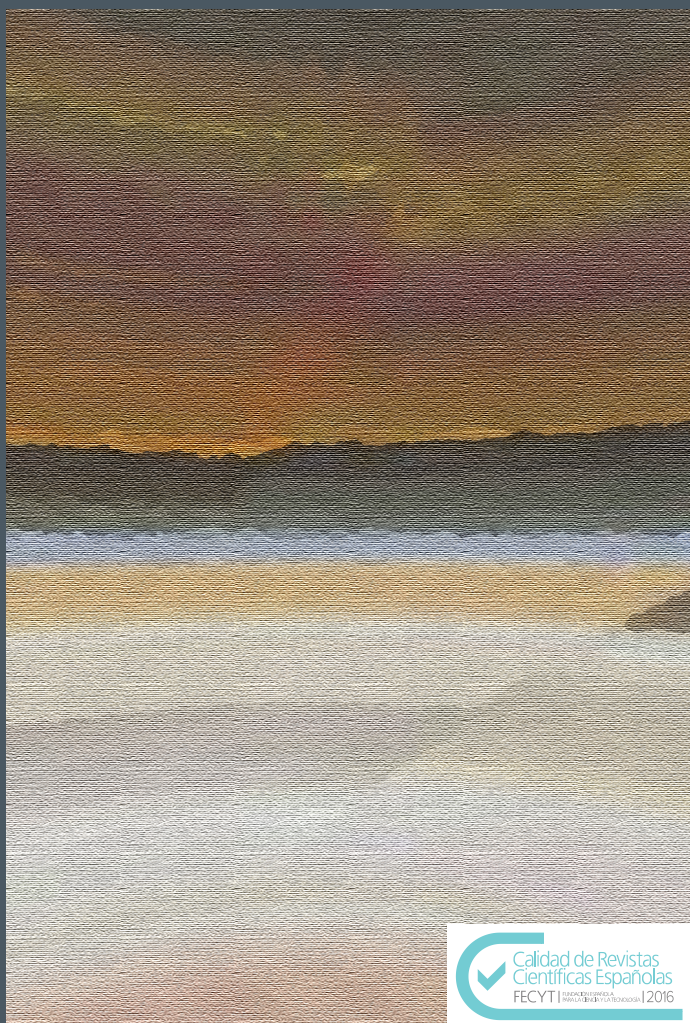


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Abstract

This paper aims to determine which variables exert the greatest influence on the quality of bilingual education and favour good results by considering the perceptions of participating CLIL teachers' and students'. For this purpose, a questionnaire with sixty two items was designed (Appendix 1) and administered to a sample of 409 students in their fourth year of compulsory secondary education (201 university students enrolled in the bilingual programme offered by the University of Granada School of Education and 73 CLIL and TEFL specialists (29 teachers and 44 professors). The results obtained show that secondary students give priority to the teachers' L2 level, linguistic exchanges with other schools, teacher commitment to the CLIL programme, living in English speaking countries and student interest and motivation. The university students pursuing the teaching degree at the University of Granada share the importance given to all these factors but, in addition, they highlight the importance given to the feedback received from the professor on their progress, oral interaction in class, motivating the students, being taught by native teachers and achieving a B2 level in English. Finally, teachers and professors coincide in the importance attributed to these variables, but they give more importance than students to the aspects related to their teaching functions: proper CLIL training, adequate human and teaching resources at their disposal and their preparation in content knowledge. The results obtained can be very helpful in order to prepare adequate evaluation

tools for bilingual education programmes in secondary education and at the university level.

Key words: quality factors in education, bilingual education, CLIL programmes, language teaching.

Resumen

Este artículo se propone determinar cuáles son las variables que ejercen mayor influencia en la calidad de la educación bilingüe y en sus buenos resultados en opinión del profesorado y alumnado implicado en estos programas. Para ello, se diseñó un cuestionario con sesenta y dos ítems, y se aplicó a una muestra de 409 alumnos de 4º de Enseñanza Secundaria Obligatoria (ESO), 201 alumnos de la titulación bilingüe de la Facultad de CC de la Educación de la Universidad de Granada y 73 profesores especialistas en la enseñanzas de las lenguas (29 profesores de Universidad y 44 profesores de Secundaria). Los resultados muestran que el alumnado de Secundaria le da prioridad al nivel de idioma del profesorado, a los intercambios lingüísticos con otros centros, al compromiso del profesor con el bilingüismo, a las estancias en los países donde se habla la segunda lengua (L2), y al interés y motivación de los estudiantes por el programa. El alumnado de la titulación de Magisterio coincide en la relevancia que le asigna a estos factores, pero además resalta la importancia de recibir “feedback” constante sobre su progreso, la interacción y comunicación oral en clase, ser motivado en el aula, el hecho de tener profesorado nativo y que el alumnado consiga un buen nivel de inglés (B2 o superior). Finalmente, el profesorado coincide en señalar la importancia de todas esas variables, pero valora más que el alumnado los aspectos que se relacionan con sus funciones docentes: su preparación didáctica en el aprendizaje integrado de contenidos y lenguas extranjeras (AICLE), disponer de los recursos materiales y humanos necesarios y la buena preparación en los contenidos curriculares. Los resultados obtenidos pueden ser de gran interés para la elaboración de cuestionarios que evalúen la calidad de estos programas en Educación Secundaria y en la Universidad.

Palabras clave: factores de calidad en educación, educación bilingüe, programas AICLE, enseñanza de las lenguas.

Introduction

Over the last decade, the progressive transformation of educational institutions into bilingual or multilingual establishments has possibly

been the greatest change in the educational system in Spain, and in the majority of European countries. This phenomenon has caused a substantial increase in these programmes at primary and secondary education level (Marsh, Mehisto, Wolff, Aliaga, Asikainen, Frigols-Martin, Hughes and Langé, 2009; Lasagabaster and Ruiz de Zarobe, 2010; Madrid and Hughes, 2011; Pérez Cañado, 2012; Martínez Agudo, 2012; Coyle, Hood, Marsh, 2012; Marsh, Pérez Cañado and Ráez Padilla, 2015; Ball, Kelly and Clegg, 2015) as well as at university education level (Ramos García, 2013; Madrid Manrique and Madrid, 2014; Madrid and Madrid Manrique, 2015).

Countries that have more of a tradition of, and better results in, bilingual education such as Canada (Dicks and Genesee, 2017) and Switzerland (Grin and Schwob, 2002) have been implementing immersion programmes for a long time. Depending on the specific circumstances, educational institutions apply partial immersion, with at least 50% of the subjects taught in the second language (L2), or all, involving 100% of the school curriculum. The programme run by the Spanish Ministry of Education, Science and Sport [Ministerio de Educación, Ciencia y Deporte (MECD)] in the state of California (Pérez Abad, 2011) and many other bilingual programmes (Uribe, 2011; Fernández Álvarez and García Rico, 2011; Wright, Boun and García, 2015; García, Lin and May, 2017) have also applied immersion programmes with satisfactory results. However, in Spain and the rest of Europe, a Content and Language Integrated Learning (CLIL) approach has been adopted, in which 30-50% of the curriculum is taught in the L2, generally English (Jáimez and López Morillas, 2011; Ortega Martín and Trujillo, 2018).

From a quantitative perspective, bilingual education is bursting onto the scene with great vigour and energy in Spain and in the rest of Europe, but we have yet to ensure that the quality of the programmes offered is satisfactory (Bruton, 2012 and 2013; Ortega Martín, 2015). Furthermore, among the quality factors that specialists in the topic have identified, we still have to work out which are priorities and which have the most impact for the teachers and students involved in such programmes. As we will see below, there are several studies regarding quality indicators in bilingual programmes in primary and secondary education (Baker, 1993; Hughes, 2007; Lorenzo, Casal, Moore, and Afonso, 2009; Ortega Martín, Hughes and Madrid, 2018) but we found very little research into university education.

Background and theoretical foundations

For many years, governments have set out to improve the educational offering of their respective countries and they have been approving successive laws in order to regulate such. Among these legal initiatives, it is worth highlighting the concern for the quality of education. Quality has been given such a level of importance that, in Spain, in recent years, it has become the key term in educational laws. The Spanish Organic Law on the Quality of Education [LOCE - Ley Orgánica de Calidad de la Educación] (LOCE, 2002) was established in 2002, and several years later quality continues to be a key term in the new law on education [LOMCE - Ley Orgánica para la Mejora de la Calidad Educativa] (LOMCE, 2013).

The concept of quality has been understood in several forms. Juran and Gryna (1993) define it generically as a group of characteristics that fulfil individuals' needs and make the product being offered satisfactory. In the educational field, quality education must focus on the student as a whole: on their social, emotional and personal dimension, as well as on the cognitive development of each subject regardless of their gender, race, ethnicity, socioeconomic status or geographical location.

As we will see further on, quality education is built on several basic pillars: well qualified teachers, a relevant curriculum that fulfils the needs and interests of the students, the appropriate use of resources, materials, methods and techniques that develop their cognitive, procedural and attitudinal competencies, in well managed institutions where there is a commitment to education and to achieving good academic results (Seymour, 1992; UNICEF, 2000; UNESCO, 2015). However, as stated by UNESCO (2005), there is a certain degree of confusion with regard to the concept of quality, and it is rarely interpreted as a unitary concept.

With regard to the educational institutions, Sammons, Hillman, and Mortimore (1995) propose several quality criteria that are summarised into eleven basic principles related to the curriculum, the students' performance and the teachers that provide the lessons.

Quality factors in language teaching and in bilingual education

Although, generally speaking, the topic of quality with regard to education has received a lot of attention, this has not been the case

in relation to languages and bilingual education specifically. One of the most interesting studies in this field is that by Sanderson (1982), which identifies several actions that characterise good language teachers. Ofsted (2001) also offers us quality indicators that have served as a basis for British inspectors to judge the efficacy of modern language teachers and it summarises them into nine points related to the knowledge and efficacy of the teachers in their planning tasks, the teaching provided and management of the class.

Hughes (2007) investigated the most important quality indicators in second language teaching at secondary education level. His results show that the most relevant aspects focus on the context in which the teaching takes place, the teachers' training, the organisation of the department, the quality learning and teaching processes, and the application of appropriate evaluation techniques.

The quality indicators that have been identified for teaching languages constitute a good starting point to explore what occurs in specific bilingual education scenarios. Several authors have studied the factors that influence the success of these programmes and they reached similar conclusions (Baker, 1993, Brisk, 2000; Lindholm-Leary, 2005; Pérez Cañado, 2016; Madrid and Julius, 2017; Ortega Martín, Hughes and Madrid, 2018). Baker (1993: 243), for example, highlights the parents' interest, their commitment to their children's education, cooperation with teachers, the teachers' enthusiasm and commitment to bilingualism, the level of material support, linguistic policy and the operation of the school as important factors in primary education.

Studies on the evaluation of the effectiveness of bilingual teaching have been completed from several perspectives, based on many groups of variables linked to the student, their family, community, school, types of programme, the coordination and organisation of the programmes, training of the teachers, teaching and learning processes, exchanges and periods abroad, materials and resources, assessment techniques and the results the students obtain. The success of bilingual programmes depends on the integration and harmonisation of several factors that interact appropriately (Pérez Cañado, 2016; Ortega Martín, Hughes and Madrid, 2018).

In our case, we propose a practical and descriptive investigation that analyses the importance of the variables proposed in the questionnaire included in Appendix 1, referring to the quality of bilingual programmes,

in accordance with the perception of teachers and students. The quality indicators we selected in this study were taken from Hughes (2007), Madrid and Hughes (2011), Lorenzo, Trujillo and Vez (2011), Madrid Manrique and Madrid (2014) and Pérez Cañado (2016). We aim to answer the following research questions:

1. Which quality indicators must be taken into account to assess the quality and the good results of bilingual programmes?
2. Which quality factors affect the quality and good results of the bilingual programmes in secondary education the most, according to students in the 4th year of the Spanish compulsory secondary education system [CSE]?
3. Which quality indicators affect the quality of bilingual programmes in university education the most (bilingual teacher education degree), according to the students affected?
4. Which variables affect the proper operation of bilingual programmes the most, according to the teachers that provide this instruction?
5. Which variables affect the quality of bilingual programmes the most, according to the teachers and students combined?
6. Are there substantial differences between the evaluations of secondary and university students and teachers in bilingual programmes? Which variables can these differences be found in?

Method

The study presented fits within the students' and the teachers' thinking paradigm (Clark and Yinger, 1979; Shavelson and Stern, 1983; Clark and Peterson, 1986). As stated by Wittrock (1990), the teachers' and students' thought processes substantially affect their behaviour and even define, guide and orientate it. Their beliefs are also components of their knowledge and justify their decisions and actions in class (Serrano Sánchez, 2010). It is important to find out and detail their opinions and evaluations on what occurs in educational institutions to raise awareness of them in order that they can be used by theorists, researchers, teacher trainers and teachers themselves, as they sometimes operate unconsciously and condition their actions.

Participants

We used a sample of 683 subjects: 409 secondary education students from eight different Spanish autonomous communities, 201 students following the bilingual teacher education degree at the University of Granada, and 73 teachers of English and of non-linguistic areas (NLA). Non-probability and casual sampling was carried out, and the selection criteria included being an officially matriculated student and a currently employed teacher, within the field of foreign language teaching and of CLIL at different levels of education. Table I shows detailed information about the participants.

TABLE I. Characteristics of the study sample.

	STUDENTS: 610				TEACHERS: 73					
	CSE (4th Grade) (409)		Teacher education (201)		Sex		Teaching activity			
	H	F	M	F	H	F	CSE	Univ.	NLA (CSE)	NLA (Univ.)
Andalucía	28	37	50	151	13	19	7	6	5	14
Canary I.	21	35	--	--	2	4	3	1	2	--
Castilla-Leon	28	27	--	--	2	2	2	1	1	--
Extremadura	12	22	--	--	3	4	3	2	2	--
Galicia	22	30	--	--	2	5	3	0	4	--
Madrid	15	15	--	--	2	4	3	2	1	--
Murcia	35	39	--	--	3	3	3	1	2	--
Navarra	25	18	--	--	2	3	2	2	1	--
Total:	186	223	50	151	29	44	26	15	18	14

When the questionnaire in Appendix 1 was used, the 409 secondary students were in their 4th year of CSE and the 210 bilingual teacher education degree students were in their 4th year in the Faculty of Education at the University of Granada. The secondary school students were completing the bilingual programme within their respective Spanish autonomous communities in accordance with the official guidelines (Jáimez and López Morillas, 2011; Ortega Martín and Trujillo, 2018). Although the teacher education degree students were completing CLIL programmes, in actual fact the professors who were teaching the subjects in English placed more emphasis on the matters related to their subject

than on linguistic aspects, except in the 4 optional subjects in the English speciality (24 credits), in which more emphasis was placed on linguistic aspects (Madrid and Julius, 2017).

This degree aims to prepare future teachers for their possible incorporation into Spanish bilingual programmes and to contribute towards their mobility across other countries, and provide them with the skills necessary to teach in Europe, where plurilingualism, with different levels of competence, is increasingly more advanced. This initiative also gives continuity to the bilingual studies of many students who reach the University from bilingual primary and secondary schools. The degree offers half of the subjects in English, precisely 116 credits of 240 (see Madrid Manrique and Madrid, 2014; Madrid and Madrid Manrique, 2015).

Material and tools

The data from this study was obtained by using the questionnaire in Appendix 1 (Madrid and Julius, 2017). The data collection tool groups together 62 variables into three dimensions: a) context variables (v1-v4), which include factors related to the type of educational institution and the social and family environment of the students, b) variables related to the personal characteristics of the students (v5-v8) and teachers (v9-v15), and c) variables related to teaching and learning processes (v16-v62): planning, curricular programming, coordination of the CLIL programme; development of communication skills and linguistic components; attitudes, values, and motivation strategies; teaching activities, methods and techniques; grouping of students and handling of the class; treatment of diversity; use of materials and resources; extra-curricular activities that promote bilingualism; assessment techniques and results obtained. It is a closed questionnaire in which the respondents expressed their opinions and perceptions using a Likert type scale (from 1 to 5 points).

To validate the questionnaire and guarantee its feasibility, the first draft was supervised by a group of 9 experts: 3 specialists in secondary education CLIL, 3 English teachers at university level, and 3 specialists in CLIL from the teaching degree. Each expert evaluated the relevance, clarity, coherence and suitability of the variables in the first draft using a Likert scale from 1 to 5 points. The drafting of some variables was then improved based on comments from experts and factors that obtained an overall average of less than 3 points were eliminated. The experts

were selected on the basis of: 1) experience in judging and decision-making based on evidence or expertise, 2) reputation in the community, 3) availability and motivation to participate, and 4) impartiality and inherent strengths such as self-confidence and adaptability.

The resulting questionnaire underwent a second trial phase with a group from the teaching degree and another group in the 4th year of CSE in Granada. In this period, we discovered that secondary school students needed some clarifications on the technical terms for some phrases and, consequently, when we used the questionnaire we had to clarify the meaning of L1 and L2, adaptation of input, feedback, contextual support, rapport and portfolio. In addition to the aforementioned clarifications, the students were told to ask any questions they had about the meaning of the questionnaire's variables in order to clarify them out loud.

Procedures

The ethical procedures followed were those proposed by the APA (American Psychological Association) in its code of ethics. The individuals passing on the questionnaire were instructed so that the same system was used for each information-gathering process. The aim of this was to prevent negative effects when responding to said questionnaires.

We completed the data analysis and the statistical calculations in this study using the statistical programme SPSS 20. We calculated the basic descriptive statistics (average and standard deviation); statistical goodness tests were completed, such as a one-sample k-S test and binomial function and chi-square, in order to see the distribution of the variables studied. We subsequently applied the Mann-Whitney U test to check whether the differences found between the group of students and teachers were significant ($p \leq 0,05$). In addition, we calculated the degree of the effect to quantify the relevance of the effect obtained using Cohen's d and to see if the differences were relevant.

Results and discussion

The reliability of the scores obtained with the questionnaire from Appendix 1 is quite high, as can be seen in table II:

TABLE II. Reliability of the questionnaire used

	N	Cronbach alpha	No. of items
4th grade students (CSE)	409	,93	62
Teacher education students (bilingual degree)	201	,91	
English and NLA teachers questionnaire	73	,93	

The Cronbach's alpha values obtained demonstrate that there is a high internal consistency and psychometric soundness in the tool used.

Students' scores

As can be seen in Appendix 1, secondary and university students coincide in giving high points (4 points and above) to the teachers' language level, language exchanges with other educational institutions, the teachers' commitment to the teaching programme, periods in countries where the L2 is spoken, the students' motivation and personal interest in the programme, the teachers' educational preparation in CLIL, the motivational strategies the teachers use in class, whether the teacher speaks clearly in class, the students' individual work, using different teaching methods, interactive and oral communication activities, insisting on the correct pronunciation of the L2 and the students reaching a high level of English.

However, both the secondary and university students assign less importance to assessment using tests ($M= 3.33$ and $DT=1.11$; $M=3.29$ and $DT=.95$ respectively) and to the use of the portfolio ($M=3.16$ and $DT=1.11$; $M=3.26$ and $DT=1.06$).

Although there are similarities between secondary and university students as regards highlighting the importance of the aforementioned variables, university students assign higher points to almost all of them. There are consequently significant differences ($p \leq 0.05$) in fifty variables, in favour of university students in each case. We used the Mann-Whitney U procedure given that the distribution of the points for the variables is not "normal" and as such non-parametric tests were used. The twelve variables where the differences between the students are not as pronounced and are therefore not significant ($p \geq 0.05$) are v12, v21, v25, v26, v27, v28, v31, v43, v50, v59, v60 and v61.

Teachers' perceptions

Overall, teachers substantially highlighted the importance of sixteen factors for the proper operation of the CLIL programmes, and assigned average points of 4.38 or above. These variables, by order of importance, refer to: the teacher's commitment to the programme, the teacher's command of the language used for instruction, the student's motivation and interest in the programme, educational preparation in CLIL, having the necessary human and material resources, preparation in the subject and in the non-linguistic content, working on the basis of tasks related to real life, language exchanges with other institutions, oral communication and interactive activities, cooperative work, constant feedback to check the students' level, applying improvement actions every year, support from the Administration, adaptation of the input and the treatment of diversity, a good linguistic project and integrated educational units, as well as the variety of activities and learning tasks.

However, and despite giving it average scores, teachers gave the least points to the use of the L1 in class ($M=3.33$ and $DT=1.04$) and assessing by means of tests ($M=3.24$ and $DT=1.10$).

Combined evaluations of the students and teachers

Appendix 1 shows that both teachers and students coincide in giving high points to the following variables and they rank these among the factors with the greatest impact on the quality of bilingual programmes:

TABLE III. Variables that have the greatest effect on the quality of CLIL programmes by order of importance.

Variables	Students and teachers (N= 683)	
	M	DT
Teacher/professor linguistic preparation and L2 level	4,47	,79
Teacher/professor motivation and personal commitment to the program.	4,42	,84
Students' personal motivation and interest in the program	4,40	,86
Language exchanges with native speakers.	4,39	,95
Living in in English-Speaking Countries.	4,30	1,00
Motivating students in class.	4,28	,92
Emphasis on interactive and oral communication activities.	4,27	,85
Speaking clearly to students in class at an intelligible volume.	4,27	,88
Didactic preparation in CLIL.	4,26	,86
Students' individual work.	4,26	,89
Emphasis on pronunciation and oral expression in class.	4,23	,90
Variety of exercises and activities.	4,22	,94
The students achieving a B2 level or higher in English.	4,21	1,01
Employing a variety of approaches and teaching methods.	4,19	,89
Cooperative and group work.	4,18	,91
Working with tasks and projects related to everyday life.	4,18	,96
Consistent feedback from students to ensure content comprehension.	4,16	,93
Availability of academic materials and human resources.	4,14	,86
Professional development and continuing education.	4,13	,90
Educational background in non-linguistic subject contents to be taught.	4,07	,85
Implementation of integrated content units and language projects planned by teachers/professors in a cooperative way.	4,07	,84
Adaptation of input and teaching programs for comprehension in class according to the students' diversity.	4,06	,89
Variety of audiovisual material and "realia".	4,04	,92
Appropriate treatment of mistakes and errors made in class.	4,04	,88
Personal qualities, personality traits and teaching behavior in class.	4,03	,93
Carrying out innovation teaching projects and incorporating measures of improvement in the subjects' lesson plan to improve results.	4,02	,90
Involvement of native teachers in the program.	4,01	1,06
Working on projects in an autonomous way.	4,00	,99

However, and despite continuing to assign average scores to it, all informants gave the least importance to the ownership of the educational institution (public, private, etc.) and the social environment of such (M=3.31 and DT=1.13), periodically assessing results using tests (M=3.312 and DT=1.07) and use of the portfolio as an instrument for teaching, learning and assessment (M=3.23 and DT=1.09).

It caught our attention that the educational administration gives a lot of importance to the use of the portfolio in classes and persistently recommends its use in class (ELP, 2000; Madrid, 2014) whereas students and teachers give the use of such modest importance. It is also worth pointing out that the importance traditionally given to exams so that students study, revise and learn the programme content is called into question according to our results, and raises the need to search for other assessment techniques that satisfy the students and teachers to a greater extent.

We found substantial differences between secondary school teachers and students, by applying the Mann-Whitney U test, in 42 variables, in all cases in favour of teachers who gave higher points. However, and despite teachers giving higher scores, the differences are not as substantial in variables 6, 10, 15, 21, 22, 25, 26, 31, 33, 38, 39, 41, 49, 50, 53, 54, 56, 60, 61 and 62.

The differences between the professors and students in their 4th year of the teacher education degree are not as pronounced, which is logical if you consider that these two groups have reached a certain level of maturity with a more equal level of linguistic, pedagogical and educational training. We only found substantial differences in the following variables:

TABLE IV. Substantial differences between the professors and university students of the teaching degree.

	Z	Sig.	Co- hen's d	Effect size (r)	Differences In favour of:
Family support and involvement in the bilingual program(v3)	-2,930	,003	-0,45	-0,22	professors
Students' cognitive styles and multiple intelligences(v6)	-3,295	,001	0,50	0,24	univ. stud.
Compromiso del profesorado con el programa(v9)	-2,431	,015	-0,39	-0,19	professors
Teachers'/professors' personal qualities and personality traits(v10)	-3,693	,000	0,50	0,24	univ. stud.
Didactic training in CLIL(v12)	-2,655	,008	-0,35	-0,17	professors
Involvement of native teachers in the program(v15)	-3,761	,000	0,51	0,25	univ. stud..
Emphasis on linguistic components: grammar, vocabulary, etc.(v27)	-2,716	,007	0,36	0,18	univ. stud..
Emphasis on and attention paid to subject contests(v28)	-1,983	,047	-0,27	-0,13	univ. stud.
Contextualization of learning activities to facilitate comprehension of course content(v30)	-2,535	,011	-0,38	-0,18	professors
Motivating students in class (v33)	-2,479	,013	0,32	0,15	univ. stud.
Speaking clearly to students in class at an intelligible volume(v39)	-2,976	,003	0,41	0,20	univ. stud.
Use of L1 to clarify concepts and teaching points when unclear in L2(v43)	-3,674	,000	0,52	0,25	univ. stud.
Incorporating measures of improvement in the subjects' lesson plan to improve results(v46)	-1,979	,048	-0,24	0,12	professors
Availability of academic materials and human resources(v47)	-1,956	,050	-0,10	0,05	professors
Effective tutorial system for bilingual subjects(v48)	-2,750	,006	0,36	0,18	univ. stud.

Table IV shows that the teacher education professors place much more importance than their students on family support, the professors' commitment to the programme, their educational preparation in CLIL, the contextualisation of the lessons and the application of improvement activities. However, the students give more importance than professors to treating their diversity of cognitive styles and multiple intelligences, the professor's personal characteristics, having native professors in the programme, the subjects' linguistic components and content, encouraging

and motivating them, the professor speaking clearly in class, use of the L1 to clarify matters and an effective tutoring system. The Cohen's d values reveal that the extent of the size effect is low in all cases ($d=0.2$) or medium ($d=0.5$) but never high ($d=0.8$). Consequently, the differences between university students and professors for these fourteen variables, although significant, are not substantially pronounced.

Conclusions

In this study, we set out to determine the most important quality indicators for obtaining good results in CLIL programmes, and to examine the evaluations made by a representative sample of students in the 4th year of CSO, teacher education degree students and teachers specialising in language teaching with regard to sixty-two variables. The aim was to identify the most important variables for the quality of said programmes. The results enable us to conclude the following:

- Based on several authors (Madrid and Hughes, 2011; Lorenzo, Trujillo and Vez, 2011; Madrid and Madrid Manrique, 2015; Rodriguez-Sabiote, Madrid, Ortega Martín and Hughes, 2018) and on the criteria of nine experts, we selected the quality indicators listed in Appendix 1.
- The quantification of the perceptions of the informants is shown in Appendix 1. However, it is worth highlighting that both secondary school and university students give more importance to the variables relating to the teachers' command of the L2, language exchanges, the teachers' commitment to the bilingual programme, periods in the countries where the L2 is spoken and the students' motivation and personal interest in the programme. University students give higher scores to almost all of the variables and highlight, in addition to the aforementioned aspects, the importance of receiving constant feedback regarding their progress, the emphasis on oral communication, being motivated in class, the teacher speaking clearly, language exchanges, emphasis on pronunciation of the L2 and work involving real-life tasks. We found many substantial differences between students in the 4th year of CSE and students in the 4th year of a teacher education degree, in favour of the latter who

assigned higher points to almost all of the variables. A substantial difference between secondary and university students can be seen in the preference that university students have for native teachers ($M=4.26$ and $DT=.94$) compared to secondary school students ($M=3.94$ and $DT= 1.09$) who do not give this as much importance. The low importance that students give to assessments using tests and to the use of the portfolio of languages as a learning and evaluation tool is also noteworthy.

- Teachers and students, considered overall, both give high scores to the aforementioned variables. However, in addition, the teachers insist on the importance of the actions that affect them more directly and that depend on them more. For example, educational preparation in CLIL; having the necessary material and human resources, training in non-linguistic content, working with real-life tasks, cooperative work and applying improvement actions. Students place less importance on these six variables.

Lastly, we believe that the questionnaire in Appendix 1 can also be used as a self-assessment tool by the bilingual educational institutions in order to find out the extent to which they fulfil the most important quality criteria that we have presented in table IV and in the final questionnaire.

Limitations

This questionnaire can be a good reference point for finding out the opinion of teachers specialising in teaching English and in CLIL, of students in the 4th year of CSE and of a bilingual teacher education degree regarding the importance of the factors that have the most impact on the quality of bilingual programmes, but the sample used is not probabilistic and we were not able to choose at random. The results therefore have to be read with caution.

It would also be interesting to extend the number of informants and take into account the opinion of students at other levels of education: primary, high school and other university degrees to find out about different perspectives and study the differences.

In the same vein, it would be useful to include more teachers from other Spanish autonomous communities and study the differences

between the perspectives of English teachers, of NLA teachers, and those of the coordinators and head-teachers of the educational institutions.

These limitations can be overcome with future studies that improve the research design and continue to contribute to better knowledge of the quality of bilingual education.

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Appendix I

FACTORS THAT EXERT THE GREATEST INFLUENCE ON THE QUALITY OF BILINGUAL PROGRAMMES AND THEIR POSITIVE

(1= not important, 2= little importance, 3= average importance, 4= quite important, 5 = very important; M = mean; ST= standard deviation)

Variables	Students and teachers / professors (N= 683)		4 th grade CSE students (N =409)		University students (N= 201)		English and NLA teachers / professors (N= 73)	
	M	SD	M	SD	M	SD	M	SD
1. Type of institution (public, private, etc.) and the social setting.	3,31	1,13	3,16	1,15	3,53	1,04	3,59	1,03
2. Family environment of the student: social and cultural.	3,96	,97	3,81	,97	4,21	,94	4,14	,87
3. Family support and involvement in the bilingual program.	3,63	1,10	3,46	1,11	3,79	1,08	4,23	,83
4. Support from the responsible institution and administration for the bilingual program.	3,93	,98	3,70	,98	4,24	,86	4,39	,83
5. Students' general capacity, intelligence and abilities.	3,74	,89	3,64	,92	3,89	,83	3,89	,80
6. Students' cognitive styles and multiple intelligences.	3,87	,90	3,81	,93	4,08	,79	3,64	,95
7. Students' motivation and interest in the program.	4,40	,86	4,23	,99	4,69	,52	4,58	,60
8. Students' personality traits: extroversion, sociability, risk-taking, perseverance, etc.	3,74	1,00	3,54	1,05	4,06	,81	3,98	,95
9. Teachers' personal commitment to the program and motivation.	4,42	,84	4,28	,93	4,57	,65	4,79	,44
10. Teachers' personal qualities and personality traits.	4,03	,93	3,96	,98	4,24	,81	3,82	,85
11. Teachers' linguistic preparation and second language level.	4,47	,79	4,35	,87	4,65	,63	4,64	,62
12. Teachers' didactic training in CLIL.	4,26	,86	4,20	,91	4,28	,78	4,55	,72
13. Teachers' preparation in non-linguistic subject contents to be taught.	4,07	,85	3,90	,91	4,30	,70	4,46	,63

14. Teachers' professional development and continuing education (.....)	4,13	,90	3,97	,95	4,40	,78	4,35	,69
15. Involvement of native teachers/ professors in the program.	4,01	1,06	3,94	1,09	4,26	,94	3,73	1,10
16. Preparation and implementation of adequate language projects planned in cooperation by teachers/ professors.	4,07	,84	3,90	,86	4,30	,75	4,38	,69
17. Integrated academic planning of linguistic and non-linguistic content.	3,81	,86	3,60	,88	4,10	,70	4,28	,74
18. Coordinating efforts from programme coordinator and headteacher.	3,97	,91	3,80	,91	4,21	,87	4,33	,73
19. Balanced integration of subject contents and linguistic aspects of L2 in class.	3,92	,89	3,75	,91	4,17	,80	4,24	,78
20. Adaptation of input for comprehension in class according to the students' diversity.	4,06	,89	3,92	,93	4,23	,79	4,39	,69
21. Employing a variety of approaches and teaching methods.	4,19	,89	4,13	,96	4,31	,77	4,26	,77
22. Variety of exercises, game like activities, and learning tasks.	4,22	,94	4,07	1,03	4,46	,78	4,38	,60
23. Emphasis on interactive and oral communication activities.	4,27	,85	4,11	,92	4,55	,66	4,44	,68
24. Emphasis on reading activities and the types of texts to be read.	3,87	,92	3,76	,96	4,02	,84	4,11	,78
25. Emphasis on written expression and the types of texts to be written.	3,87	,87	3,80	,91	4,00	,79	3,95	,81
26. Attention to cultural and intercultural aspects.	3,67	,98	3,60	1,02	3,82	,92	3,71	,90
27. Emphasis on linguistic components: grammar, vocabulary, spelling, etc.	3,90	,92	3,92	,94	3,96	,89	3,63	,90
28. Emphasis on and attention paid to subject content.	3,89	,87	3,80	,93	3,97	,74	4,18	,76
29. Attention dedicated to practical activities of both linguistic and non-linguistic content.	3,98	,92	3,84	,97	4,18	,82	4,32	,72
30. Contextualization of learning activities to facilitate comprehension of course content.	3,87	,90	3,73	,92	4,00	,83	4,30	,74

31. Systematic repetition of instructions and reiterating directions in class activities to facilitate learning.	3,49	1,02	3,48	1,04	3,48	,97	3,62	1,09
32. Applying the recommendations of learning theories to facilitate the incorporation of teaching contents in the students' cognitive network.	3,72	,87	3,58	,89	3,88	,82	4,06	,70
33. Motivating students in class by highlighting successes and downplaying mistakes.	4,28	,92	4,16	1,03	4,54	,65	4,32	,72
34. Variety of audiovisual material and "realia".	4,04	,92	3,90	1,00	4,27	,78	4,26	,64
35. Use of information and communication technology (ICTs) to facilitate learning activities.	3,91	,96	3,77	1,02	4,09	,83	4,21	,79
36. Providing feedback to students to favour content comprehension and detect confusion.	4,16	,93	3,91	1,02	4,57	,61	4,42	,65
37. Use of outlines, graphics, charts, concept maps, and similar techniques to synthesize information, clarify, and make connections.	3,93	1,00	3,81	1,07	4,07	,89	4,23	,74
38. To care for pronunciation and oral expression in class.	4,23	,90	4,10	,97	4,48	,70	4,27	,85
39. Speaking clearly to students in class at an intelligible volume.	4,27	,88	4,15	,95	4,53	,67	4,22	,81
40. Use of gestures and non-verbal communication to facilitate content comprehension.	3,92	1,03	3,72	1,12	4,26	,71	4,09	,97
41. Appropriate treatment of errors and mistakes made in class.	4,04	,88	3,93	,93	4,25	,69	4,12	,93
42. Rapport between teachers/ professors and students	3,94	1,02	3,77	1,10	4,20	,83	4,23	,78
43. Use of L1 to clarify concepts and teaching points when unclear in L2.	3,75	1,02	3,77	1,03	3,86	,97	3,33	1,04
44. Use of L2 by teachers/professors in at least 50% of the subjects.	3,79	1,11	3,54	1,15	4,15	,89	4,27	1,01
45. Use of L2 by students for communication in class and outside of class.	3,50	1,16	3,19	1,17	3,93	,96	4,11	1,02
46. Incorporation of measures of improvement in the subjects' lesson plan to improve results.	4,02	,90	3,85	,97	4,25	,68	4,42	,70

47. Availability of academic materials and human resources.	4,14	,86	3,99	,94	4,34	,65	4,50	,66
48. Effective tutorial system for bilingual subjects.	3,77	1,06	3,55	1,12	4,19	,84	3,88	,85
49. Giving the same status to L1 and L2 to maintain equal linguistic prestige and social recognition.	3,75	1,11	3,61	1,14	4,01	,98	3,77	1,16
50. Periodic evaluation and control by tests.	3,31	1,07	3,33	1,11	3,29	,95	3,24	1,10
51. Use of a portfolio as a teaching, learning and evaluation tool.	3,23	1,09	3,16	1,11	3,26	1,06	3,56	,99
52. Application of ongoing evaluation system.	3,86	1,14	3,62	1,24	4,27	,81	4,11	,93
53. Application of student self-evaluation and its consideration in student marks.	3,74	1,07	3,71	1,13	3,86	,92	3,58	1,09
54. Students' individual work.	4,26	,89	4,14	1,00	4,49	,64	4,32	,72
55. Student's and teachers' cooperative and group work.	4,18	,91	4,07	,96	4,31	,83	4,43	,67
56. Homework.	3,58	1,14	3,49	1,23	3,74	1,00	3,60	,92
57. Encouraging project work and autonomous work.	4,00	,99	3,88	1,05	4,14	,87	4,23	,80
58. Working with tasks and projects related to everyday life.	4,18	,96	3,99	1,02	4,48	,78	4,45	,72
59. Participation in suitable extracurricular activities.	3,96	1,01	3,99	1,08	3,95	,87	3,79	,92
60. Living in English-speaking countries.	4,30	1,00	4,26	1,06	4,35	,92	4,34	,88
61. Language exchanges with native speakers.	4,39	,95	4,31	1,04	4,52	,78	4,45	,78
62. Achieving a B2 level or higher in English.	4,21	1,01	4,07	1,09	4,44	,80	4,33	,88