

CLIL TEACHER'S INITIAL EDUCATION: A STUDY OF UNDERGRADUATE AND POSTGRADUATE STUDENT TEACHERS

LA FORMACIÓN INICIAL DEL DOCENTE AICLE: UN ESTUDIO DE MAESTROS ESTUDIANTES DE GRADO Y POSTGRADO

Mónica Gutiérrez Gamboa
Magdalena Custodio Espinar
Universidad Rey Juan Carlos

Abstract

Content and Language Integrated Learning (CLIL) has been implemented in Spain for almost two decades. Most studies in this area have shown that this approach provides students with plenty of benefits. However, current studies have also shown that more than half of in-service CLIL teachers are methodologically untrained to provide this kind of education since the only requirement to do it is teachers' proficiency in the foreign language. This paper is aimed at analyzing the level of acquisition of CLIL principles by student teachers according to the academic program studied, their interest in teaching CLIL, their perceived level of training in CLIL, and their English level in a sample of 56 potential CLIL teachers from different Spanish universities. To measure the degree of integration of CLIL principles, the *Cuestionario de integración de los principios metodológicos AICLE* (CIPMA) was used (Custodio Espinar & García Ramos, 2019). Results show that there are differences between the groups who have studied a Master's Degree in Bilingual Education, and those who have studied a Degree in Infant or in Primary Education without specific training in CLIL in two of the four dimensions of the questionnaire, the foundations of CLIL (D1), and the specific resources and activities that this approach requires (D3), in favor of postgraduate students. Besides, significant differences were found between participants who are hesitant and those who are convinced of offering bilingual education and between students who think that they have been poorly trained and those who perceive themselves to be fairly trained, in favor of the latter in both cases. Finally, students with higher linguistic competence show a better integration of the CLIL principles. It is concluded that important challenges are to be faced by universities regarding the education of the future CLIL teacher such as providing CLIL courses in all the academic programs of the education degrees.

Key Words: CLIL, teacher competences, initial education, teacher training.

Resumen

El Aprendizaje Integrado de Contenido y Lengua (AICLE) se ha implementado en España durante casi dos décadas. La mayoría de los estudios en esta área han demostrado que este enfoque brinda a los estudiantes muchos beneficios. Sin embargo, los estudios actuales también han demostrado que más de la mitad de los maestros AICLE en servicio no están formados metodológicamente para brindar este tipo de educación, ya que el único requisito para ello es el nivel de competencia de los docentes en la lengua extranjera. Este artículo tiene como objetivo analizar el nivel de adquisición de los principios AICLE por parte de los futuros profesores de educación bilingüe de acuerdo con el programa académico que estudian, su interés por enseñar AICLE, su nivel percibido de formación en AICLE y su nivel de inglés, en una muestra de 56 maestros potenciales de AICLE de diferentes

universidades españolas. Para medir el grado de integración de los principios AICLE se utilizó el Cuestionario de integración de los principios metodológicos AICLE (CIPMA) (Custodio Espinar & García Ramos, 2019). Los resultados muestran que existen diferencias entre los grupos que han cursado un máster en educación bilingüe y los que han cursado un grado en Educación Infantil o en Educación Primaria sin formación específica AICLE en dos de las cuatro dimensiones del cuestionario, fundamentos de AICLE (D1) y los recursos y actividades específicos que requiere este enfoque (D3), a favor de los estudiantes de posgrado. Además, se identificaron diferencias significativas entre los estudiantes que dudan y los que están convencidos de ofrecer educación bilingüe y entre los estudiantes que piensan que están mal capacitados y los que se perciben adecuadamente capacitados, a favor de los últimos en ambos casos. Finalmente, los estudiantes con mayor competencia lingüística muestran una mayor integración de los principios AICLE. Se concluye que las universidades deben enfrentar importantes desafíos en la formación del futuro docente AICLE, entre los que destaca impartir cursos AICLE en todos los programas académicos de los grados de educación.

Palabras clave: AICLE, competencias del profesorado, formación inicial, formación del profesorado.

1. INTRODUCTION AND AIM OF THE STUDY

The European Union has been aiming to enable citizens to communicate in two modern European languages, in addition to their mother tongue, since 1995 (European Commission, 1995). In order to achieve this aim, the way foreign languages are learnt at school has been reorganized due to the implementation of bilingual programs based on CLIL.

CLIL is an approach that integrates the acquisition of language and culture by the development of the thinking skills through the study of curricular contents defined in the national and regional curriculum. It has been implemented in Spain since the beginning of this century. Many experts and researchers in the field, such as Van de Craen et al. (2007), Baetens (2008), Moate (2010), Várkuti (2010) Yassin et al. (2010), Bonnet (2012), Dale and Tanner (2012), Massler (2012), Halbach and Wechem (2014), Vinuesa (2017), Custodio-Espinar (2019a, 2019b, 2020), and López (2019), have argued the positive impact that it has on students and the necessary competences that CLIL teachers are supposed to develop in order to allow students to make the best of CLIL. Pupils not only improve their language proficiency, but it also provides them with benefits connected to the 4Cs (content, cognition, communication and culture) developed by Coyle (1999).

As Yassin et al. (2010) had already noted, “the quality of classroom discourse depends largely on the teacher” (p.49), an idea subsequently reasserted in several research papers (Massler, 2012; Acción Educativa, 2017; Mosquera, 2017; Madrid & Roa, 2018; Rodríguez-Sabiote, Madrid, Ortega-Martín, & Hughes, 2018; Custodio-Espinar, 2019a, 2019b, 2020; Morton, 2019; Sánchez, 2019; Pérez-Barco, 2020). However, in order to guarantee the effectiveness of this methodological approach, one of the most influential factors, in addition to teachers’ linguistic competence in the target language, is teachers’ training in the CLIL principles.

From a practical perspective, there are some aspects concerning these 4Cs which are key factors that teachers have to consider in order to carry out good CLIL practice (Anderson & Krathwohl, 2001; British Council, 2006; Mehisto, Marsh, & Frigols, 2008; Coyle, Hood, & Marsh, 2010 ; Moate, 2010; Yassin et al., 2010 ; Ioannou-Georgiou & Pavlou, 2011; Johnstone et al., 2011):

1. The main focus of the CLIL classroom has to be the acquisition of curricular contents.
2. Language is determined by content. Language in CLIL must be planned in advance to allow learners to use it as a tool for communication, as well as for the development of cognitive skills.
3. CLIL activities must enable students to progressively develop thinking skills, from low order thinking skills (LOTS) to high order thinking skills (HOTS), through the learning of contents.
4. CLIL lessons must lead to cultural awareness by the exposure to a foreign language, and by increasing opportunities for communication among students and between teacher and student. In other words, CLIL lessons should promote opportunities for communication to emerge so that learners are aware of and value perspectives different from their own.

However, despite all these benefits, it is worth highlighting that bilingual education has become a major concern in Spain on account of the results shown in the last PISA test carried out in 2018. In this regard, Isabel Galvín suggested the fact that Science is taught through a foreign language in almost half of high schools, and it could have led to this failure (Silió, 2019). On her behalf, Paloma Fernández, speaker of ACIERTAS¹ project, developed by the *Confederación de Sociedades Científicas de España* (COSCE), emphasizes the need to develop students' scientific knowledge from Primary Education stage, which requires an intensive analysis of teaching methodologies (Cortes, 2019).

On the other hand, if the results in PISA test are contrasted with the studies on the benefits of CLIL, they do not seem to be in harmony. This situation demands an urgent revision of the variables that affect good CLIL practice. Experts in the CLIL field agree that the role of the CLIL teacher is essential to ensure these benefits. For this purpose, documents have been published at European and Spanish level describing the competences that CLIL teachers must acquire (Bertaux et al., 2010; Marsh et al., 2010; Pavón-Vázquez & Ellison, 2013; Pérez Cañado, 2018). In addition, given the variety of different profiles that CLIL educators can present (Bentley, 2010), organized into content teacher -or specialist in music, physical education-, general content teacher, and language teacher by Salaberri (2010), it is necessary to take into account that each of them requires specific pedagogical training to provide bilingual education (Morton, 2016).

The above mentioned could be summarized as the need for CLIL teachers training in both the theoretical and practical skills of this approach. The authors mentioned above agree that bilingual teachers should be familiar with the conceptual principles of CLIL in order to acquire the competences to implement this approach. Therefore, as Custodio Espinar and García Ramos (2019) state, the successful implementation of the CLIL approach involves the mastering of competences for the design of dual-focus lessons that integrate the 4Cs, a high linguistic competence in the target language and the ability to handle the Common European Framework of Reference for Languages (CEFRL) designed by

¹ ACIERTAS (*Aprendizaje de las Ciencias por Indagación En Redes Transversales colaborativAS*) <http://www.aciertas.org/Home/Paginas/que-es-aciertas-1>

the Council of Europe (2001). Besides, it demands competences that promote cooperation among the agents involved in the teaching-learning process; competences on the monitoring of one's own practice, and competences in active methodologies and in the use of ICT (Pérez-Cañado, 2018).

With this in mind, it becomes necessary to analyze the requirements to be a CLIL teacher in Spain. For example, in Madrid, these requirements are described in the sixth article of Order 5958/2010, which regulates the implementation of bilingual schools in the Region of Madrid. It states that teachers who teach bilingual education, in addition to being qualified to teach the specific areas, such as physical education and music, must obtain the accreditation to teach in a foreign language (O. 5958/2010, January 21), but it does not mention any requirement concerning the other competences of the CLIL teacher.

Thus, teachers must seek voluntarily additional training in CLIL, in the courses that the national and regional educational authorities offer as part of their in-service teachers' training plans. Notwithstanding, current studies have shown that more than half of in-service CLIL teachers are methodologically untrained to provide this kind of education (Custodio Espinar & García Ramos, 2020). This situation, which is the result of an accreditation model based on teachers' foreign language proficiency, calls the need to research not only CLIL teachers' competence in planning CLIL lessons but also the competence in CLIL of potential future bilingual teachers as they represent the grassroots of the future multilingual society. Because teachers' linguistic competence is a necessary but not sufficient requirement to successfully develop bilingual programs.

In this sense, the present paper is aimed at evaluating if current undergraduate and postgraduate academic programs of Education and Bilingual Education are designed to address such deficiencies in CLIL methodological competence, and if potential CLIL teachers who will access the labor market have acquired the needed knowledge and skills to guarantee the effectiveness of bilingual education in Spain. The study focuses on verifying the need to redesign university degree syllabuses so as to effectively achieve the objective of preparing future CLIL teachers in both communicative competence in the foreign language and pedagogical knowledge of bilingual education. This will allow learners to benefit from all the advantages that the CLIL approach might provide.

2. METHOD

This research is an ex-post-facto descriptive and differential study aimed at obtaining information about the education in CLIL of potential future teachers of bilingual programs, graduate and postgraduate students of Education Degrees and Master's in Bilingual Education.

2.1. Research questions, objectives and variables

The research problem of this empirical study could be summarized in the following question: are potential primary CLIL teachers equally trained in this approach? The study also aims to answer the following research questions:

- RQ1 Are there differences in the level of integration of CLIL principles of student teachers according to their academic program?

- RQ2 Are there differences in the level of integration of CLIL principles of student teachers according to their interest in teaching CLIL?
- RQ3 Are there differences in the level of integration of CLIL principles of student teachers according to their perceived level of training in CLIL?
- RQ4 Are there differences in the level of integration of CLIL principles of student teachers according to their level of English according to the CEFRL?

Thus, the specific objectives of the study are to analyze the differences in the level of integration of CLIL principles of student teachers according to four factors: the academic program they study, their interest in teaching CLIL, their perceived level of training in CLIL, and their level of English according to the CEFRL. The levels of these independent variables (IV) studied are:

- Academic program: Infant Education and Primary Education Degree, English as a Foreign Language (EFL) Major in Primary Education Degree, and Master's degree in Bilingual Education.
- Interest in teaching CLIL: Yes, no, and maybe.
- Perceived level of training in CLIL: Not at all, poorly, moderately, fairly, and highly trained.
- English level according to the CEFRL: A2, B1, B2, and C1.

Finally, there are five dependent variables (DV) in the study. The main DV is the global score in the sum of all the CLIL lesson plan dimensions as defined in the CIPMA. The other DV are the score in each of the four dimensions of the questionnaire: D1 Core elements of CLIL; D2 Methodology; D3 Resources; and D4 Evaluation.

2.2. Instrument

The instrument used to collect the data was the CIPMA questionnaire (*Cuestionario de Integración de los Principios Metodológicos de AICLE*). It is a questionnaire designed and validated by Custodio Espinar and García Ramos (2019) to measure the competence in CLIL lesson planning. It consists of 42 items organized into 16 identification variables, 23 study variables, and three criterion items. To adapt the identification items to the study, an online questionnaire has been designed using Google forms. The online CIPMA² consists of 40 items distributed in 11 identification variables, its 23 study variables, and the three criterion items.

The 23 dependent variables are measured according to a Likert scale which goes from 1 to 6, where 1 indicates never and 6 always; therefore, the higher the score obtained in the survey, the deeper the knowledge on the CLIL methodological principles necessary to plan CLIL lessons. In addition, the dependent variables are organized into four dimensions. Concretely, the first dimension consists of ten questions on the core elements of CLIL, the second dimension contains nine questions on CLIL

² Link to the online CIPMA used in the study:
https://docs.google.com/forms/d/e/1FAIpQLSfYLclVlZjPmygyG6YrZWCZAn_5KISZpowOA7bWRQ7vS4Umw/viewform?usp=sf_link

methodology, the third dimension asks two questions on resources and, finally, the fourth dimension asks two questions regarding the evaluation in CLIL settings.

The last part of the survey comprises the three criterion items which are questions about general considerations of how teachers perceive how programming can influence students' learning, and a self-assessment of their own knowledge and understanding of CLIL principles.

2.3. Participants

The population of the study consists of students who are in the last year of their Degree or Double Degree in Education (year 4 or year 5 students) or studying a Master's in Bilingual Education. For this purpose, professors from different universities were asked to share a link to the online version of the CIPMA to their students of the different academic programs they teach. The sample, who voluntarily participated in the survey, comprises a total of 56 student teachers studying different academic programs related to Education and Bilingual Education (Table 1).

Teacher Education	Frequency	Percentage
Infant Education or Primary Education Degree	21	37.5
EFL Major in Primary Education Degree	13	23.2
Master's degree in Bilingual Education	22	39.3
Total	56	100.0

Table 1. Distribution of the sample according to their academic program

2.4. Procedure and analysis

The questionnaire was completed by students using Google forms during the months of April, May, and June in 2020. For the data analysis, the IBM SPSS 20 application was used. The reliability of the CIPMA on the sample has been calculated using Cronbach's alpha coefficient to evaluate the correlation between the 23 item-variables and the scale. Regarding the validity of the questionnaire, the Pearson's correlation coefficient has been used, with sigma value under 0.01, or under 0.05.

A descriptive analysis of independent and dependent variables has been carried out. Besides, group averages have been compared in order to identify any differences in the degree of integration of the CLIL principles between the different groups according to the four factors studied. For this differential analysis, One-Way ANOVA was used (with Tukey b for subsequent contrasts). The significance level was set at the 0.05 (5% level).

3. RESULTS

3.1. Instrument reliability and validity

The reliability of the scale in this study is 0.907, which is excellent. Concerning the criterion validity, there is a statistically significant linear correlation between the total score in the questionnaire and the

three criterion items in the Pearson type parametric correlations analyzed. Pearson's correlation coefficients are significant in all the dimensions, with the exception of the criterion item 3, which does not present a correlation between dimensions 3 and 4 of the questionnaire. This could be explained by the fact that these dimensions ask only about two aspects of the CLIL lesson plan that are not specific of CLIL but general to any kind of lesson plan.

3.2. Descriptive analysis

The sample consists of 56 student teachers who are distributed in 49 women, six men, and one student who did not answer. They are potential CLIL teachers for the bilingual programs implemented at the moment, who show a variety of profiles. According to the academic program, ten study an Infant Education Degree, 11 a Primary Education Degree, 13 an EFL Major in a Primary Education Degree, and 22 study a Master's Degree in Bilingual Education, as shown in Table 1. This means that almost half of the sample has studied a Master's degree in Bilingual Education (39.3%), 37.5% of students have finished a degree in Infant or Primary Education and 23.2% have the specialization in teaching a foreign language (EFL Major).

In relation to the interest of the sample in teaching CLIL, Figure 1 shows the distribution of the sample in this variable.

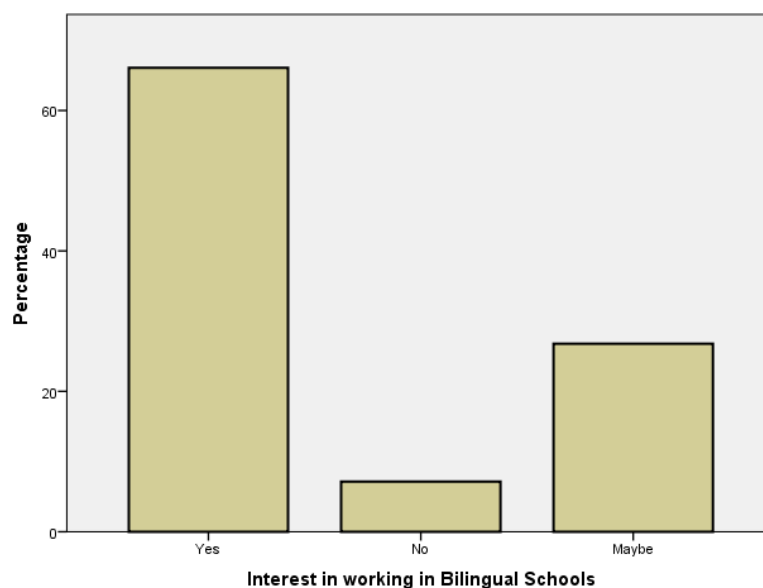


Figure 1. Distribution of the sample according to their interest in teaching CLIL.

As shown in Figure 1, 66.1% stated that they were interested in working as a CLIL teacher, whereas 26.8% were hesitant, and only 7.1% were not interested in having a position at a bilingual school.

The distribution of the sample according to their perceived level of training in CLIL is shown in Figure 2.

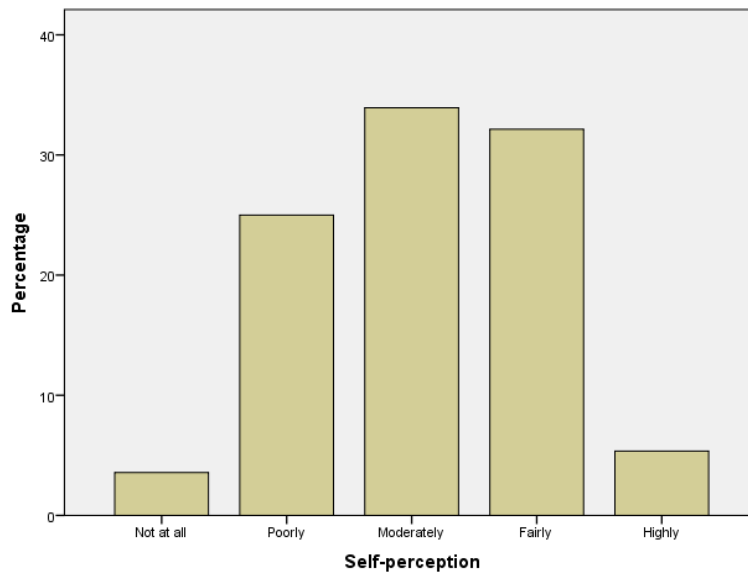


Figure 2. Perceived level of training in CLIL.

With reference to the English level according to the CEFRL, 46.4 % of the students have an English level of B2, 37.5% a C1 level, and 16.1% a B1.

On the other hand, the distribution of the four dependent variables in the sample of 56 students is shown in Figure 3.

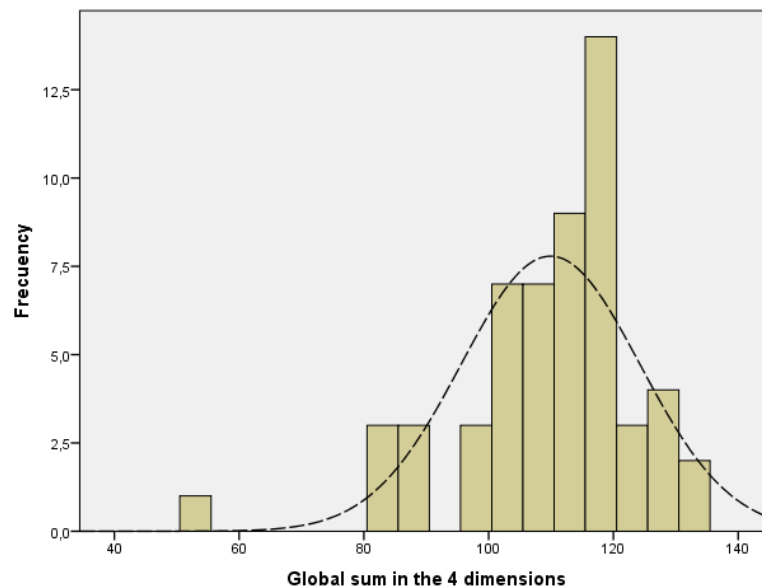


Figure 3. Distribution of the main dependent variable in the sample.

The histogram shows the average score obtained by the sample in the sum of the four dimensions of the questionnaire. As can be noticed, the normality curve is slightly offset to the right, which indicates that the average score of the sample is high. More concretely, the average number of points obtained by the sample is 109 points from a total of 138. However, there is a difference of 82 points between the

least trained student in the CLIL principles, who scored 53 points, and the strongest student, who scored a total of 135 points.

3.3. Differential analysis of student CLIL teacher's competence to plan CLIL

The results of the analysis of the global level of integration of CLIL principles in undergraduate and postgraduate student teachers according to the academic program studied, their interest in teaching CLIL, their perceived level of training in CLIL, and the English level according to the CEFRL is shown in Table 2.

Null hypothesis (means are equal)	Testing Technique	Statistic	Sig.	Statistical decision and conclusion
1. DV Global level of CLIL integration IV Academic program	ANOVA	F= 3.016	0.057	Null hypothesis accepted. No significant differences between groups.
2. DV Global level of CLIL integration IV Interest in teaching CLIL	ANOVA	F= 3.243	0.047	Null hypothesis rejected. Significant differences between yes and maybe, in favour of yes.
3. DV Global level of CLIL integration IV Perceived level of training in CLIL	ANOVA	F= 4.636	0.003	Null hypothesis rejected. Significant differences between poorly and fairly trained, in favour of fairly.
4. DV Global level of CLIL integration IV English level according to the CEFRL	ANOVA	F= 2.593	0.084	Null hypothesis accepted. No significant differences between groups.

Table 2. Differences in the global level of acquisition of the CLIL principles

The results of the impact of the different independent variables studied on each of the four CLIL dimensions of the CIPMA questionnaire are described in Table 3.

	D1 CLIL elements		D2 Methodology		D3 Activities and resources		D4 Evaluation	
	F	Sig.	F	Sig.	F	Sig.	F	Sig.
1. Academic program	4.188	0.020	1.165	0.320	3.706	0.031	0.626	0.539
2. Interest in teaching CLIL	4.249	0.019	1.923	0.156	2.929	0.062	1.236	0.299

3. Perceived level of training in CLIL	4.404	0.004	3.654	0.011	0.509	0.729	1.457	0.229
4. Level of English according to the CEFRL	3.992	0.024	1.801	0.175	0.685	0.508	0.932	0.400

Table 3. Differences in the level of acquisition of the CLIL principles in the four dimensions of CIPMA.

4. DISCUSSION

This research found that, despite the fact that the acquisition of specific competences by CLIL teachers has been studied and proven to be necessary for ten years now, after sixteen years since the implementation of bilingualism in Spain, and, in spite of the existence of several European and Spanish documents which define the CLIL teacher competences (Bertaux et al., 2010; Marsh et al., 2010; Pavón-Vázquez & Ellison, 2013; Pérez Cañado, 2018), Degrees in Education are not yet adequately adapted to the educational demands of bilingual education in Europe and Spain. This situation is due to a deficient initial education (Banegas, 2012; 2015; Coyle et al., 2010; Mehisto et al., 2008; Rábano Lamas & García Esteban, 2015; Torres, 2018), as this study confirmed. The results showed that not all undergraduate teachers have acquired the competences that this approach demands. Hence, in the light of the fact that methodological training is not a requirement for the teaching of dual-focus education through CLIL, this means that there are potential CLIL teachers who can access this type of education without any particular training for bilingual education. Custodio-Espinar and Garcia-Ramos (2020) revealed that only around half of the teachers who are currently working in bilingual schools in the region of Madrid have received specific CLIL methodological training. Thus, it can be concluded that there is a strong need to train all future teachers in CLIL principles, since this factor strongly determines the success of bilingual programs.

The differences found between the groups of the sample in dimension 1 in all the independent variables studied are in line with and contribute to the support of the ideas included in previous studies carried out by Massler, 2012; Megías, 2012; Acción Educativa, 2017; Mosquera, 2017; Gisbert, 2017; Madrid and Roa, 2018; Rodríguez-Sabiote, Madrid, Ortega-Martín, and Hughes, 2018; Cortes, 2019; Custodio-Espinar, 2019a, 2019b, 2020; López, 2019; Morton, 2019; Sánchez, 2019; Pérez-Barco, 2020. These studies contend that teacher training in linguistic and methodological domains of bilingual education principles is crucial to ensure the acquisition of CLIL-specific principles by all CLIL teachers in order to guarantee the benefits of CLIL to all learners, and to facilitate teachers' practice within this new linguistically and cognitively challenging approach.

The results of this study raise important challenges that universities must face regarding the profile of the future CLIL teacher, who should be considered as the key to a future multilingual society (European Commission, 1995). In this regard, this paper proposes the challenge of reviewing the

syllabus of academic programs so as to adapt them to the current educational demands by including a compulsory CLIL course at degree level in order to ensure that all future teachers, regardless they decide to teach bilingual education or not, acquire the methodological foundations of this approach, in line with the conclusions of Calle Casado (2015). This points out the claim of some authors who state that if academic programs were connected to current educational demands, investment in training courses for in-service teachers would be considerably reduced (Banegas, 2012; Madrid & Madrid, 2014). Furthermore, it might increase teachers' motivation and desire for this kind of education. These recommendations aim to improve academic teacher training programs and, consequently, the quality of education, bilingual or not, since as stated by Wolff, “CLIL teacher education, if taken seriously, constitutes a fundamental part of all teacher education, that every teacher should be educated, in fact, as a CLIL teacher” (2012, p. 107).

All in all, regarding the first research question, it cannot be maintained that significant differences exist in the main dependent variable, the total score in the four dimensions. Nevertheless, if the results are analysed according to each of the four dimensions (shown in Table 3), differences are evident in two of them. In particular, students from different academic teaching programs show a heterogeneous academic education in terms of knowledge about the CLIL approach (D1), and its specific resources and activities (D3). These two differences were found between the groups that have studied a Master's Degree in Bilingual Education, and those that have studied a Degree in Infant or in Primary Education without an EFL Major. Therefore, it could be held that a specific training through a targeted academic program in the CLIL principles does influence and guarantee the acquisition of the principles of this approach.

With respect to the second research question, significant differences are identified in the global level of integration of CLIL principles between participants who are convinced that they want to offer bilingual education and those who are hesitant (Table 2). The statistically significant differences also occur in dimension one (Table 3), which asks about the acquisition of the pillars of CLIL. From these results, it is understood that students with a higher interest in teaching CLIL are more likely to develop competences to plan and deliver good CLIL lessons. Further research should be conducted to find out what motivates student teachers to teach in CLIL settings.

Question three of the research has also been answered in this study. Table 2 shows notable differences between individuals who think that they have been poorly trained and those students who perceive themselves to be fairly trained, in favour of the latter. Concretely they are reflected in dimension 1 of the questionnaire, but also in dimension 2, which enquires about methodological considerations for the CLIL classroom (Table 3). Hence, it could be asserted that student teachers do actually recognize and are aware of the lack of training in CLIL principles as well as in the methodology that this approach requires.

With reference to the influence of the level of English according to the CEFRL, it was found that it does not significantly determine the overall level of integration of CLIL principles (Table 2). However, differences in dimension 1 of the CIPMA can be identified. In particular, these differences occur

between those students who have a B2 and a C1 level. Those with higher linguistic competence show a better acquisition of the CLIL principles.

As can be ascertained, all of the independent variables studied coincide in the existence of statistically significant differences with regard to dimension 1 of the questionnaire, which specifically focuses on CLIL principles. These differences refer to the academic training in CLIL received by future teachers. This academic training should foster the acquisition of CLIL competences for effective CLIL lesson planning such as the analysis of linguistic and cognitive demands to provide scaffolding, the integration of the 4Cs, the support and encouragement of interaction within the classroom, and the planning of motivating and meaningful activities that allow students to create a final outcome reaching the peak of the Bloom Taxonomy. No significant differences were found in the other dimensions studied. This could be explained by the fact that these dimensions include general aspects of the teaching-learning practice which can be applied to any class and studied at any educational degree, whether bilingual or not.

4. CONCLUSIONS

To summarize, findings enabled to answer the research questions and to assert that teacher training degrees are not sufficiently adapted to the real educational demands of Europe and Spain, because not all potential future teachers of CLIL have been trained in this domain since differences were always found in dimension 1 in all the independent variables studied. These differences found show that there is no homogeneity in the theoretical and methodological acquisition of the main CLIL principles in student teachers.

In particular, these differences abovementioned exist between future teachers who have received specific training through a Master's Degree, and those who have studied a Degree with no specialization in teaching English as a foreign language. However, since there are no significant differences between potential future CLIL teachers who have studied the EFL Major and any of the other two groups studied, it could be stated that this specialization is not a guarantee for the acquisition of CLIL competences. Therefore, it can be considered that there is a need for a common module on CLIL for all future teachers.

On the other hand, the interest that students demonstrate in teaching CLIL allows noticing that teachers who have a clear desire to dedicate to this kind of education show a higher degree of integration of the CLIL principles. Given the high labour demand of bilingual teachers, and the ease to access to this kind of teaching, since the only requirement is a C1-B2 level depending on the region, it is not possible to guarantee that the group of teachers who are doubtful about their future interests will be trained in CLIL on their own. In spite of this, fortunately, the third independent variable studied reveals that potential future CLIL teachers are aware of their own limitations and their competence in CLIL, since those students who claim to have been poorly trained have obtained considerably lower scores than those who feel to have been fairly trained.

Finally, as far as the level of English is concerned, results show that this factor has statistically significant differences only in the specific dimension focused on the CLIL principles, dimension 1. One

reason for this can be that individuals who are interested in teaching in bilingual schools are concerned about the need to acquire the vehicular language. Although it is a matter of some considerable concern that these differences also occur between the groups with higher linguistic competence, B2 and C1, and both, depending on the Regional Administration, can have access to bilingual education teaching. Therefore, once again, it can be asserted that language competence is necessary, but it cannot be demanded as a unique requirement. In fact, teachers with a lower level of linguistic competence obtained lower results in the total score and the score in dimension 1, which is in line with the studies of Pérez-Cañado (2016) and Custodio-Espinar and García-Ramos (2020).

All in all, this study found that, as Banegas (2012; 2015), Mosquera (2017), Gisbert (2017), and Custodio-Espinar (2019a) pointed out, there is a lack of CLIL training in some student teachers. Therefore, it is still teachers who must voluntarily seek additional training (Custodio Espinar & García Ramos, 2020). However, such training cannot be guaranteed, and it could be said that this is one of the limitations noted in this study. Thus, in future studies, it might be interesting to research the correlation between the interest in CLIL teaching and interest in CLIL training in order to ascertain if those who are hesitant to access bilingual education are interested in being trained in the future.

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