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# Assessing students' perceptions regarding English Medium Instruction in Higher Education

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**Abstract.** This paper investigates the satisfaction degree of students engaged in English-taught undergraduate programmes in the University of Oviedo. In particular, this research is intended to assess the perceptions of students on the implementation of bilingual degrees and the impact these programmes might have on their language competence in English, the promotion of their international dimension, and the improvement in their career prospects. The research sample is composed of 255 undergraduate students engaged in bilingual streams. The paper relies on quantitative and descriptive methodology and the data were analysed using SPSS. Although the overall satisfaction with Englishtaught programmes is rather high, the conclusions of the study allow us to identify lines of optimization and propose improvements for the implementation of bilingual programmes in similar contexts.

Keywords: EMI; CLIL; bilingual programmes; Higher Education:student satisfaction

# [es] Evaluación de las percepciones del alumnado sobre la utilización del inglés como lengua de instrucción en la universidad

Resumen. Este artículo analiza el nivel de satisfacción de los estudiantes de grados impartidos en inglés en una universidad española. En concreto, la investigación se centra en el estudio de las percepciones de los estudiantes sobre la implementación de los grados bilingües y el impacto que estos programas puedan tener en tres ámbitos: la competencia de los alumnos en inglés, la promoción de su dimensión internacional, y la mejora de sus perspectivas profesionales. La muestra se compone de 255 estudiantes matriculados en grados bilingües. En el trabajo se utiliza una metodología cuantitativa y descriptiva y los datos fueron analizados con SPSS. Aunque el grado de satisfacción general de los alumnos es bastante alto, las conclusiones del estudio permiten identificar propuestas de mejora para la implementación de programas bilingües en contextos similares.

Palabras clave: Inglés como medio de instrucción; AICLE; programas bilingües; educación superior; satisfacción de los estudiantes

# [fr] Évaluation des perceptions des étudiants sur l'utilisation de l'anglais comme langue d'instruction à l'université

**Résumé.** Cet article analyse le niveau de satisfaction des étudiants des grades dispensés en anglais à une université espagnole. La recherche est centrée précisément sur l'étude des perceptions des étudiants

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en ce qui concerne l'implémentation des « grades bilingues » et l'impact éventuel de ces programmes dans trois domaines: la compétence des étudiants en anglais, la promotion de leur dimension internationale et l'amélioration de leurs perspectives professionnelles. L'échantillon est composé de 255 étudiants inscrits à un des programmes bilingues. La méthodologie utilisée est quantitative et descriptive et les données ont été analysées avec SPSS. Bien que le degré de satisfaction général des étudiants est assez élevé, les conclusions de cette étude permettent d'identifier des propositions d'amélioration en vue de l'implémentation des programmes bilingues dans des contextes similaires.

**Mots clé:** Anglais comme véhicule d'instruction; AICLE, programmes bilingues; éducation supérieure; satisfaction des étudiants

**Contents**: 1. Introduction. 2. Literature review: teaching through English at university level. 3. Methodology. 3.1. Context, sample and research scope. 3.2. Research tool and data collection. 3.3. Distribution of the sample. 4. Main results. 4.1. General satisfaction with the bilingual programme. 4.2. Courses and materials. 4.3. Internationalization and language learning. 5. Discussion of results. 6. Conclusions. 7. References. 8. Appendix: student satisfaction survey.

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#### 1. Introduction

The number of so-called bilingual programmes offered by institutions of Higher Education in Spain has grown exponentially in the last years (Jover, Fleta and González, 2016; Ramos, 2013). With the adaptation to the European Higher Education Area (EHEA), most Spanish universities have developed bilingual streams in which students have to complete a minimum number of subjects (or ECTS credits) taught through the medium of English. This situation is in line with the current panorama in other European countries in which the number of institutions offering English-taught programmes has rocketed in the last decade (Costa and Coleman, 2012; Dearden, 2015).

By engaging in bilingual education, Spanish universities aim to increase their international visibility, attract foreign students and lecturers, and improve their position in international rankings (Lasagabaster, 2012; MECD, 2014). Furthermore, using English as the Medium of Instruction (EMI) can contribute to promoting international mobility and improve the language competence of both lecturers and students (Cenoz, 2009, 14).

The implementation of bilingual programmes in Spanish universities has already been approached by a number of scholars who have investigated organizational issues (Ramos and Villoria, 2012), students' academic performance (Toledo, Rubio and Hermosín, 2011), the heterogeneity in the implementation of bilingual education (Halbach, Lázaro and Pérez, 2013; Halbach and Lázaro, 2015), teacher satisfaction (Doiz, Lasagabaster and Sierra, 2011; Fernández-Costales and González-Riaño, 2015), and the promotion of multilingualism in Higher Education (Cenoz, 2010; Lasagabaster, 2012). However, few researchers have investigated the satisfaction degree of students engaged in so-called 'bilingual degrees' at Spanish universities and their perception on the possible impact English-taught Programmes might

have on their future careers. This paper is intended to fill this gap by investigating the satisfaction level of participants engaged in English-taught undergraduate programmes at a Spanish university, the University of Oviedo, and provide new insights in the field by exploring students' perceptions on the influence EMI might have on their internationalization and their professional prospects. The research objectives are as follows: 1) analyse the overall satisfaction level of students engaged in the bilingual degrees offered at the university; 2) assess the self-perception of students as regards the impact bilingual education may have on: A) their language competence in English, B) the promotion of their international dimension, and C) the prospects regarding their professional career.

We consider that this paper can contribute to the opening up of new research lines related to the use of EMI at the tertiary level. As it has been pointed out by Costa and Coleman (2012), the main focus on the field has been on the implementation of English-taught programmes and the possible benefit they might have as regards the internationalization of institutions of Higher Education; however, studies approaching the perception of the participants of bilingual programmes (students and lecturers) are still needed. The topic is very relevant in Spain, because the introduction of EMI is far more recent and probably more needed than in other countries with a longer tradition yet stronger job market.

## 2. Literature review: teaching through English at university level

The field of Content and Language Integrated Learning (CLIL) has already been investigated by many authors, especially as regards Primary and Secondary Education (Coyle, Hood and Marsh, 2010; Dafouz and Guerrini, 2009; Dalton-Puffer, 2011; Lasagabaster and Zarobe, 2010; Lorenzo, Casal and Moore, 2010; Lorenzo, Trujillo and Vez, 2011; Madrid and Hughes, 2011; Zarobe and Catalán, 2009). Therefore, here we focus on the most relevant works in the field of EMI in Spanish and European universities; the possible divide between CLIL and EMI will not be addressed directly and both terms will be used to refer to the type of programmes offered by Spanish institutions (i.e., programmes taught in English): analysing whether or not English-taught programmes in Spain should be regarded as examples of CLIL clearly deserves scholarly attention but it falls out of the scope of this paper.

The internationalization of Higher Education in countries where English is not the national language seems to be a synonym for the use of EMI (Coleman, 2006; Costa and Coleman, 2012; Jensen and Thøgersen, 2011; Lasagabaster, 2012). English has also become the international lingua franca and the main communication tool within Higher Education (Dafouz, 2015; Seidlhofer, 2004; Van Leeuwen and Wilkinson, 2003; Wilkinson, 2004).

The northern European countries were the first to introduce bilingual programmes at university with highly positive results (Cenoz, 2010; Lasagabaster, 2012). In fact, there is an important corpus of research devoted to the development of multilingual universities in northern Europe (Airey, 2011; Hellekjaer, 2010; Jensen and Thøgersen, 2011; Van Leeuwen and Wilkinson, 2003; Wilkinson, 2004), which shows the benefits of teaching in several languages and also the heterogeneous approaches that can be observed depending on particular contexts.

Countries in southern Europe have approached multilingualism at a tertiary level far more recently and their universities are behind their Nordic partners in this field. However, a significant number of articles have appeared in the last years in response to the growing interest of institutions in teaching through English. This is the case in Spain, where the implementation of bilingual programmes has gained momentum in the last decade, with more and more universities offering modules or study tracks in which students can take content subjects taught through English (Ramos, 2013; Ramos and Villoria, 2012); in fact, EMI can be understood as a key element within the internationalization strategy of non-English speaking universities (Lasagabaster, 2012).

In the context of Spain, particular attention has been paid to the implementation of bilingual programmes in multilingual settings (i.e., autonomous communities where more than one language is spoken); research has been devoted to analyse plans intended to promote multilingualism at the tertiary level and assess the use of EMI in order to achieve the objectives of multilingualism and multilingual competence (Cenoz, 2010; Lasagabaster, 2012; Doiz, Lasagabaster and Sierra, 2011 and 2013).

Research has also been conducted on language aspects in EMI: Muñoz (2001) investigates students' perceptions towards the use of English in content subjects and concludes that students realise more progress in receptive than in productive skills, with a special focus on the gains in self-confidence; Dafouz, Núñez and Sancho (2007) analyse discursive features and teacher-student positioning in the Spanish university context; more recently, Aguilar and Muñoz (2014) report on a study on engineering students that reveals less proficient pupils obtain higher gains in listening skills and grammar than those students with a higher command of English.

Regarding organizational issues, Fortanet (2011) studies the implementation, structure and curricular issues within bilingual programmes in Spanish universities and offers results based on the opinions of 38 lecturers concerning teaching through English. A recent study (Fortanet, 2013) carried out with 1,003 respondents (including lecturers, students, and administrative staff) analyses not only the characteristics of the university community and their relationship with languages, but also the historic evolution of language policies as well as the prospective strategies to be adopted in the coming years.

Research has also been devoted to underline the plural approaches observed in the implementation of bilingual programmes at the university level: Halbach, Lázaro, and Pérez (2013) explore the heterogeneity amongst Spanish universities in relation to multilingualism and provide data from institution representatives to explain the diverse treatment afforded to English at the tertiary level. They recommend reviewing the language requirements for students and lecturers engaging in bilingual education and the setting of homogeneous criteria, objectives, and procedures leading to the creation of a common language policy to meet the needs of bilingual degrees in Spain. In the same vein, Doiz, Lasagabaster, and Sierra (2013) present several experiences concerning the introduction of EMI in several Spanish, European, and Asian universities, underlining the heterogeneity of 'multilingual education'. This research also collates some interesting insights with reference to the institutional policies that have been adopted by universities in the promotion of multilingualism. The final remarks underline the lack of sufficient language competence possessed by students in order that they might successfully pursue English study programmes at university.

Within the specific field of study of this paper, it is worth mentioning that the perception of the university community on the implementation of bilingual programmes has also been explored: the study by Feixas *et al.* (2009) concludes that most students screened in their research confirm their positive reactions related to the overall gains of EMI; on the other hand, pupils do not perceive that studying through English hampers the learning process or slows down the acquisition of contents in the lectures taught in a foreign language.

Toledo, Rubio, and Hermosín (2011) investigate the attitudes of university students towards bilingual programmes and the potential impact on their motivation and academic output. This research takes a sample of 39 university students and concludes that the voluntary enrolment in English-taught programmes is a determining factor to increase student satisfaction regarding bilingual degrees; the results obtained with this study also lead the authors to think that students' attitude and their English level correlate with the satisfaction degree with the bilingual programme. Most students participating in this research state they have improved their oral and written skills in English, with a special emphasis on vocabulary acquisition and also on oral and written comprehension. This work concludes that, globally, students assess learning through English in a positive way, although a relevant percentage of respondents would rather have taken the course in Spanish.

Finally, Aguilar and Rodríguez (2012) analyse the perception of lecturers and students engaged in CLIL at the university level. As regards students' satisfaction, the participants of the study report that their experience has been positive and they consider that the most relevant aspects of learning contents through English at university are: the acquisition of technical specialised vocabulary, improving their listening and speaking skills, and to a lesser extent their reading and writing skills. However, this study also concludes that most students ascertain that they have not learned any English in the CLIL programme. Following with the negative aspects, students highlighted that they expected their lecturers to be more fluent in English.

In the field of EMI at Higher Education, at least so far, most attraction has been paid to organizational issues, teachers' perception, students' academic achievement, and the gains perceived as regards particular skills (e.g., listening); research on the possible impact of bilingual education on students' internationalization, their career prospects, and the impact on motivation is still needed.

## 3. Methodology

## 3.1 Context, sample, and research scope

The University of Oviedo (a public institution of Higher Education) started its 'Bilingual Programme' in 2009 with the introduction of 2 bilingual degrees. Currently, the institution operates 11 degree programmes with bilingual study plans (most of them in engineering, sciences, and social sciences). In all the 'bilingual degrees' (4-year programmes), students have to complete a minimum of 120 ECTS credits in English at the university.

In the academic year 2014/2015, 296 courses were taught in English, involving 437 students and 76 lecturers. The university provides courses on pronunciation and writing skills for lecturers engaged in bilingual degrees; there are also specific

courses intended to provide students who start a 'bilingual degree' with technical vocabulary and specific skills to be more effective in following a university lecture in English. These courses start in September, and participants are grouped by academic field (e.g. engineering, education, etc.). Courses focus on general university vocabulary, subject-specific vocabulary, classroom English, and public speaking. Students can also take general English courses at the *Casa de las Lenguas* (the language institute of the University of Oviedo), which offers 75-hour courses ranging from A1 to C2.

Students require a B2 level of English to enrol in a bilingual degree; they can certify their command of English by means of any official language test (e.g. First Certificate, TOEFL, etc.). Lecturers aiming to teach through the medium of English can enter the bilingual programme as long as they fulfil one of the following requirements: A) they can certify a C1 in English by means of an official certificate; B) they certify a B2, and they have completed two of the courses offered for lecturers (there are courses on methodology, pronunciation, academic writing, and public speaking); C) they have taught 1 year through English in a foreign university in the last 10 years; D) they have been a visiting scholar at a university in an English-speaking country in the last 10 years, and they have completed two of the courses offered for lecturers.

The sample of this study is composed of 255 participants from the total population of students engaged in bilingual degrees: 52 students were outgoing Erasmus in 2014, so the population available for the study accounted for 385. Therefore, it can be ascertained that this study relies on a representative sample: the margin of error is 4% and the level of confidence is 98%. The sample includes students from all the bilingual degrees and from different courses. All participants in the study are Spanish students; the number of international students enrolled in the bilingual courses accounted for 5% in 2015 but they were dismissed for the current research.

#### 3.2 Research tool and data collection

The research tool used in this investigation was a survey designed to provide reliable data on students' opinions on the bilingual programme (see Appendix 1). The questionnaire was first used in a pilot study to check its validity and reliability and was later administered individually (via e-mail) to all the students engaged in bilingual degrees: 255 pupils returned the survey within one month.

The final version of the questionnaire included 30 items as well as a section intended to provide us with relevant details concerning the subjects of the study (who answered anonymously). The survey gathered specific information on the individuals being interviewed, namely: 1) Course (first, second, third, or fourth year); 2) Degree; 3) Self-estimated level of English; and 4) Motivation to study in English. The questionnaire contained 3 sub-scales designed to provide information on three dimensions:

- A) General satisfaction with the implementation of the programme: this section includes items 1 to 10 and deals with the overall satisfaction of students with the bilingual degree and their perception on their learning process.
- B) Courses and materials: this section includes items 11 to 20 and focuses on the materials available in English, the training received before starting the bilin-

- gual degrees, and the perception of students regarding the level of English of their lecturers, among other issues.
- C) Internationalization and language learning: this section includes items 21 to 30 and asked participants about their willingness to participate in mobility programmes, and their perception on the impact of studying in English for their professional career.

Respondents answered the survey according to a Likert Scale in the following format: 1 – Strongly Disagree; 2 – Disagree; 3 – Agree; 4 – Strongly Agree. An even number of possible answers was intentionally used to avoid subjects neglecting to answer the questions directly by selecting the 'neutral' or 'indefinite' option.

Data were processed using SPSS 22 and the validation of the scale revealed a Cronbach's alpha result of .872, showing a good level of homogeneity in the items. Finally, analysis of descriptive statistics, analysis of differences according to respondents' features, and non-parametric tests (Pearson's chi-squared and Kruskal-Wallis) were conducted (the Kolmogorov-Smirnov Test showed the sample did not have a normal distribution). The variables considered in the analyses were: course and degree of students, gender, self-perceived level of English, and motivation to study in a bilingual programme.

## 3.3 Distribution of the sample

The sample was distributed as follows (Figure 1): 93 participants answering the survey were first-year students (36.5%); 110 were in the second year of their corresponding degree (43.1%); 37 students (14.5%) were enrolled in third year, and 15 students (5.9%) were final-year students. It is worth mentioning that the number of subjects offered in English at the 'bilingual degrees' is still reduced in the third and fourth years compared to the first and second courses; moreover, the number of students in the first promotions of the bilingual degrees is considerably lower than recent cohorts of undergraduates. Regarding gender, 64% of respondents were female students while 36% were male students.

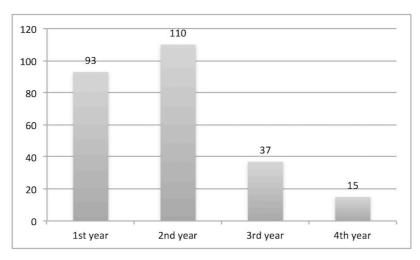


Figure 1. Distribution of students by year

The distribution of participants according to degree programme was as follows: 58 Electronic engineering, 39 Computing engineering, 29 Business and marketing, 27 Tourism, 22 Economy, 16 Mechanical engineering, 15 Civil engineering, 14 Mining engineering, 12 Environmental engineering, 12 Accountancy, and 11 Geomatics. As for the branch of knowledge, 59.6% of participants belong to technical fields while 40.4% are studying social and legal sciences.

The self-perceived level of English of the students answering the questionnaire provides interesting information (Figure 2): 25 students (7.5%) report having a C2; 87 students (31.4%) state they have a C1; 125 (43.5%) report they have a B2; 16 students (5.9%) say they have a B1; and 2 participants (0.4%) think their level is A2. As it has been previously mentioned, students require a B2 level to start a bilingual degree, so it is surprising that a small number of respondents estimate that their level is below that standard (and despite the fact they had to certify the B2).

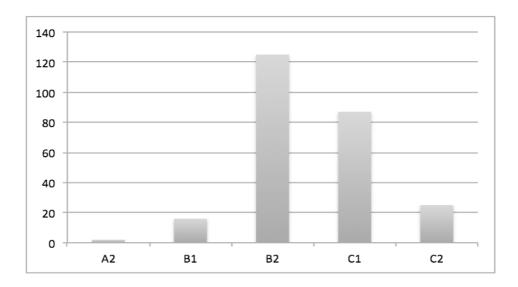


Figure 2. Participants' self-perceived level of English

Finally, regarding the motivation of students to enrol in a bilingual degree (Figure 3), most think that studying through English can improve their professional future (90) followed by a group that expects to have more possibilities at an international level (75). Furthermore, some students are willing to improve their language competence in English (74) and a small group reports that their interest lays in studying in a smaller group (5). The remaining group (11) chose the 'Other' option (with most students stating that studying in English is a challenge for them).

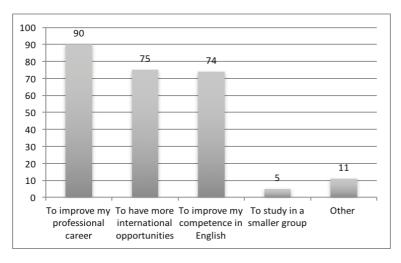


Figure 3. Motivation of students to enrol in the bilingual programme

#### 4. Main results

Next, the most relevant results are presented. Data are analysed according to the three scales of the questionnaire, taking into account the variables set in the study.

## 4.1 General satisfaction with the bilingual programme

The overall satisfaction level of students seems to be rather high according to the results of the questionnaire, with mean values higher than 2.5 in most cases (1 - fully disagree; 2 - disagree; 3 - agree; 4 - fully agree): it is worth mentioning that there are especially positive values in item 6 ('Learning contents in English is a positive experience for us', with 71.8% reporting they fully agree) and item 10 ('I would recommend other students to take the Bilingual Programme', where 42.2% state that they fully agree and 51.4% reporting they agree). However, the satisfaction level is particularly lower in item 4 ('There is a good number of subjects offered in English at the university'), with 49.1% of participants showing disagreement.

The analysis of the chi-square test shows statistically significant differences in relation to some of the variables of the study: regarding the 'Course' of the students, differences were found in item 2 ('The organization of the bilingual programme is appropriate', p = 0.000, chi-square value = 89.609), with participants in higher courses reporting significantly lower levels of satisfaction. This seems to be a general pattern which can be observed in items 3 ('I think the subjects of the bilingual programme are well coordinated', p = 0.000, chi-square value = 56.058), 4 (p = 0.000, chi-square value = 63.622), 7 ('In general, I am satisfied with the contents learned through the courses'), 8 ('I perceive I have learned as much contents as the students in the Spanish programme' p = 0.006, chi-square value = 23.260), 9 ('I need to make stronger efforts in the lessons taught in English than in the ones I take in Spanish' p = 0.000, chi-square value = 43.867), and 10 (p = 0.000), chi-square value = 43.867), and 10 (p = 0.000), chi-square value = 43.867), and 10 (p = 0.000), chi-square value = 43.867), and 10 (p = 0.000), chi-square value = 43.867), and 10 (p = 0.000), chi-square value = 43.867), and 10 (p = 0.000), chi-square value = 43.867), and 10 (p = 0.000).

0.000, chi-square value = 74.735). In all cases, students in the first two courses show higher levels of satisfaction than third- and fourth-year students.

Statistically significant differences can also be observed when analysing the 'Degree' of the participants, which has been grouped in two branches of knowledge (technical studies and science, and social and legal sciences): differences were found in item 4 (p = 0.000, chi-square value = 35.940), with students in the first group showing higher levels of satisfaction; similarly, in item 6 (p = 0.001, chi-square value = 13.991) divergences can be observed with students from technical studies showing lower levels of satisfaction with the contents learned through English. Finally, it is interesting to note that students from technical degrees also report lower levels in item 10 than their peers in social and legal sciences (p = 0.003, chi-square value = 13.657), with 10.6% of students in engineering not recommending the bilingual programme.

The 'Level of English' of students only shows statistically significant differences in item 9 (p = 0.000, chi-square value = 57.714), where students with higher levels of English (C1 and C2) clearly report that they do not need to make additional efforts when attending a lecture taught through the medium of English.

For the variable 'Motivation', results indicate that differences can be found in item 10 (p = 0.000, chi-square value = 32.425), where students who report their interest in the bilingual programme lies in studying in smaller groups show lower levels of satisfaction, as 36.4% disagrees or fully disagrees with the idea of recommending the programme to other students.

### 4.2 Courses and materials

The satisfaction of the students regarding the subjects and the resources available is generally positive although it is worth mentioning that the mean is clearly lower in the results of items 11 ('In general, lecturers have a good level of English', mean = 2.31) and 20 ('The Zero Courses have met my expectations', mean = 2.24).

The analysis of the variable 'Course' renders statistically significant differences as regards item 11 ('In general, lecturers have a good level of English', p = 0.000, chi-square value = 59.033), item 16 ('Class materials, resources and bibliography are suitable and updated', p = 0.000, chi-square value = 46.949), item 17 ('There are available materials in English for most subjects', p = 0.000, chi-square value = 89.754), and item 19 ('I find exams and evaluation activities more difficult in the bilingual programme', p = 0.000, chi-square value = 32.259). As in the previous scale, results show that students in the third and fourth courses are less satisfied with the level of English of the lectures and the materials available in the bilingual programme.

As for the variable 'Degree', differences can be found in items  $11 \ (p = 0.002$ , chi-square value = 15.152), with students in technical programmes showing a lower perception on the level of English of their lecturers, item 13 ('Teachers in the bilingual programme teach mostly in English', p = 0.000, chi-square value = 25.847), with a higher percentage of students of social and legal sciences reporting their teachers use English in their lessons without resorting into Spanish, and item  $17 \ (p = 0.001$ , chi-square value = 16.101), with a higher percentage of participants from social and legal sciences unsatisfied with the availability of resources in English.

Regarding the 'Level of English', differences have been identified with relation to item 16 (p = 0.001, chi-square value = 32.368, with students reporting B1 and B2 levels showing less favourable perceptions towards the availability of materials in English than their partners with C1 and C2 levels) and item 19 (p = 0.003, chi-square value = 29.979), where the level of the students seems to be related to their perception on the difficulty of taking exams in the foreign language, since students with higher levels in the L2 report having less difficulties with the evaluation in English taught subjects.

## 4.3 Internationalization and language learning

The third scale of the questionnaire clearly renders the best results of the survey with all the items but two (item 23 'There are enough mobility opportunities and international exchanges at the university' and item 27 'I speak in English to my mates and teachers in the classes') showing mean values higher than 3 points.

The analysis of the 'Course' variable provides statistically significant results concerning items 23 (p = 0.000, chi-square value = 54.873), 25 ('Taking part in this programme has improved my level of English', p = 0.000, chi-square value = 40.603), 26 ('My English level is suitable to follow the lectures', p = 0.001, chi-square value = 22.888), and 28 ('I read more in English since I registered in the Bilingual Programme', p = 0.000, chi-square value = 45.338); in all these cases, the contingency table shows that the satisfaction of students decreases in the last two courses of the degree.

As regards the variable 'Degree' significant results can be observed in items 21 ('I am willing to participate in international mobility programmes', p = 0.000, chisquare value = 14.912), 22 ('The Bilingual Programme has promoted my interest in visiting other countries', p = 0.000, chi-square value = 25.905), 23 (p = 0.000, chisquare value = 38.595), 24 ('I think completing the Bilingual Programme will have a positive impact on my professional future', p = 0.000, chi-square value = 24.703), and 30 ('I feel I am prepared to study and even work in a foreign country using English', p = 0.000, chi-square value = 16.856). The contingency table shows that in all these cases, students enrolled in degrees related to social sciences show higher degrees of satisfaction than those in technical sciences.

Regarding the 'Level of English', differences were found in item 25 (p = 0.001, chi-square value = 33.313), meaning that the percentage of students with advanced levels (especially C2) that perceive their competence has improved is lower than those reporting B1 and B2 levels; differences were also identified with regards to item 30 (p = 0.000, chi-square value = 30.620), with students with higher levels showing more favourable perceptions about their readiness to work using English.

#### 5. Discussion of results

The results of this study show that there is a high level of student satisfaction with the bilingual programme. In particular, the answers to questions 1 ('In general, I am satisfied with the Bilingual Programme') and 10 ('I would recommend other students to register in the Bilingual Programme') clearly indicate that participants are

rather satisfied about studying through the medium of English, a conclusion which is supported by previous studies analysing Spanish universities (Aguilar and Rodríguez, 2001; Feixas *et al.*, 2009; Toledo, Rubio, and Hermosín, 2011). The data of the current study also reveal that most students do not perceive studying through English entails additional difficulties in the learning process and think that they assimilate as many contents as their partners in the groups being taught in Spanish. In addition, it is worth highlighting that their level of English might correlate with the satisfaction degree, as students with higher levels seem to have a better perception on the bilingual programme.

Secondly, students estimate that their level of English has improved since they study through the medium of English (80% of respondents agree with this statement); this figure contrasts with the results of previous research (Aguilar and Rodríguez, 2012) collecting more negative views on the progress in English of students enrolled in bilingual programmes. It is interesting to note that – in line with other studies (Aguilar and Muñoz, 2014; Muñoz, 2001) – results also suggest that students with lower competence in the L2 are more satisfied with their progress in relation to language learning than their partners with higher proficiency levels. This should lead us to consider that the expectations of students with a higher command of English might not being met in relation to language learning in the bilingual programmes: a possible explanation could be linked to the lower language competence of lecturers in the L2, as reported by students answering the survey.

Thirdly, results also suggest that students perceive the most relevant gain in their English competence has been on the acquisition of technical vocabulary. This is clearly in line with the conclusions of other studies (Aguilar and Rodríguez, 2012; Toledo, Rubio, and Hermosín, 2011), which also identified technical and specialised vocabulary as one of the most relevant gains perceived by students enrolled in bilingual programmes. In addition, the results of our survey suggest that studying through English has encouraged students to read more materials in the foreign language.

Regarding the international dimension of the students, most participants interviewed are interested in international mobility, and a high percentage consider studying through the medium of English has encouraged them to pursue this goal. In other words, it can be concluded that EMI can promote the international dimension of university students; this should be regarded as a positive outcome, as one of the strategic axes of English-taught programmes and CLIL is enhancing students' internationalization as a means to optimise their employability, an objective which is in tune with the Strategy for the Internationalization of Spanish Universities (MECD, 2014). The promotion of students' interest in internationalization might be supported by two contributing factors: on the one hand, improving their language competence in English and, on the other hand, increasing the time exposure to the L2, which can reinforce students' confidence and motivation to engage in international mobility.

Finally, results indicate that students consider that English-taught programmes might have a positive impact on their professional careers and future prospects. Participants estimate that studying contents through English can enhance their curriculum and result in better opportunities when entering the labour market; also, this is the main motivation for students to enrol in bilingual programmes.

Leaving aside the positive implications and the advantages pointed out in relation to bilingual education, this study has also identified several drawbacks or

shortcomings that need to be taken into account: it is noteworthy mentioning that although the overall satisfaction with the teaching quality in the bilingual streams seems to be relatively positive, a high percentage of students consider that the language competence of the lecturers teaching in English is not suitable and they should have a better command of the L2: 61 students mentioned this in the available space for suggestions at the end of the survey. In my view, lecturers teaching subjects through the medium of English should certify a C1 level; an advanced command of English is a must in order to engage in EMI, so the C1 level seems to be a suitable requirement for lecturers willing to teach content subjects trough the medium of English. Universities should be cautious when accepting alternatives such as stays abroad, as they do not necessarily reflect the language competence of lecturers; in this sense, as suggested by Halbach and Lázaro (2015, 18), the internal quality systems of universities need to be optimised and streamlined to facilitate the implementation of bilingual programmes. It has to be noted that only one out of four universities in Spain require lecturers certify a C1 level to teach in bilingual programmes (Jover, Fleta and González, 2016, 127; Halbach and Lázaro, 2015, 16). The poor competence of lecturers in the L2 may be one of the causes that lead many to code-switching and use Spanish in their EMI groups (see Lasagabaster, 2017).

The issue of language competence in EMI has already been identified by many scholars, who also suggest that the lack of specific adapted teaching materials can hamper the quality of bilingual programmes (Dafouz, 2007; Fernández-Costales and González-Riaño, 2015; Halbach, Lázaro and Pérez, 2013, Pérez-Vidal, 2007). All in all, it seems that the acquisition of language proficiency by teachers is one of the most relevant challenges to be addressed in the implementation of EMI in many European settings (Dearden, 2015). It is worth mentioning that the language competence of lecturers should be seconded with sound methodological foundations to teach trough a foreign language (Pérez-Cañado, 2015, 166), and the acquisition of a multidimensional language competence which provides academics not only with linguistic skills but also cultural competence (see Dafouz, 2015).

A second element highlighted by students is that the training received before starting their degree does not meet their expectations in some cases. On several interviews held with some of the respondents, there seems to be an agreement on the idea that participants did not expect 'traditional language courses' but modules focused on improving their fluency and the acquisition of technical vocabulary (while in accordance to the students, the courses provided them with general vocabulary related to the university and Higher Education): in particular, students demand courses on communicative abilities in English, and pronunciation. In addition, they also suggest more technical vocabulary would be helpful before they join the bilingual programmes. Students also demand more subjects taught in English, especially in the third and fourth years of the degree, where the offer is still limited in some study plans. In this sense, the results of the questionnaire share the outcomes of previous research in the field, such as the study by Aguilar and Rodríguez (2011) in which students ascertain that more courses taught through English should be available at the university.

#### 6. Conclusions

This paper confirms the results of previous research focusing on the case of Spanish bilingual degrees at Higher Education by examining the satisfaction level of students with the implementation of the programmes. In addition, this study provides new insights in the field by examining students' opinions on three particular dimensions: the impact of English-taught programmes on their competence in the L2, their motivation to engage in mobility exchanges, and their perception on the possible impact studying through English might have regarding their professional prospects.

While the general outcome in the implementation of EMI seems to be rather positive, this research underlines that there is still room for improvement, in particular as regards the level of English of the lecturers and also in relation to the training which is offered to students before starting their degrees; in addition, the decrease in the satisfaction level in the last courses suggests stronger efforts need to be made in monitoring the students' development and progress: lecturers may use portfolios in their classes, although this is rather unusual in many disciplines such as science or engineering; in all the cases, continuous assessment and progress checks are recommended to track students' development. In this sense, working with projects can also be useful to assess if students acquire the contents and competences expected in every unit or block. At the institutional level, more quality controls (e.g. surveys) are required. Furthermore, longitudinal studies are welcome to investigate the possible fluctuations in student satisfaction with EMI.

It is worth mentioning the possible limitations of the methodological design considered in this paper. The questionnaire reports on data based on the opinions of the students; therefore, some of the information (for instance, the self-perceived level of English of the students, or their assessment of the language competence of lecturers teaching through the L2) should be taken with caution. Also, the results of the study have not rendered statistical significant differences as regards two of the variables being investigated (gender and age). Finally, this study focuses on the particular case of a Spanish university which is starting the implementation of bilingual education, so the results might not apply to institutions with long traditions in Europe or universities located in bilingual territories.

This paper contributes towards providing new insights in the field of EMI in Higher Education, in particular by drawing the attention to the impact bilingual education might have on the perception of students on their internationalization, the possible improvement on their language competence, and their professional prospects.

The influence of EMI at university level needs to be evaluated, not only in relation to the benefits in language competence or the gains in particular skills, but also at a macro-level and using multidisciplinary approaches: hence, research conducted as a continuation of this paper may focus on the planning of studies investigating the possible influence of bilingual programmes on students' attitudes towards English, or analyses focusing on the impact EMI at the tertiary level might have on the employability of graduates from bilingual degrees. Also, a comprehensive analysis on the implementation of bilingual programmes at university level is still required in the case of Spain, with a particular emphasis on methodological issues that might contribute to determine if bilingual programmes should be considered as examples of CLIL.

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## 8. Appendix - student satisfaction survey

## **Satisfaction Indicators**

On the basis of the following statements, specify your level of agreement or disagreement according to the following scale:

1	2	3	4
Strongly disagree	Disagree	Agree	Strongly agree

Tick only one option per question

	A) Overall Satisfaction				
1	In general, I am satisfied with the Bilingual Programme				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
2	The organization of the Bilingual Programme is appropriate				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
3	I think the subjects of the Bilingual Programme are well coordinated				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
4	There is a good offer of subjects taught in English at the university				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
5	I think a training course in English before starting the Bilingual Programme is not needed				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
6	Learning contents in English is a positive experience for us				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
7	In general, I am satisfied with the contents learned through the subjects				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
8	I perceive I have learned as many contents as the students in the Spanish programme				
8	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
9	I need to make stronger efforts in the classes taught in English				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
10	I would recommend other students to take the Bilingual Programme				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				

	B) Courses and materials				
11	In general, lecturers have a good level of English				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
12	Lecturers show involvement and commitment in the courses				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
13	Lecturers in the Bilingual Programme teach mostly in English				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
14	I do not understand some of the lecturers when they explain in English				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
15	The overall quality of lessons in English is better than the ones in Spanish				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
10	Class materials, resources and bibliography are suitable and updated				
16	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
17	There are available materials in English for most subjects				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
18	Students' participation in the courses taught in English is similar to the one in the courses taught in Spanish				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
19	I find the evaluation more difficult in the Bilingual Programme				
. •	□ Strongly disagree □ Disagree □ Strongly Agree				
20	The content of the "Zero Courses" have met my expectations  □ Strongly disagree □ Disagree □ Strongly Agree				
	☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly Agree				
	C) Internationalization and language learning				
21	I am willing to participate in international mobility programmes				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
22	The Bilingual Programme has promoted my interest for visiting other countries				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				
23	There are enough mobility opportunities and international exchanges at the university				
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree				

24	I think taking the Bilingual Programme will have a positive effect in my professional future			
24	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree			
25	Taking part in this programme has improved my level of English			
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree			
26	My level is appropriate to follow the lectures in English			
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree			
27	I speak in English to my mates and teachers in the classes			
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree			
20	Thanks to the Bilingual Programme I read more materials in English			
28	Strongly disagree Disagree Agree Strongly Agree			
29	Following lessons in English has provided me with technical and professional vocabulary and skills in English			
	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree			
30	I feel I am prepared to study and even work in a foreign country using English			
30	□ Strongly disagree □ Disagree □ Agree □ Strongly Agree			
Age:				
	MI E I			
Gende	r:   Male   Female			
What i	s your estimated level of English?			
□ A1 □	□ A2 □ B1 □ B2 □ C1 □ C2			
	lid you decide to take the Bilingual Programme? Tick only one			
☐ To improve my level of English				
□ To study in a smaller group				
☐ To have more opportunities regarding international mobility				
☐ To have better professional opportunities				
□ Other (specify):				
Please, indicate your degree programme:				

Year:	
□ First	
□ Second	
□ Third	
□ Fourth	