 2018; Gil-Galván and Martín-Espinosa, 2021; Imbernón, 2020) that mainly focuses on in-service teachers, with less attention paid to future PE teachers' attitudes toward FL learning (Carrasco-Gil, 2019), which forms the basis of this study. In the Spanish context, there is a need to prioritize research on CLIL programs (Lasagabaster, 2008). PE is a subject that is frequently taught in Primary Education using a FL, which makes it a domain with a high demand for CLIL teacher training. This study is motivated by the necessity to gather the perspective of future Primary Education teachers regarding the teaching of PE using a FL. This is of particular significance, considering the ongoing review of the Degrees that provide access to the regulated teaching profession in Spain.

2. LITERATURE REVIEW

2.1. CLIL context

The CLIL methodology has gained widespread popularity and has been the subject of numerous studies analysing its implementation in Spain. These studies have focused on different areas such as students' academic performance (Fernández-Sanjurjo et al., 2017), competences (Martínez-Agudo, 2020), teacher training (Pérez-Cañado, 2018; Valdés-Sánchez and Espinet, 2020), case studies exploring aspects of implementation in different regions (Martínez-Agudo, 2020; Fernández-Sanjurjo et al., 2017) and specific methodologies, materials and resources (Bellés-Calvera, 2018; Carrión and Pérez, 2020). These studies unanimously agree that implementing the CLIL approach in Spanish classrooms can enhance the teaching-learning process of students (Meyer, 2010). For instance, Xanthou (2011) highlights that CLIL has a positive impact on L2 vocabulary knowledge, stating that "CLIL offers more opportunities to expose learners to L2 vocabulary knowledge in meaningful situations" (p. 124). The results of Martínez-Agudo's study (2020) also confirm the positive effects of CLIL on global language competence. Additionally, other studies (Barreto-Huilcapi et al., 2021; Bobadilla and Couto, 2017; García-Fernández et al., 2017) have demonstrated that it provides cognitive benefits beyond FL acquisition. Nevertheless, the implementation of CLIL has been questioned. Martínez-Soto (2022) identifies improvement areas such as the lack of resources and teacher training, the digital divide, technological dependence and the need for further research in this field. In addition, Almodóvar-Antequera and Gómez-Parra (2017) add a cognitive overload for learners having to process academic content in a new language, difficulties for teachers in need of specialised training, limitations in social interaction in the mother tongue and the possibility of neglecting subject-specific content (e.g. PE) in favour of linguistic development. However, these obstacles can be mitigated by appropriate planning, teacher training, language support and attention to individual pupils' needs. Thus, teacher training emerges as a crucial area of research that needs to be improved to meet contemporary linguistic and didactic demands, as proficiency in English has to take precedence over methodological issues among teachers (Durán-Martínez et al., 2020). According

to Custodio-Espinar and García-Ramos (2020), the quality of bilingual programmes has been assessed mainly through students' academic results. However, the quality of bilingual teaching depends not only on pupils' academic results but also on teachers' competence in CLIL. Pérez Cañado (2016a) argues that the impact of bilingual programmes on teachers has not been comprehensively and reliably evaluated.

On the other hand, it should be noted that one of the key factors for successful CLIL implementation is the teachers' FL language competence. In order to better understand this situation, it is necessary to explore the language proficiency of prospective teachers, as research has mainly focused on in-service teachers. Despite advances in research, there is still a mismatch between teacher education and the demands of bilingual programmes (Fernández Cézár, Aguirre Pérez, & Harris, 2013). Pérez-Cañado (2018) identifies several competences in CLIL teacher training that require development, among which linguistic is the first one mentioned, together with others such as the pedagogical, scientific, or organisational competences. According to the author, these enable CLIL teachers to develop quality bilingual teaching. Consequently, there are many voices calling for a review of the academic programmes of universities of education, with the aim of improving the initial training of bilingual teaching staff by generating a strategic plan as a fundamental measure for tackling these training needs (Fernández Cézár et al., 2013; Fernández Díaz, 2017; Jover et al., 2016; Pérez Cañado, 2016a).

2.2. CLIL and Physical Education

CLIL presents unique challenges for PE teachers, such as the development of linguistic competence in two languages, the acquisition of specific vocabulary, the effective integration of content and language, the additional support needed for students, and the consideration of cultural and linguistic diversity (Chiva-Bartoll et al., 2015; Coral, 2013; Fernández-Barrionuevo, 2017; García et al., 2012; Hernando et al., 2018; Molero-Clavellinas, 2011). Furthermore, contemporary education challenges conventional notions of subject-exclusive competences and advocates an inclusive pedagogy, as supported by several studies (Guzmán-Ibarra et al., 2019; Krichesky and Murillo, 2015; Lage-Gómez and Ros, 2021; Sebastian and Allensworth, 2012).

The use of CLIL in FL learning has led to research identifying specific competences in PE for FL learning (Baena-Extremera et al., 2017; Fernández-Barrionuevo et al., 2021; García et al., 2017; García-Calvo and Nieto-Moreno de Diezmas, 2020; Martínez-Hita, 2022; Torres-Outón, 2019). However, there is concern that this excessive focus on FL learning may compromise the essence of PE. To address this challenge, teachers need training in effective integration strategies through specialised CLIL programmes, as highlighted by Fraguera-Vale et al. (2020) and Pérez-Cañado (2016b).

Teacher preparation is a fundamental aspect of FL teaching, as pointed out by Ramos and Ruiz-Omeñaca (2011). In this regard, Bolarín-Martínez et al. (2019) highlight that there are significant differences in pedagogical approaches, teaching strategies, language use and assessment methods between teaching an FL and a mother tongue in a bilingual context. Moreover, expressing oneself in an FL can have negative impacts on learners, according to research by Ramos and Ruiz-Omeñaca (2011) and Salvador-García et al. (2018) and as detailed in the previous section. Therefore, it is crucial to establish a respectful learning

environment, as recommended by Ramos and Ruiz-Omeñaca (2011), Tran and Fujiko (2013), and Huertas-Tinoco and Alcaraz-Muñoz (2018). The creation of this CLIL environment requires specialised teacher training, which entails an additional workload (Fraguela-Vale et al., 2020), and raises concerns about the lack of dedicated CLIL training programmes (Pérez-Cañado, 2016b).

Regarding the impact of CLIL on physical activity levels, there are different perspectives. On the one hand, some studies suggest that CLIL methodology may compromise physical activity levels due to longer explanations and the requirement for learners to use all four language skills (Coral, 2013; Salvador-García et al., 2017). On the other hand, some studies suggest that CLIL does not impede physical activity levels, but rather improves them (Salvador-García et al., 2020a, 2020b, 2022).

Against this backdrop, there is a need for further investigation to better comprehend Primary School students' perspectives regarding the future performance of PE lessons in a FL. This need is highlighted by the studies conducted by Coral et al. (2020), Gil-López et al. (2021), and Martínez-Hita et al. (2021, 2023). Similarly, the current study aims to explore the perceptions of future Primary Education teachers regarding the teaching of PE in a FL, along with the influence of their initial English proficiency on these perceptions. As mentioned earlier, there is a research gap concerning the actual state of prospective teachers' language proficiency in relation to their prior training. To address this gap, the study has established five specific objectives that require data collection from the participants involved.

1. To find out the initial accredited English language level of the participants in the study.
2. To assess future teachers' perception on the FL training received in the Degree in Primary Education.
3. To determine the needs and demands in English and CLIL in the Primary Education Degree and the PE specialization.
4. To evaluate the extent to which students' accredited FL proficiency influences their perception of the English training received in the Primary Education Degree.
5. To find out how willing participants are to teach PE in FL in the future and whether their level of English influences their decision.

3. METHOD

A quantitative study was carried out with a cross-sectional, descriptive, and correlational design.

3.1. Participants

The present study involved a non-random intentional sampling of 160 students, with 63.7% identifying as female, 35% as male, and 1.3% choosing not to disclose their gender. The students were enrolled in their third (66.3%) and fourth (33.7%) year of the Primary Education degree at the University of A Coruña (UDC) and were selected based on their

current enrolment in or expressed interest in studying PE. A total of 178 potential participants were considered, and 18 were excluded for failing to meet this criterion.

It should be noted that students pursuing a Degree in Primary Education at UDC are only required to take one 6 ECTS credit subject in their third year, which covers general FL didactics topics and is taught in English, regardless of their chosen specialization, including PE. Furthermore, no FL language subjects are offered, and CLIL is only briefly addressed among other FL methodologies, approaches, and resources for Primary Education.

The average age of the sample was 21.5 years, with a standard deviation of 2.5 years. The study also examined the students' pre-university FL training, finding that 39.4% had completed a non-linguistic subject in English, while 52.5% held an official certification of their English proficiency level. To facilitate comparative analyses based on this variable, the responses were dichotomized into two categories: basic level (67.5%), which included those without certification or with a level of A1, A2, or B1, and advanced level (32.5%), which included those with accredited studies of B2, C1, or C2. In the context of this study, the categorization of these two groups is justified based on two conditions. Firstly, it considers the Common European Framework of Reference for Languages (CEFR), which outlines six levels of language proficiency. This framework enables the formation of two groups comprising an equal number of proficiency levels (three levels each). Secondly, it takes into consideration the requirement in several Autonomous Communities of Spain, such as Galicia, where a minimum language proficiency level of B2 is mandated for CLIL Primary school teachers.

3.2. Instrument

To address the research objectives, a survey instrument (see Appendix), which consisted of a set of 37 items organized into five distinct blocks, each aligned with one of the specific objectives of the study. The blocks included FL proficiency, training received during the Primary Education Degree program to teach PE in FL, predisposition to teach PE in FL, and training requirements for teaching in plurilingual programmes. Additionally, the survey included a section on sociodemographic data, which consisted of several items related to the participants' demographic and educational backgrounds.

In order to conduct this study, the following 16 items were used, each of which is linked to the specific objectives of the research.

Table 1. Relationship between the specific objectives of the study and the questionnaire items

Specific objectives	Items
1. To find out the initial accredited English language level of the participants in the study.	13, 14 and 15
2. To assess future teachers' perception on the FL training received in the Degree in Primary Education.	21 to 27
3. To determine the needs and demands in English and CLIL in the Primary Education Degree and the PE specialization.	28 to 31
4. To evaluate the extent to which students' accredited FL proficiency influences their perception of the English training received in the Primary Education Degree.	21 to 31 (basic-advanced level comparison in English -items 14 y 15-)
5. To find out how willing participants are to teach PE in FL in the future and whether their level of English influences their decision.	34 and 36 (basic-advanced level comparison in English -items 14 y 15-)

3.3. Procedure

The questionnaire was administered via an online form, specifically Google Forms, which was made available to the study participants in their respective university classrooms. To facilitate the administration of the survey, two members of the research team visited each classroom during scheduled class time and provided basic instructions on how to access and complete the form, as well as addressed any questions or concerns raised by the participants. In order to maintain control over participation, access to the form was closed once the allotted time had elapsed. This procedure was carried out in three classrooms, specifically two groups in the 3rd year and one group in the 4th year.

3.4. Data analysis

Data were analysed using the Statistical Package for Social Sciences SPSS v.28 (IBM Corp., Armonk, NY, USA) to calculate descriptive and inferential statistics. Descriptive analyses were performed to report participants' responses to each questionnaire item. Non-parametric statistics were used for the inferential analysis, as the normality assumption was not met. A 95% confidence interval ($p < 0.05$) was assumed to consider the significance of the differences, correlations and associations studied.

Whitney U test was applied for comparisons between groups (by the initial level of English language proficiency). Spearman's correlation coefficient was used to study correlations between quantitative variables, and the Chi-square test to analyse associations between qualitative. It needs to be clarified that although the questionnaire includes the expression FL, most of the participants understand it as "English".

4. RESULTS

In order to facilitate the structural organization and promote a better understanding of this section, the findings were categorized based on the five specific objectives delineated in the study.

4.1. Initial training received

This study highlights the importance of FL proficiency in the Primary Education Degree program and how it affects students' perceptions of their training and potential to teach non-language subjects in FL. In particular, the study investigates the impact of accredited FL proficiency levels on students' self-perceived proficiency in various communication skills. Results (table 2) show that there is a significant difference in proficiency levels between students with basic and advanced FL proficiency (B2, C1 and C2), with the latter group displaying higher levels of proficiency in all communication skills. However, even the advanced group displayed low levels of perceived proficiency in speaking and writing, indicating a need for further language training.

Table 2. *Perceived level of competence in speaking, reading, writing, and listening in English language. Comparison between students with basic and advanced levels of English.*

Mann Whitney U test (n=160)

VARIABLES	CERTIFICATION OF ENGLISH LEVEL	
	BASIC VS ADVANCED <i>M (SD)</i>	Z
Speaking	2.69 (0.93) vs 3.63 (0.88)	-5,515***
Reading	3.46 (0.93) vs 4.19 (0.84)	-4,785***
Writing	2.89 (0.84) vs 3.75 (0.81)	-5,538***
Listening	3.12 (1.03) vs 4.06 (0.87)	-5,255***

*** $p < 0.001$; *M*=mean; *SD*=standard deviation; *Z*=Z-values (Mann-Whitney U test).

4.2. FL training in the Primary Education Degree

The data presented in Figure 1 pertains to the evaluations of participants regarding the education they received at the undergraduate level, with a specific focus on FL teaching. It can be observed that the scores for the various items are generally low, with none of the seven evaluated domains reaching the central value of the scale (three). The participants express a sense of inadequacy in terms of the training they received in FL teaching, as well as in the Degree program and PE specialization, with regards to their ability to teach PE in

FL. Furthermore, the participants feel that their undergraduate education did not effectively prepare them to utilize FL in their teaching, irrespective of the subject taught.

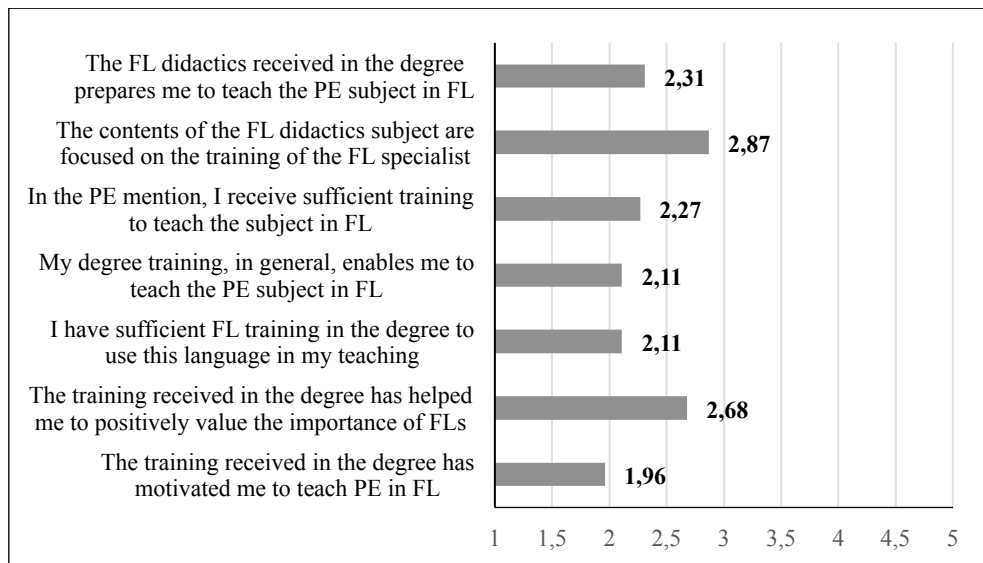


Figure 1. *Students' perception of their FL training in the degree program*

The most positive evaluations amidst the overall negative trend relate to the notion that FL teaching concentrates on developing expertise in FL, and that the undergraduate education helped participants to understand the pivotal role of FL in Primary Education. Finally, the data suggests that the motivation to teach PE in FL is insufficiently instilled through undergraduate education.

Overall, the findings suggest that participants in this study are not entirely confident in the adequacy of their training to teach PE in FL. Furthermore, they hold a neutral or negative opinion about the value of FLs in PE, and are not particularly motivated to teach PE in FL.

4.3. Students' training needs in English and CLIL in the Primary Education Degree and the PE specialization

With regards to the participants' opinions on training needs (figure 2) in the Degree, it appears that there is a moderate demand of an increase in academic FL training, as well as mandatory training in CLIL. The participants expressed a neutral view towards the compulsory training on this methodology. Moreover, they showed a moderately positive attitude towards the incorporation of specific FL subjects in specializations. However, there was a slight disagreement regarding the use of a FL to teach some subjects within the PE specialization. The available data suggests that there is not much support for the inclusion of specific FL subjects in specializations.

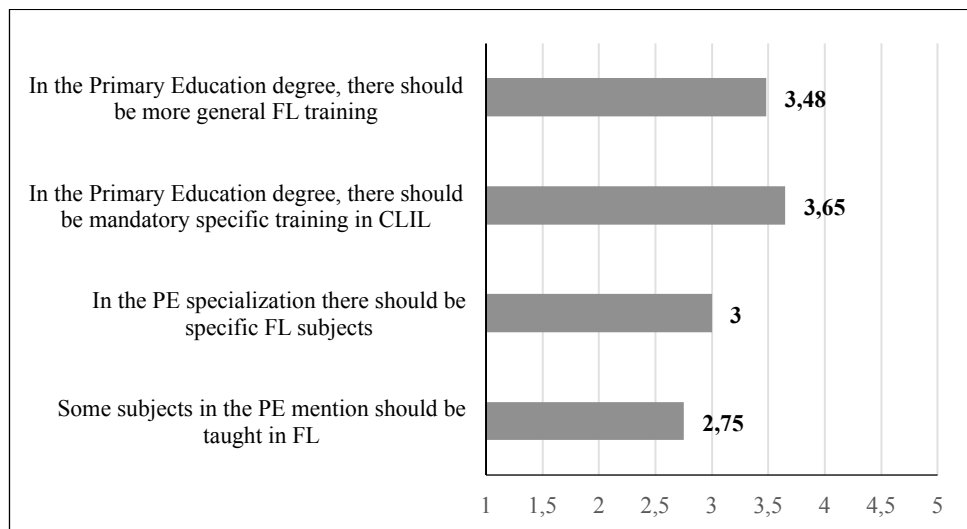


Figure 2. *Students' training needs in English and CLIL in the Primary Education Degree and the PE specialization.*

4.4. Influence of accredited FL proficiency level in the assessment of the FL training received in the Primary Education Degree program

The Mann Whitney test was used (Table 3) to determine whether students' evaluations of the English-related training they received in the Degree differed based on their FL proficiency level. Results showed that there was agreement among students with both basic and advanced FL proficiency in their negative evaluations of the first three questions. They believed that the FL didactics did not adequately prepare them to teach PE in FL, that the subject's content was not focused on training the FL specialist, and that they did not receive sufficient training to teach the subject in FL. However, differences in evaluations were observed in the remaining four questions, with students with advanced FL proficiency providing slightly more favourable evaluations. They felt more equipped to teach PE and other subjects in FL than their basic-level peers and valued the importance of FL in the Primary Education Degree more highly. Despite these nuances, all evaluations were below 3 out of 5, indicating that there is room for improvement in the English-related training provided in the program.

Table 3. *Assessment of English-related training received in the degree program. Comparison between students with basic and advanced levels of English. Mann Whitney U test (n=160)*

VARIABLES	CERTIFICATION OF ENGLISH LEVEL	
	BASIC VS ADVANCED M (SD)	Z
The FL didactics received in the degree prepares me to teach the PE subject in a FL	2.24 (1.06) vs 2.44 (1.18)	-1.024
The contents of the FL didactics subject are focused on the training of the FL specialist	2.80 (1.12) vs 3.02 (1.06)	-1.199
In the PE mention, I receive sufficient training to teach the subject in a FL	2.18 (1.10) vs 2.46 (1.08)	-1,564
My degree training, in general, enables me to teach the PE subject in a FL	1.95 (1.08) vs 2.44 (1.06)	-2.853**
I have sufficient FL training in the degree to use this language in my teaching	1.92 (0.96) vs 2.52 (1.34)	-2.646**
The training received in the degree has helped me to positively value the importance of FLs in Primary Education	2.55 (1.06) vs 2.96 (1.19)	-2.210*
The training received in the degree has motivated me to teach PE in a FL	1.78 (0.95) vs 2.33 (1.23)	-2.557*

*p<0.05; **p<0.01; M=mean; SD=standard deviation; Z=Z-values (Mann-Whitney U test).

Table 4 presents a comparison of the educational demands between groups of students with varying levels of FL proficiency. Notably, significant differences are observed in favour of students with advanced FL proficiency, who express a greater need for enhanced FL training that is both general and specific, as well as a desire for an increased number of FL subjects that focus on teaching in their respective specializations. Additionally, students with advanced FL proficiency express a preference for certain subjects in their specializations to be taught in FL. It is worth noting that the demand for increased training is more pronounced in relation to the Degree in general, rather than specifically in reference to the PE specialization, for both groups of students.

Table 4. *Assessment of FL and CLIL educational needs. Comparison according to English proficiency (Basic vs Advanced). Mann Whitney U test (n=160)*

VARIABLES	CERTIFICATION OF ENGLISH LEVEL	
	BASIC VS ADVANCED M (SD)	Z
In the Primary Education degree, there should be more general FL training	3.24 (1.37) vs 3.98 (1.13)	-3,311***
In the Primary Education degree, there should be mandatory specific training on methodologies for multilingualism	3.48 (1.13) vs 4.00 (1.10)	-2,893**
In the PE specialization there should be specific FL subjects	2.78 (1.24) vs 3.46 (1.11)	-3,322***
Some subjects in the PE mention should be taught in FL	2.48 (1.26) vs 3.31 (1.15)	-3,723***

p<0.01; *p<0.001; M=mean; SD=standard deviation; Z=Z-values (Mann-Whitney U test).

4.5 Willingness to teach EF in English

More than half of the participants (56.9%) expressed their willingness to teach PE in FL. There is a relationship between FL proficiency and the willingness to teach PE in FL among students. Our results indicate a strong association between these variables, with higher levels of FL proficiency being positively associated with a greater willingness to teach in FL (Chi-square=15.162; p<0.001). Specifically, while only 46.3% of students with basic accredited FL training expressed a willingness to teach in FL, this percentage increased to 78.8% among students with advanced FL proficiency. This finding suggests that FL proficiency is a key factor in determining the willingness of individuals to teach PE in FL, highlighting the importance of language education in preparing teachers for bilingual programs.

Furthermore, the analysis reveals a consensus among participants regarding the potential advantages of teaching in FL for future career prospects. Both groups of students, those with basic FL proficiency (87%) and those with advanced proficiency (94.2%), responded positively to this question, and no significant differences were found between the two groups (Chi-square=1.913; p>0.05).

5. DISCUSSION

The initial objective of this study was to determine the participants' initial accredited level of English. Based on the data collected in the previous section, it has been observed that approximately 40% of the participants have previous experience in CLIL instruction, both in Primary and Secondary Education.

The results of our study reveal that there is a significant relationship between possessing a certificate of advanced proficiency in a FL and a higher self-perception of competence in

English language skills such as speaking, reading, writing, and listening. This association has been supported by scholars such as Wang (2021) and Llinares and Whittaker (2019), who have emphasized the importance of acquiring an advanced level of proficiency in a second language to enhance receptive and productive language skills. The findings indicate that those with certificates of advanced English proficiency may have more confidence and ability to communicate in the language. Improving language skills can have a positive impact on the performance of CLIL teaching and learning, as English is used as the medium of instruction in other subject areas. Therefore, it is important to promote language training and certification programs for teachers, as greater proficiency influences the quality of teaching and the linguistic development of students.

The second objective was to assess the perception of future teachers regarding the language education received in the Degree in Primary Education. As indicated in the previous section, the scores on the different items are generally low, with none of the seven assessed domains reaching the central value of the scale (three). Participants express feeling inadequately prepared in terms of the language education received in the program's language teaching and the specialization in PE, specifically in their ability to teach PE in a FL. These findings highlight significant concerns regarding the adequacy of participants' training to teach PE in a foreign language. The participants' lack of confidence, coupled with their uncertain perception of the value of the FL in the context of PE, poses challenges for effective language integration in this specific field.

The third objective of this study was to determine the needs and demands regarding English and CLIL in the Degree and the specialization in PE. Throughout the analysis, it was observed that students perceive additional language education as a threat to their pedagogical training, leading to insufficient preparation for teaching the subject in English in their future professional careers. In the context of Galicia, PE is one of the subjects that is predominantly taught using the CLIL methodology due to its numerous advantages, as discussed in the literature (Salvador-García et al., 2020a, 2020b; Martínez-Hita et al., 2021; Martínez-Hita et al., 2023). However, in the Degree in Primary Education, only one mandatory subject worth 6 ECTS introduces FL didactics. Therefore, there is a clear need for specific CLIL training for teaching PE through the FL, which is essential and should be incorporated into both initial and continuous teacher training (Pérez Cañado, 2018).

Despite recognizing the importance of being able to teach in a FL using the CLIL methodology for their future profession, the participants do not request further training in this area. This contradiction can be largely explained by the perception that increased language education applied to teaching represents an obstacle to obtaining the Degree. As emotions and cognition cannot be separated (Arnold, 2000; LeDoux, 1999), students interpret that an increase in the workload during the Degree, considering their initial level of language competence, would hinder their graduation.

Language learning can generate emotions such as stress, tension, ridicule, and anxiety (Rodríguez-Pérez, 2014). University education implies an ongoing process, and teacher trainees may experience anxiety. There are interrelationships between students' prior experiences and their language proficiency (Thompson, 2013). FL anxiety is related to underdeveloped communicative skills, generating fear, shyness, or silence (Horwitz, Horwitz et al., 1986). Low FL proficiency is associated with higher anxiety, and there are negative correlations between anxiety and performance, especially in public speaking (Aida, 1994; Horwitz, 1986). Students' beliefs, such as self-efficacy and giftedness, also influence language anxiety (Cheng, 2001).

Regarding the fourth objective, the study revealed that students' proficiency in the FL influences their perception of the FL training they received during their undergraduate studies. Specifically, students who possess an advanced level of FL proficiency demonstrate a greater appreciation for the preparation provided in the degree program for teaching PE through a FL and using the language more extensively in their pedagogy. A correlation exists between FL proficiency and the evaluation of the readiness to teach EF and other subjects in FL in the future. Students with advanced FL proficiency exhibit slightly more favourable assessments compared to their peers with basic-level proficiency. These findings underscore the significance of considering the level of FL proficiency when designing teacher training programs, as higher accredited competence levels can enhance motivation to teach in the FL and yield professional development benefits.

Finally, regarding the fifth objective, the study identified that individuals who express a willingness to teach PE through a FL possess significantly higher levels of English certification in comparison to those without such inclination. This finding aligns with prior research conducted by Huertas-Tinoco and Alcaraz-Muñoz (2018) and Zhu and Zhang (2019). It suggests that the level of accredited competence in the FL can influence individuals' motivation to teach in that language. In addition to the association between FL proficiency level and the willingness to use CLIL, participants reached a consensus regarding the potential career advantages of delivering the subject in the FL. Both students with a basic level of FL competence and those with an advanced level responded positively to this inquiry, indicating that there are advantages to teaching PE in the FL. Notably, no significant differences were observed between the two groups. These outcomes indicate that participants recognize the professional benefits of teaching in the FL, irrespective of their current level of competence. However, this reality presents a substantial challenge for current teacher training practices, as there is no explicit requirement for additional specialized training.

6. CONCLUSION AND PEDAGOGICAL IMPLICATIONS

The findings of this study underscore the significance of CLIL training in the preparation of future Primary school teachers, particularly those specializing in PE. Through comprehensive data collection and analysis, several key conclusions have emerged, holding substantial implications for teacher education and instruction within multilingual contexts.

Firstly, the findings reveal that students pursuing a specialization in PE exhibit negative perceptions regarding the language education training they receive during their Degree, specifically in relation to their future teaching in multilingual environments. These findings shed light on significant concerns regarding the adequacy of the training provided for teaching PE in a FL. Consequently, there is a pressing need to enhance both the quantitative aspect (increased credits and hours dedicated to language education) and the qualitative aspect (CLIL training) of language education. Additionally, it is crucial to elevate students' competence and self-confidence in language skills during their pre-university education, as this will facilitate an effective reform of the curriculum and enhance language teaching in non-linguistic domains.

Despite the widely acknowledged importance of attaining proficiency in a FL for future professional development, the demand for improvements in language education remains mod-

erate. The results of this study suggest that students specializing in PE do not demonstrate a strong inclination to receive additional CLIL training. This can be partially attributed to the regulatory function of language certification, which influences students' perception of the training received during their Degree and their expectations regarding language education and CLIL. Furthermore, it has been observed that the level of accredited language proficiency has a significant impact on participants' willingness to teach PE in a FL in the future. Those individuals with higher levels of English certification exhibit a greater readiness to teach the subject in a FL. This underscores the importance of developing language skills among future teachers and providing opportunities for them to obtain language proficiency certifications. Moreover, participants recognize the professional advantages associated with teaching in a FL. Consequently, it is imperative to consider students' language proficiency levels when designing teacher education programs, alongside recognizing the complementary role that language proficiency plays in leveraging language education throughout their degree program.

Based on the aforementioned findings, several didactic implications can be derived. Mere modifications to the existing curriculum are insufficient to improve language education in teacher training Degrees and encourage students to consider teaching PE in a FL. The findings of this study emphasize the necessity of promoting enhancements in language education within the Degree, addressing students' concerns and resistance, and taking into account the level of accredited language proficiency during the planning stages of teacher education programs. Such efforts will enable an effective reform of the curriculum and enhance the quality and quantity of language teaching in non-linguistic disciplines within educational institutions.

7. REFERENCES

- Abarca-García, S.L., Larrea-Vejar, M.L. & Guijarro-Paguay, S.L. (2018). Alternativa metodológica para el desarrollo de la competencia comunicativa oral en idioma inglés. *European Scientific Journal*, 14(5), 160-172. <http://dx.doi.org/10.19044/esj.2018.v14n5p160>
- Aida, Y. (1994). Examination of Horwitz, Horwitz, and Cope's construct of foreign language anxiety: the case of students of Japanese. *The Modern Language Journal*, 78(2), 155-168. <https://doi.org/10.2307/329005>
- Almodóvar-Antequera, J.M. & Gómez-Parra, M.E. (2017). Propuesta metodológica para la creación de materiales bilingües (AICLE) en Educación Infantil. *El Guiniguada. Revista de investigaciones y experiencias en Ciencias de la Educación*, 26, 77-88. https://accedacris.ulpgc.es/bitstream/10553/22159/1/0235347_00026_0008.pdf
- Arnold, J. (2000). La dimensión afectiva en el aprendizaje de idiomas. Madrid: Cambridge University Press.
- Baena-Extremera, A., Gómez, M. & Granero, A. (2017). Aprendizaje de la educación física bilingüe a partir de las metas de logro y el clima de aprendizaje. *Porta Linguarum*, 28, 81-93. <http://10.30827/digibug.54004>.
- Barreto-Huilcapi, M., Aguirre-Fernández, R. E., & Serra-Valdés, M. A. (2021). Beneficios del método AICLE/CLIL para el aprendizaje de una lengua extranjera a través del aula invertida. CLIL Method benefits for learning a foreign language through the flipped classroom. *Revista Panamericana de Pedagogía*, 32, 197-215. <https://revistas.up.edu.mx/RPP/article/view/2271/1869>

- Barrios, E. & Milla-Lara, M. D. (2020). CLIL methodology, materials and resources, and assessment in a monolingual context: an analysis of stakeholders' perceptions in Andalusia. *The Language Learning Journal*, 48(1), 60-80. <https://doi.org/10.1080/09571736.2018.1544269>
- Bellés-Calvera, L. (2018). Teaching Music in English: A Content-Based Instruction Model in Secondary Education. *Latin American Journal of Content & Language Integrated Learning*, 11(1), 109-139. <https://doi.org/10.5294/laclil.2018.11.1.6>
- Bolarín-Martínez, M.J., Porto-Currás, M. & Lova-Mellado, M. (2019). Implementation of bilingual programmes in Primary Education: teaching and evaluation strategies. Implementación de los programas bilingües en Educación Primaria: estrategias de enseñanza y evaluación. *Elia. Estudios de Lingüística Inglesa Aplicada*, 1, 207-234. <http://dx.doi.org/10.12795/elia.mon.2019.i1.09>
- Carrasco-Gil, E.J. (2019). Percepción de los futuros docentes sobre la utilización del inglés como lengua vehicular en Educación física en Educación Secundaria: un análisis DAFO. *Bilingual education under debate. Practice, research and teacher Education*, 303-320. <https://hdl.handle.net/11162/201049>
- Carrión, E. & Pérez, M. (2020). TIC y AICLE Como Elementos Facilitadores en la Enseñanza Bilingüe. *ArtsEduca*, 25, 153-172.
- Cheng, Y.-S. (2001). Learners' beliefs and second language anxiety. *Concentric: Studies in English Literature and Linguistics*, 27, 2, 209-223. <http://www.concentric-linguistics.url.tw/ch/upload/articlesfs91402102553135620.pdf>
- Chiva-Bartoll, O., Isidori, E., & Fazio, A. (2015). Educación Física bilingüe y pedagogía crítica: una aplicación basada en el judo. *Retos: Nuevas Tendencias en Educación Física, Deportes y Recreación*, (28), 110-115. <https://doi.org/10.47197/retos.v0i28.34812>
- Codó, E. (2020). The dilemmas of experimental CLIL in Catalonia. *Journal of Multilingual and Multicultural Development*, 41(7), 590-602. <https://doi.org/10.1080/01434632.2020.1725525>
- Coral, J. (2013). Physical education and English integrated learning. How School Teachers Can Develop PE-in-CLIL. *Temps d'Educació*, 45, 41-64.
- Coral, J., Urbiola, M., Sabaté, E., Bofill, J., Lleixà, T., & Vilà-Baños, R. (2020). Does the teaching of physical education in a foreign language jeopardise children's Physical activity time? A pilot study. *International Journal of Bilingual Education and Bilingualism*, 23(8), 839-854. <https://doi.org/10.1080/13670050.2017.1407289>
- Council of Europe (2001). *Common European Framework of Reference for Languages: Learning, Teaching and Assessment*. Cambridge University Press.
- Couto-Cantero, P. y Bobadilla-Pérez, M. (2017). Análisis, Implementación y Evaluación de Programas Bilingües en Galicia y la Universidad de A Coruña. En Secretaría General Técnica. Centro de Publicaciones (Ed), *Educación bilingüe: tendencias educativas y conceptos clave* (2017 ed., pp. 1-277). Ministerio de Educación, Cultura y Deporte.
- Custodio-Espinar, M. y García-Ramos, J.M. (2020). Are Accredited Teachers Equally Trained for CLIL? The CLIL Teacher Paradox. *Porta Linguarum*, 33, 9-25. <https://doi.org/10.30827/portalin.vi33.18113>
- Durán-Martínez, R., Beltrán-Llavador, F. & Martínez-Abad, F. (2020). Training priorities in primary education bilingual programmes in Spain. *European Journal of Teacher Education*, 1-17. <https://doi.org/10.1080/02619768.2020.1827387>
- Fernández-Barrionuevo, E. (2017). *Generalización de la motivación en AICLE entre los dominios de Educación Física y aprendizaje en lengua extranjera en centros bilingües andaluces*. [Tesis Doctoral]. Universidad de Granada.

- Fernández-Barrionuevo, E., Baena-Extremera, A., & Villoria-Prieto, J. (2021). La Educación Física bilingüe como forma de motivar hacia el aprendizaje en una lengua extranjera. Estudio preliminar basado en el Modelo Trans-Contextual. *Bilingual Physical Education as a way to motivate learning in a foreign language. Preliminary study based on the Trans-Contextual Model*. *Retos*, 42, 244-255. <https://doi.org/10.47197/retos.v42i0.77382>
- Fernández-Cézar, R., Aguirre Pérez, C., & Harris, C. (2013). La Formación de maestros en aprendizaje integrado de contenidos en lengua extranjera (AICLE): Un Estudio en Castilla La Mancha. *Revista de Formación e Innovación Educativa Universitaria*, 6(1), 33-44.
- Fernández-Díaz, M. J. (2017). Entrevistas. Formación inicial de Maestros. M.^a José Fernández Díez. Decana de la Facultad de Educación UCM. *Revista Digital EducaMadrid*. <https://www.educa2.madrid.org/web/revista-digital/entrevistas/-visor/m-jose-fernandezdiez-decana-de-la-facultad-de-educacion-ucm>
- Fernández-Sanjurjo, J., Fernández-Costales, A., & Arias, J. M. (2017). Analysing Students' Content Learning in Science in CLIL vs. non-CLIL Programmes: Empirical Evidence from Spain. *International Journal of Bilingual Education and Bilingualism*, 22(6), 661-674. <https://doi.org/10.1080/13670050.2017.1294142>
- Fernández-Viciana, A. & Fernández-Costales, A. (2019). La autoeficacia percibida en los futuros docentes de inglés de Educación Primaria. *Profesorado. Revista currículum y formación del profesorado*, 23(4), 216-233.
- Fraguela-Vale, R., Varela-Garrote, L., Carretero-García, M., y Peralbo-Rubio, E. M. (2020) Basic Psychological Needs, Physical Self-Concept, and Physical Activity Among Adolescents: Autonomy in Focus. *Frontiers in Psychology*, 11(491). <https://doi.org/10.3389/fpsyg.2020.00491>.
- Gallego-Ortega, J. L., & Rodríguez-Fuentes, A. (2014). Percepción del alumnado universitario de Educación Física sobre su competencia comunicativa. *Movimiento*, 2(2), 425-444. <https://doi.org/10.22435/mot.v0i2.194>
- García-Calvo Rojo, S. & Nieto-Moreno de Diezmas, E.L. (2022). Educación Física Bilingüe-AICLE a través de la enseñanza comprensiva de los juegos: análisis comparativo de la satisfacción intrínseca por edad y género. *Bilingual Physical Education-CLIL through teaching games for understanding: comparative analysis of intrinsic satisfaction by age and gender*. *Retos*, 46, 458-466. <https://doi.org/10.47197/retos.v46.91685>
- García-Fernández, B., Nieto-Moreno De Diezmas, E., & Ruiz-Gallardo, J. (2017). Mejorar la motivación en ciencias con enseñanza CLIL. Un estudio de caso. *Enseñanza de las ciencias, n.º extraordinario*, 2625-2630. <https://www.raco.cat/index.php/Ensenanza/article/view/336891>
- García, J. V., García, J. J., & Yuste, J. L. (2012). Educación Física en inglés. Una propuesta para trabajar la higiene postural en Educación Primaria. *Retos. Nuevas tendencias en Educación física, Deporte y Recreación*, 22, 70-75.
- Gil-Galván, R. & Martín-Espinosa, I. (2021). ¿Cómo valoran los estudiantes universitarios de Educación su dominio de competencias lingüísticas en lengua extranjera? *Revista Complutense de Educación*, 32(2), 237-247. <https://doi.org/10.5209/rced.68326>
- Gil-López, V., González-Villora, S., & Hortiguera-Alcalá, D. (2021). Learning foreign languages through content and language integrated learning in physical education: A systematic review. *Porta Linguarum*, 35, 165-182. <https://doi.org/10.30827/portalin.v0i35.15785>
- Guzmán-Ibarra, I., Settati, A., & Marín-Urbe, R. (2019). Transdisciplinariedad y transversalidad: una experiencia para religar la práctica educativa. *Cultura, Educación y Sociedad*, 10(1), 73-84. <https://doi.org/10.17981/cultedusoc.10.2.2019.06>

- Hernando, A., Hortigüela, D., & Pérez-Pueyo, A. (2018). Percepción de coordinadores de programas bilingües y docentes de Educación Física en inglés en secundaria sobre el proceso de implantación y desarrollo del bilingüismo en la Comunidad de Castilla y León. *Retos. Nuevas tendencias en Educación física, Deporte y Recreación*, 33, 63-68. <https://doi.org/10.47197/retos.v0i33.54423>
- Horwitz, E. K. (1986). Preliminary evidence for the reliability and validity of a foreign language anxiety scale. *TESOL Quarterly*, 20(3), 559–562. <https://doi.org/10.2307/3586302>
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125–132. <https://doi.org/10.2307/327317>
- Huertas-Tinoco, M. C., & Alcaraz-Muñoz, M. (2018). Attitudes of Physical Education Teachers towards the Teaching of English in the Context of the European Bilingual Education Model. *European Physical Education Review*, 24(1), 22-36. <https://doi.org/10.1177/1356336X16660155>
- Imbernón, F. (2020). La formación permanente del profesorado. Algunas inquietudes, evidencias y retos a superar. *Crónica, revista científico profesional de la pedagogía y la psicopedagogía*, 5, 103-112. <http://www.revistacronica.es/index.php/revistacronica/article/view/93>
- Jover, G., Fleta, T. & González, R. (2016). La formación de los maestros de Educación Primaria en el contexto de la enseñanza bilingüe en lengua extranjera. *Bordón*, 68(2), 121-135. <https://doi.org/10.13042/Bordon.2016.68208>
- Krichesky, G.J., & Murillo F. J. (2015). La colaboración docente como factor de aprendizaje y pro-motor de mejora. Un estudio de casos. *Educación XXI*, 21(1), 135-156. <https://dialnet.unirioja.es/servlet/articulo?codigo=6266706>
- Lage-Gómez, C., & Ros, G. (2021). Transdisciplinary integration and its implementation in primary education through two STEAM projects. La integración transdisciplinar y su aplicación en Educación Primaria a través de dos proyectos STEAM. *Journal for the Study of Education and Development*, 44(4), 801-837. <https://doi.org/10.1080/02103702.2021.1925474>
- Lasagabaster, D. (2008). Foreign language competence in content and language integrated courses. *The Open Applied Linguistics Journal*, 1, 30-41. <https://doi.org/10.2174/1874913500801010030>
- Ledoux, J. (1999). El cerebro emocional. Barcelona: Planeta.
- Llinares, A., & Whittaker, R. (2019). Examining the Relationship between English Language Proficiency and Perception of Speaking and Writing Ability among Spanish University Students. *Journal of English for Academic Purposes*, 41, 18-30. <https://doi.org/10.4995/rlyla.2022.16122>
- Martínez-Agudo, J. (2020). The Impact of CLIL on English Language Competence in a Monolingual Context: A Longitudinal Perspective. *Language Learning Journal*, 48(1), 36–47. <https://doi.org/10.1080/09571736.2019.1610030>
- Martínez-Hita, F.J., García-Cantó, E., Gómez-López, M. & Granero-Gallegos, A. (2021). *Revisión sistemática del tiempo de compromiso motor en Educación Física*. Ciencia, Cultura y Deporte, 16(49), 365-378. <http://dx.doi.org/10.12800/ccd.v16i49.1609>
- Martínez-Hita, F.J., García-Cantó, E., Gómez-López, M. y Granero-Gallegos, A. (2023). Influencia de una educación física bilingüe AICLE en el tiempo de compromiso motor. *E-Balonmano. com: Revista de Ciencias del Deporte. Journal of Sport Science*, 19(1), 55-66. <https://doi.org/10.17398/1885-7019.19.55>
- Martínez-Hita, F.J., Granero-Gallegos, A. & Gómez-López, M. (2022). Diseño y validación de una herramienta para evaluar AICLE en las sesiones de Educación Física. *Porta Linguarum*, 37, 193-210. <https://doi.org/10.30827/portalin.vi37.17795>

- Martínez-Soto, T. (2022). Una revisión sistemática sobre el uso de TIC y el método AICLE en la educación obligatoria. *RiiTE Revista Interuniversitaria de Investigación en Tecnología Educativa*, 222–239. <https://doi.org/10.6018/riite.544431>
- Meyer, O. (2010). Towards quality CLIL: successful planning and teaching strategies. *Pulso*, 33, 11-29. <https://dialnet.unirioja.es/servlet/articulo?codigo=3311569>
- Molero-Clavellinas, J.J. (2011). De la educación física hacia la educación física bilingüe: un análisis desde el punto de vista metodológico. *EmasF, Revista Digital de Educación Física*, 2(10), 7-16. <https://dialnet.unirioja.es/servlet/articulo?codigo=3659955>
- Muñoz, A., Granado-Peinado, M., Martín, J. & Rivilla-García, J. (2017). Estudio de caso: Análisis de la distribución del tiempo en educación física. *E-balonmano.com: Revista de Ciencias del Deporte*, 13(2), 167-174. <http://www.redalyc.org/articulo.oa?id=86553841009>
- Pérez-Cañado, M. L. (2016a). From the CLIL craze to the CLIL conundrum: Addressing the current CLIL controversy. *Bellaterra Journal of Teaching & Learning Language & Literature*, 9(1), 9–31. <https://doi.org/10.5565/rev/jtl3.667>
- Pérez-Cañado, M. L. (2016b). Stopping the ‘Pendulum Effect’ in CLIL Research: Finding the Balance between Pollyanna and Scrooge. *Applied Linguistics Review*, 8(1), 79–99. <https://doi.org/10.1515/applirev-2016-2001>
- Pérez-Cañado, M. L. (2018). Innovations and Challenges in CLIL Teacher Training. *Theory into Practice*, 57(3), 1–10. <https://doi.org/10.1080/00405841.2018.1492238>
- Pérez-Cañado, M. L., & Lancaster, N. K. (2017). The effects of CLIL on oral comprehension and production: a longitudinal case study. *International Journal of Bilingual Education and Bilingualism*, 30(3), 300-316. <https://doi.org/10.1080/07908318.2017.1338717>
- Ramos, F. & Ruiz, J. V. (2011). La Educación Física en centros bilingües de primaria inglés-español: de las singularidades propias a la elaboración de propuestas didácticas prácticas con AIBLE. *Revista Española de Lingüística Aplicada*, 24, 153-170. <https://dialnet.unirioja.es/servlet/articulo?codigo=3886031>
- Rodríguez-Pérez, N. (2014). Creencias y representaciones de los profesores de lenguas extranjeras sobre la influencia de los factores motivacionales y emocionales en los alumnos y en las alumnas. *Porta Linguarum*, 21, 183-197. <https://doi.org/10.30827/Digibug.30490>
- Salvador-García, C. & Chiva-Bartoll, O. (2017). CLIL in teaching physical education: Views of the teachers in the Spanish context. *Journal of Physical Education and Sport*, 17(3), 1130-1138. <http://dx.doi.org/10.7752/jpes.2017.03174>
- Salvador-García, C., Capella-Peris, C., Chiva-Bartoll, O. & Ruiz-Montero, P. J. (2020a). A mixed methods study to examine the influence of CLIL on physical education lessons: Analysis of social interactions and physical activity levels. *Frontiers in Psychology*, 11(578), 1-10. <https://doi.org/10.3389/fpsyg.2020.00578>
- Salvador-García, C., Chiva-Bartoll, O. y Vergaz-Gallego, J.J. (2018). Percepción del alumnado sobre el uso del método AICLE en Educación Física: estudio de caso. Perception of students on the use of CLIL method in Physical Education: A Case Study. *Retos*, 33, 138-142. <https://doi.org/10.47197/retos.v0i33.53665>
- Salvador-García, C., Chiva-Bartoll, O., & Capella-Peris, C. (2022). Bilingual Physical Education: The Effects of CLIL on Physical Activity Levels. *International Journal of Bilingual Education and Bilingualism*, 25(1), 156-165. <https://doi.org/10.1080/13670050.2019.1639131>
- Salvador-García, C., Chiva-Bartoll, O., & Colomer-Diago, C. (2020b). The effect of bilingual physical education on students’ physical activity: Things are not always as they seem. *Cultura, Ciencia y Deporte*, 15(43), 53-61. <https://doi.org/10.12800/ccd.v15i43.1407>

- Salvador-García, C., Chiva-Bartoll, O., & Isidori, E. (2017). Aprendizaje de un idioma extranjero a través de la Educación Física: Una revisión sistemática. *Movimento (ESEFID/UFRGS)*, 23(3), 647-660. <https://doi.org/10.22456/1982-8918.68754>
- Sebastian, J., & Allensworth, E. (2012). The influence of principal leadership on classroom instruction and student learning: A study of mediated pathways to learning. *Educational Administration Quarterly*, 48(4), 626-663. <https://doi.org/10.1177/0013161X12452332>
- Thompson, A. S. (2013). The interface of language aptitude and multilingualism: reconsidering the bilingual/multilingual dichotomy. *The Modern Language Journal*, 97, 685-701. <https://doi.org/10.1111/j.1540-4781.2013.12034.x>
- Torres-Outón, S. M. (2019). Idoneidad de la Educación Física para el Aprendizaje Integrado de Contenidos en Lengua Extranjera (AICLE). *EmásF, Revista Digital de Educación Física*, 60, 57-75. <https://dialnet.unirioja.es/servlet/articulo?codigo=7063106>
- Tran, H., & Fujiko, M. (2013). Using visual methods to teach English language learners in physical education. *Journal of Physical Education, Recreation & Dance*, 84(8), 46-53. <https://doi.org/10.1080/07303084.2013.816725>
- Valdés-Sánchez, L., & Espinet, M. (2020). Coteaching in a Science-CLIL Classroom: Changes in Discursive Interaction as Evidence of an English Teacher's Science-CLIL Professional Identity Development. *International Journal of Science Education*, 42(14), 2426-2437. <https://doi.org/10.1080/09500693.2019.1710873>
- Wang, L. (2021). The correlation between English language proficiency and perceived communicative competence of Chinese non-English majors. *Theory and Practice in Language Studies*, 11(1), 39-45. <https://doi.org/10.17507/tpls.1101.05>
- Xanthou, M. (2011). The Impact of CLIL on L2 Vocabulary Development and Content Knowledge. *English Teaching: Practice and Critique*, 10(4), 116-126. <https://edlinked.soe.waikato.ac.nz/journal/files/etpc/files/2011v10n4art7.pdf>
- Zhu, Z., & Zhang, J. (2019). Research on the Relationship between English Language Proficiency of Physical Education Teachers and Their Attitudes towards English Teaching. *Journal of Physical Education, Recreation & Dance*, 90(6), 8-14. <https://doi.org/10.1080/07303084.2018.1558896>