LINGUISTIC DEMANDS AND LANGUAGE ASSISTANCE IN EMI COURSES
What is the stance of Italian and Spanish undergraduates?

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Abstract - This paper delves into students' view on English-medium instruction (EMI) in two South European countries, Italy and Spain. In particular, two topics which have been less frequently investigated are addressed: the linguistic demands of students and the need students may feel for some form of language assistance. To this end, a paper-based questionnaire was given to 290 undergraduate students, 145 of whom being Italian (from the Department of Engineering) and 145 Spanish (from the Departments of Business Administration, Engineering, Economics, History, Economics and Law, Marketing, and Public Administration). The questionnaire contained close-ended and open-ended questions regarding their pre-university EMI experiences, whether content teachers should be assisted by language experts, and what aspect of EMI teaching should be paid heed to. The results revealed some agreement between the two nationality groups, with some interesting exceptions regarding the language skills students viewed as more difficult, and as a result, the areas in which they feel the need for language support. In general, both groups favoured language assistance, although they considered that this responsibility does not fall within the remit of content lecturers. The data also showed differences linked to the specific disciplines, thereby confirming the impact of students' specialization on the EMI experience.

Keywords: English-medium instruction (EMI); language support; content teachers; students' stance; university.

1. Introduction

EMI courses have grown in Europe over the last 10 years; however, they are implemented in different ways due to both the diversity and peculiarities of the university system in each country and the different relationship of these countries with English. Specifically, several studies (Wächter, Maiworm 2014; Dimova *et al.* 2015) have revealed a division between North and South European countries not only in terms of the number of EMI courses offered, but also in the characteristics of the programmes themselves. For this reason, it is useful to examine two countries from Southern Europe: Italy and Spain (see Costa, Pladevall-Ballester 2018, regarding CLIL in secondary schools) to verify the actual similarities or differences in this particular area. Both countries share some characteristics: their languages are neo-Latin, EMI is spreading in both countries, they tend to have a predominance of teacher-centered lessons and similar faculty profiles, and the students' English proficiency tends to be lower than in the Northern countries (http://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs_237.en.pdf).
With this in mind, this paper focuses on one of the most debated and unexplored issues regarding EMI, namely students' views on their language demands and the possibility of language assistance (e.g. in the form of collaboration between content and language

lecturers). In fact, according to recent publications this represents one of the areas requiring further research in EMI. In this vein, Macaro *et al.* (2018) consider the possibility of providing support to the content teacher by the language teacher:

> We need to understand what kind of 'accommodation' needs to be made for EMI students, […]. Might that additional support come from an English language specialist working more closely with the content teacher? (Macaro *et al.* 2018, p. 38)

Along the same lines, in a discussion on EMI by Coleman *et al.* (2018, p. 705), Coleman asks whether an effective coordination between content and language lecturers is viable and leads to language improvement, an area that still requires empirical evidence:

> […] what resources are allocated to explicit English teaching? Is coordination possible and encouraged between subject teachers and language tutors? I would expect research to show that cooperation between the two teams and curricular integration would produce better results (has this already been shown?), […] (Coleman *et al.* 2018, p. 705)

The few studies already undertaken in this area (Arnò-Macià, Mancho-Barés 2015; Cots 2013; Lasagabaster 2018) highlight the importance of working toward greater collaboration between content and language lecturers, given that content lecturers are not willing to deal with the language aspect (Airey 2012) and that language assistants can therefore play a role more suited to their competencies.

In light of the above considerations, the aim of this article is to give voice to students (as suggested by Lasagabaster 2018) in order to understand if the collaboration between content and language teachers is requested in various disciplines in both Spain and Italy. To our knowledge, previous studies in Europe on student perceptions (Aguilar, Rodríguez 2012; Costa, Mariotti 2017; Tatzl 2011) have not dealt with these issues nor undertaken a comparison between countries.

2. Literature review

In this section, studies on students' perceptions are reviewed highlighting both the positive aspects and the challenges posed by the EMI learning environment. The aim is to understand whether language is acknowledged as a relevant component of the learning process and whether students feel the need for language support. The research will be presented starting from non-European countries and then focusing on studies carried out in Europe.

In the Gulf, Belhiah and Elhami (2015) surveyed the views of students enrolled in Business, Engineering and Social Sciences courses held in English. They found that the EMI policy seemed to be providing some benefits as the overwhelming majority of students reported considerable improvements in listening, speaking, reading, and writing skills in English. Nevertheless, the exclusive use of English posed many problems due to the overall low proficiency of students. Therefore, the study advocates bilingual education to improve students' mastery of English, while simultaneously preserving their national identity and indigenous culture. Evans and Morrison (2011) carried out a questionnaire-based research on 448 undergraduate students at the Hong Kong Polytechnic, complemented by interviews to 28 undergraduate students enrolled in Business, Applied Sciences, Health and Social Sciences, Construction and Land Use and Humanities. English was used as the medium of instruction on all the courses. Results show that most students preferred EMI to teaching in Cantonese, even though they reported inadequate

levels of proficiency and a disorganised presentation of subject matter content by EMI teachers. In Korea, Kim *et al.* (2014) surveyed 249 Korean and 61 international students enrolled in Business Management and Engineering courses, and they complemented the quantitative data with semi-structured interviews for a restricted sample of students. They found that international students believed their level of English to be adequate, whereas Korean students perceived that their level of English negatively affected their understanding of the content. Despite being enrolled in EMI courses, these students identified themselves as EFL learners, and showed a lack of confidence in EMI activities and interaction with international students in EMI classrooms. Kim and Yoon (2018) also analysed data from 174 undergraduate Science and Engineering students enrolled in either English-taught or Korean-taught (KMI) classes offered by the same lecturer. Findings show that KMI students demonstrated higher levels of satisfaction and better performance in their classes than the EMI students. Nevertheless, the majority of the students supported the school's EMI policy. As far as previous exposure to EMI is concerned, it should be noted that in the Gulf, Hong Kong and Korea students typically have the opportunity to practice English across several school subjects before they access higher education due to the language policies of their countries, although none of the studies analysed students' pre-university experiences.

In Turkey Arkin and Osam (2015) investigated the impact of EMI on the disciplinary learning of undergraduate Business Administration students. Their research, based on lecture observation and semi-structured interviews involving 10 students, confirms that English-medium education is seen positively in view of a professional or an academic career; however, students thought the process of disciplinary learning was negatively affected by having to learn in English due to their limited language skills. They claimed that the instructional process in the native language as opposed to a foreign language (i.e. English) is significantly different, and they called for a more effective addressing of the language needs of learners in English-taught classes.

In the Netherlands, Klaassen (2001) analysed data obtained from interviews and questionnaires administered to undergraduate students of Engineering. The great majority of students (73%) said they expected to improve their English proficiency as a result of attending EMI courses, they expected lecturers to have a high competence in the English language, and felt they should be able to adapt their teaching accordingly. Furthermore, Klaassen's work brings out the need for supporting tools such as transparencies with summaries and explanations, the use of visuals, authentic materials, and in-class assignments. In a qualitative study conducted in Sweden, Airey (2009) interviewed 22 undergraduate Physics students, who claimed that there were very few differences between being taught in English or in Swedish, implying they believed that language did not play a significant role in their learning. Nevertheless, the students asked and answered fewer questions and reported finding it difficult to follow the lecture and take notes at the same time. In a large-scale survey involving 4524 students at Stockholm university, Bolton and Kuteeva (2012) highlighted discipline-related patterns of academic English use, suggesting that in the sciences the use of English is more accepted and widespread among students, whereas in the humanities and social sciences English is often used as an additional or auxiliary language alongside Swedish.

In Austria, Tatzl (2011) surveyed 66 students taking part in Engineering Master's degree programmes. Overall, the students thought EMI courses had had a positive impact on their English language skills and many also pointed out that English-medium Masters' programmes familiarise learners with the English language on a daily basis, showing that they acknowledge integration of the foreign language into student life and university

education. However, students reported difficulties with vocabulary and technical terms and generally felt that EMI poses linguistic challenges. Spoken interaction was regarded as the most demanding skill, followed by writing and comprehension. Nevertheless, over half of the students in the questionnaire survey (34 respondents) did not express any need for language assistance. Finally, students regretted that the content had to be simplified and the fact that they had a heavier workload compared to students on L1-taught courses.

In the Belgian context, Bartik *et al.* (2012) observed and interviewed 18 students involved in a joint Master's programme in Chemistry and Materials Science. The students had never taken part in EMI courses before, but they had been offered a content-linked English language course over the Bachelor cycle. Students reported needing an adaptation period varying from 2 to 8 weeks according to their initial L2 knowledge, and described listening to lectures and speaking to lecturers in English as tiring and requiring extra cognitive effort; they also expressed the need for written support and course materials. However, they also reported language gains, in particular in their communicative competence and domain-specific terminology.

In Italy, Ackerley (2017) analysed data from a questionnaire completed by 111 students (98 from Italy and 13 from other countries) across a range of Master's level courses at the University of Padova. The questionnaire was divided into two parts, one administered before the beginning of EMI courses and the other at the end. Overall, reactions to EMI were positive. The main worries before starting the course were comprehension, lacking specialist terminology, and simply not having a good enough level of English. Among the advantages of following an EMI course, the majority of the students (74.3%) made reference to learning English, in particular to improving their knowledge of subject-specific or technical terminology as well as their comprehension skills. Clark's (2017) questionnaire-based study involving 46 students (15.2% international students) enrolled in a two-year postgraduate degree course held in English at the Department of Political and Juridical Sciences and International Relations of the University of Padova observed that EMI students were not homogeneous and pointed out differences between domestic and international students, the latter tending to be harsher in their self-evaluation, and less critical of their lecturers' language abilities, except for pronunciation. Overall, most students reported that their English definitely improved during the course except for those students who rated that they already had a high level of English when they started. Costa and Mariotti (2017) administered a questionnaire to 160 graduate students from the Economics and Engineering Departments of three universities located in Northern Italy finding that overall students thought EMI courses can lead to an equal or better learning of the subject matter compared to regular subject matter courses, and for these students this is one of the most important reasons for enrolling on this type of course. Moreover, students stated that there was room for improvement as far as lecturers' linguistic competence and their ability to facilitate learning in an L2 are concerned. As far as previous exposure to English-taught courses is concerned, it should be noted that L2-medium instruction is now compulsory in Italian secondary schools, but the students in this study had finished school before these changes had come into effect.

In Spain, Aguilar and Rodríguez (2012) interviewed 87 postgraduate Engineering students with no previous exposure to EMI. Their reaction to EMI was predominantly positive, and as far as language competence was concerned, the students said they mainly increased their knowledge of technical vocabulary and improved their listening and speaking skills. As regards the negative aspects, they thought the pace of the course was too slow, they mentioned the need for materials in English and criticised the lecturers' insufficient level of English. Doiz *et al.* (2013) described the context of a trilingual

university, the University of the Basque Country (UBC) where English has been introduced as a third language. They explored the views of 632 students on the multilingual policy of UBC. In general, international students were more positive towards EMI than local students. This might be ascribed to the fact that local students thought they had a lower level of English than international students. Arnó-Macià and Mancho-Barés (2015) investigated the views of 745 Spanish L1 students enrolled in Agronomy, Engineering, Business and Law courses. Only 10% of the sample had previously been exposed to English-taught courses. Students enrolled in EMI courses reported positive views towards English-taught courses together with language benefits such as domain-specific vocabulary/discourse, development of fluency, and overcoming their fear of speaking in public. In the same study, data from focus groups carried out with EMI students showed that they were generally aware that language is a concern in EMI classes, as shown by the fact that they adopted strategies to address comprehension difficulties such as referring to language help classes and resorting to their shared L1 for overcoming language problems. Some of the comments suggested the need for language support and integration of content and language in English-taught courses.

Overall, the reviewed studies indicate that EMI is generally a positive experience for students, even though in countries outside Europe the perceived low English proficiency of students seems to be a strong hindrance, preventing them from making the most out of their learning process (Arkin, 2015; Belhiah, Elhami 2015; Evans, Morrison 2011; Kim *et al.* 2014; Kim, Yoon 2018). However, even in these cases, students generally perceived EMI courses as beneficial for their English proficiency, hinting at the fact they were aware of the relevance of the linguistic component alongside content learning. Most studies reported students explicitly calling for language support. Among the most improved skills, students generally mentioned better proficiency and communicative competence (Aguilar, Rodríguez 2011; Bartik *et al.* 2012; Clark 2017; Tatzl 2011) and the learning of domain-specific terminology (Ackerley 2017; Aguilar, Rodríguez 2011; Arnó-Macià, Mancho-Barés 2015; Bartik *et al.* 2012). At the same time though, students from all disciplines reported difficulties in specific academic areas such as comprehension of lectures, oral skills, and heavier workload compared to students on L1-taught courses (Ackerley 2017; Airey 2009; Tatzl 2011). Finally, some studies also pointed to the need for supporting tools (Aguilar, Rodríguez 2011; Bartik *et al.* 2012; Klaassen 2001) and expressed concern about simplification of lecture content (Tatzl 2011), a slower pace (Aguilar, Rodriguez 2011), lecturers' linguistic competence and their ability to facilitate learning in an L2 (Aguilar, Rodriguez 2011; Costa, Mariotti 2017).

3. Research questions

With the previous review of the literature in mind, this study was designed to answer the following three research questions by surveying and comparing the opinions of Italian and Spanish undergraduate students:
RQ1.   How did undergraduate students find their pre-university EMI experiences?
RQ2.   Should content teachers be assisted by (English) language experts?
RQ3.   What language aspects of EMI teaching should be paid heed to?

4. The study

This section is divided into three parts: the first one describes the sample, the second one the instrument used to gather the data, and the last one the procedure.

4.1. The participants

The sample was made up of 290 undergraduates, half of them from Italy and the other half from Spain. All of them were enrolled in EMI courses when they participated in the study. It has to be underscored that all the Italian undergraduates (145) were enrolled in a single degree, namely Engineering. The Spanish students were enrolled in seven different degrees: Business Administration (68 students), Engineering (40), History (12), Economics (11), a double degree in Business and Law (10), Marketing (3) and Public administration (1).
As for the academic year, 80.9% were enrolled in the first year, 14.3% in the second, 4.2 in the third and only 0.7 in the fourth. Therefore, the vast majority of the respondents (95.2%) were first or second year undergraduates. They were predominantly male (69.3%), whereas female students represented a quarter of the sample (25.9%). The remaining chose either the option "other" (0.3%) or decided not to fill out this item (4.5%).

4.2. The instrument

The data was gathered by means of a questionnaire in English that consisted of 14 items. The instrument was divided into three sections: the first aimed at gathering students' personal data (gender, degree, country and academic year), the second focused on their EMI experience (how they found it, what skills happened to be the most difficult to master, etc.), and the third one dealt with team teaching (in which they were asked whether lecturers should focus on language, whether it would be a good idea to have a language expert to assist content teachers, etc.). In this paper team teaching refers to the collaboration between a content teacher and a language teacher in an EMI programme "in which the abilities of the team members complement each other to improve the learning results" (Lasagabaster 2018, p. 401). Finally, an open-ended question was included so that they could provide any additional thoughts they might have on the issues raised in the closed-ended items.

4.3. The procedure

The respondents were invited to fill in the questionnaire anonymously, a task carried out in class, after having explained to them the objectives of the study. It has to be highlighted that, although they were told that participation was on a voluntary basis, none of them refused to participate, which seems to indicate that EMI was deemed a topic of interest by all of them.

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5. Results

Students were firstly asked about their EMI experience in primary and secondary education (at pre-university levels). Four out of ten participants (120 students, 41.4%) had previously been enrolled in EMI courses, whereas 170 students (58.6%) had had no previous experience. Among those with EMI experience, the vast majority found it rewarding (see Figure 1): those who labelled it as excellent or good were 63.4%, those who went for satisfactory 28.3%, while those who opted for unsatisfactory represented only 7.5% of the sample. A single student (0.8%) chose the option "I don't know".
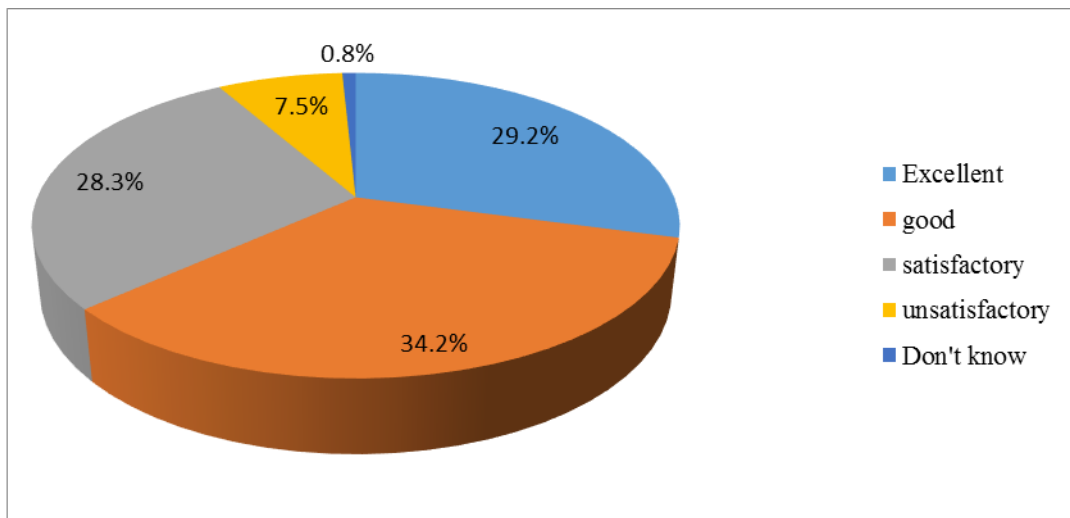

Figure 1
Degree of satisfaction about EMI courses at pre-university level.

The comparison of the two contexts under scrutiny by means of a T-test for independent samples revealed that, although the Spanish undergraduates were happier with their pre-university EMI experiences (M = 1.99) than their Italian counterparts (M = 2.72), the differences between both groups were however not statistically significant [t(119) = -3.46; p = .087].

As for the most difficult language skills to master in English, Table 1 shows the students' stance (from the most difficult to the least difficult). Two of the language skills related to oral production turned out to be the ones that the undergraduates found the most difficult, namely speaking and pronunciation. Reading specialized texts came third, whereas writing was fourth. Understanding spoken English was the next option, whereas vocabulary and grammar were not regarded as difficult as the other language aspects.

Degree of difficulty	Language skill
Most difficult	1. Speaking
↓	2. Pronunciation
↓	3. Reading specialized texts
↓	4. Writing
↓	5. Understanding spoken English
↓	6. Learning and using new words
Least difficult	7. Grammar

Table 1
Students' views about the most difficult language skills in English.

The perceptions of difficulty by the Italian and Spanish students (see Table 2) were rather similar. In fact, speaking, pronunciation and writing were considered the most difficult language skills, whereas grammar, vocabulary and understanding spoken English entailed fewer difficulties.

However, the case of reading specialized texts stood out due to the two cohorts' different perceptions. While Spanish undergraduates found it the most difficult task, this was not the case for Italian students, for whom this skill ranked fifth out of seven. The main reason underlying this discrepancy may lie in the different degrees in which the groups were enrolled. Whereas all the Italian participants were enrolled in Engineering, the Spanish students' degrees were more varied: History, Business, Business and Law, or Business Administration. Although all EMI students are expected to read specialized texts as part of their courses, the features of the different type of texts depending on the specialization may vary considerably depending on the specialization (Airey 2009; Lasagabaster 2018). A technical text may rely on mathematical formulas and problem solving activities that do not require the same level of language comprehension as, for example, a particular law in which linguistic nuances may make quite a bit of a difference. Nevertheless, and with the exception of the reading skill, it can be affirmed that there are not big differences between the two cohorts.

Spain	Italy
1. *Reading specialized texts*	1. Speaking
2. Pronunciation	2. Pronunciation
3. Speaking	3. Writing
4. Writing	4. Understanding spoken English
5. Grammar	5. *Reading specialized texts*
6. Understanding spoken English	6. Learning and using new words
7. Learning and using new words	7. Grammar

Table 2
Students' views about the most difficult language skills in English per country.

When they were asked whether content teachers should explicitly focus on language (i.e. grammar), the majority of the participants rejected this option (59.3%), which was supported by 28.6%, whereas 12.1% chose the "I don't know" option. Although the Spanish undergraduates were slightly more negative than the Italian (see Table 3), the 2 X 3 Chi-square test (Dörnyei 2007) showed no statistically significant difference when comparing the cohorts by country and the three possible options [X^2 (2, 290) = 3.78, p = .151]. The fact that Italian students were from the Engineering faculty explains why they did not consider a focus on language as being important: "Concerning question number 4 the answer is no for engineering courses where maths is predominant. For more spoken lectures (Economics, Psychology…) focus on language should be a must" (Student 37, Engineering, Italy)

Option	All participants	Spain	Italy
Yes	28.6%	24.1%	33.1%
No	59.3%	64.8%	53.8%
I don't know	12.1%	11%	13.1%

Table 3
Do you think that lecturers teaching in English should explicitly focus on language (i.e. grammar, etc.)?

According to the participants, the language areas that their content lecturers paid most

attention to (from most attention to least attention) can be seen in Table 4. Special heed was paid to speaking, oral presentations and vocabulary, whereas writing, and above all, pronunciation and grammar seemed to be disregarded by the vast majority of EMI teachers. In addition, the results were exactly the same both in the case of the sample as a whole and when it was divided into Spanish and Italian undergraduates, which seems to indicate that there is a clear-cut trend in this respect.

Attention	All participants	Spain	Italy
Most	Speaking	Speaking	Speaking
↓	Oral present.	Oral present.	Oral present.
↓	Vocabulary	Vocabulary	Vocabulary
↓	Writing	Writing	Writing
↓	Pronunciation	Pronunciation	Pronunciation
Least	Grammar	Grammar	Grammar

Table 4
Content teachers' attention to language areas.

As for the possibility of having a language expert assisting lecturers in courses taught in English, the students showed a mixed picture (Table 5). The majority of them (136 students; 46.9%) were in favour of this option, 86 students were against it (29.7%) and 68 students had no clear idea (23.4%). Despite the fact that the Spanish students were more positive about this collaboration than the Italian respondents (53.1% vs. 40.7%), a similar trend was observed when the percentages of the two nationalities were statistically analysed. In fact, the 2 X 3 Chi-square test showed that there was no significant difference between the two contexts and the Yes/No/I don't know options of the sampled participants $[X^2 (2, 290) = 4.91, p = .085]$. Some students seemed to be concerned about the person in charge of providing such support, as indicated by their preference of native speakers over non-native speakers. The following two statements referred to this issue:

> It would be good for us if we had some lessons, or voluntary classes, with native professors. Another things I miss are practical activities to help us develop our english level, with workshops or visits for example (Student 134, Marketing, Spain).
> [No, I don't think it would be a good idea to have a language expert assist teachers,] but to have natives or people that do know English (Student 37, Engineering, Spain).

Moreover, the majority of the Italian students who provided an answer to the open question (12 out of 18 students) were quite critical of the level of English of their lecturer:

> The difficulty in understanding spoken English is related to the fact that teachers quite always have a bad English. If students are required to have a C1 in English, Professors should be asked to do the same (Student 42, Engineering, Italy).
> I think that being forced to follow courses of the difficulty of aeronautical engineering in English is simply crazy and creates a further obstacle to really mastering new physical concepts. No English improvement can be found because the English level of the teachers is usually low (Student 92, Engineering, Italy).

Option	All participants	Spain	Italy
Yes	46.9%	53.1%	40.7%
No	29.7%	27.6%	31.7%
I don't know	23.4%	19.3%	27.6%

Table 5
Do you think that in courses taught in English it would be a good idea to have a language expert assist lecturers?

When asked in what language areas they would like to receive language support (Table 6), the whole sample put those related to oral production (oral presentations, speaking and pronunciation) in first place. The following statement by one of the participants may help to summarize the general feeling: "I think language is something that gets better as you use it (be it good or bad). So I think students and teachers should be encouraged to talk more" (Student 12, Engineering, Spain).

However, when the results were analysed by country several differences emerged. The Spanish participants were more interested in having support in reading specialized texts (whereas this is the last option for their Italian counterparts) and in having the meaning of technical words explained, while the Italian students opted for the aforementioned language areas related to oral production. Once again, it seems that students' different specializations may have had an impact on their choices. Both groups agree in not considering note-taking and understanding spoken English as difficult tasks.

All participants	Spain	Italy
1.Oral presentations	1.*Reading (esp. texts)*	1.Oral presentations
2.Speaking	2.Vocabulary	2.Speaking
3.Pronunciation	3.Oral presentations	3.Pronunciation
4.Vocabulary	4.Speaking	4.Vocabulary
5.Note-taking	5.Pronunciation	5.Note-taking
6.Spoken English	6.Spoken English	6.Spoken English
7.Reading (esp. texts)	7.Note-taking	7.*Reading (esp. texts)*

Table 6
In what language area/s would you like to receive language support?

As for their preferences when it comes to being evaluated in their EMI classes (Table 7), both the sample as a whole and the two nationality cohorts clearly went for the written final test, even in the case of the Italian participants who are habitually more accustomed to oral final tests in their home universities (the last option for the Spaniards and the third for the Italians). While Spanish students are traditionally not very fond of oral examinations, Italians' choice may have been conditioned by the fact that the oral test should take place in a foreign language. And this despite the fact that students are well aware of the challenges of relying on a written final test: "I would like to ask a professor of statistics applied to business administration to change the evaluation, especially to divide the final exam into two parts (like midterms) because I am scared to fail this course since when final weights 70% it is very scaring" (Student 93, Business, Spain). In this case the student refers to the final exam, which is worth 70% of the final score of the course.

All participants	Spain	Italy
1.Written final test	1.Written final test	1.Written final test
2.Project presentation	2. Mid-term assess.	2.Project presentation
3.Mid-term assess.	3.Project presentation	3. Oral final test
4.Oral final test	4.Oral final test	4. Mid-term assess.

Table 7
How they prefer to be evaluated.

In the last closed-ended item of the questionnaire students were asked whether they believed that English should be taken into account in their mark (i.e. a small percentage of

the final mark). The results (Table 8) revealed that both the sample as a whole and the nationality-based groups preferred not to have English proficiency included as a criterion for their mark in EMI subjects. One of the participants was rather blunt in this respect: "In courses taught in English, this language should be just a tool. I think the most important thing in these courses is adapting the language to the subject itself" (Student 99, Business and law, Spain). However, the Italian students (70%) were remarkably more reluctant about this possibility than the Spanish students (47.6%) and this difference is statistically significant [X^2 (2, 290) = 18.33, p = .000]. The thoughts of those against including an English criterion in their mark could be summarized in the proposal put forward by two of the participants: "I think it would be a good idea to ask for some sort of language requirements prior to enrolling on the course" (Student 63, Business, Spain). "Having taught English to high-school students I know that 8/10 students don't know how to speak English. I think that the teaching methods have to be changed as to prepare people for university, where English spoken courses are increasing in number" (Student 12, Engineering, Italy) These statements seem to indicate that, if only those students with a good English proficiency were allowed to enroll in EMI courses, there would be no need to consider this possibility.

Option	All participants	Spain	Italy
Yes	31.4%	42.8%	20%
No	59%	47.6%	70.4%
I don't know	9.7%	9.7%	9.7%

Table 8
Should English be taken into account in your final mark?

6. Discussion and conclusions

This paper has presented an investigation into the EMI experience of university students in two contexts, Italy and Spain. In order to provide background information for the study, we aimed at analysing the participants' pre-university EMI experience, which has allowed us to observe that there is a trend among students to feel more willing to take courses in English at university in comparison with the figures found in high school. In particular, our results revealed that only four out of ten participants (41.4%) had previously been enrolled in EMI courses at pre-university level. Students' greater willingness to take EMI at university may be due to several reasons such as the possibility of taking EMI courses at university but not at pre-university level, the students' growing awareness of the importance of English, the desire to acquire the specialised language of their content subjects, as well as other external and motivational factors (see Doiz, Lasagabaster 2018). Whatever the reasons for the students' decision to enroll, the data seems to indicate that undergraduates find EMI in higher education an interesting option to take advantage of, also noted in Doiz and Lasagabaster (2016), Valcke and Wilkinson (2017) and Wächter and Maiworm (2014), to mention but a few references.

The Italian and the Spanish students who took EMI at pre-university level deemed their EMI experience satisfactory. In particular, 63.4% found it excellent, 28.3% satisfactory and only a small percentage of the students (7.5%) did not like it. There were no statistically significant differences between the Italian and the Spanish students. While the present study did not enquire about this issue, previous studies on student

satisfaction with their EMI courses at university level in the Spanish context have shown that students enjoy their EMI experience and believe that it may result in an increase in their symbolic and economic capital (Aguilar, Rodriguez 2012; Arnó-Macià, Mancho-Barés 2015). In fact, their experience is so positive that they would "support an increase in the number of subjects offered in English" (Doiz, Lasagabaster 2018, p. 673). Notwithstanding, there are a number of issues that could and perhaps should be tackled in order to optimize the potential benefits of the EMI experience, such as the uneasiness the students feel in spontaneous public interactions, their feeling of vulnerability stemming from their self-consciousness about their pronunciation and from the lack of specialised vocabulary, primarily (Ackerley 2017; Airey 2009; Doiz, Lasagabaster 2018; Tatzl 2011).

The second main issue dealt with the possibility of complementing the EMI experience with the assistance of a language expert to tackle language matters in the classroom. Our study revealed that 46.9% of the students agreed with the idea of having such language-expert support. A significant majority of the students (59.3% out of the total pool of participants) also agreed that the content teacher should not deal with language issues and should limit himself or herself to the content-matter. There were no statistically significant differences between the two contexts with regard to these two issues. In other words, according to the students, content and language aspects should be kept separate, and, should emphasis on learning English wished to be made, the responsibility of such undertaking should fall on the language experts. However, despite the strong support received, one out of three students (29.7%) were against having language assistants in the classroom (27.6% in the case of the Spanish students and 31.7% in the case of the Italian students), a result that needs to be accounted for in further research. Thus, it would be interesting to determine whether this stance derives from a narrow conceptualization of EMI in which no reference to language matters should be made or from their understanding of the role of EMI teachers. Alternatively, this position may also be based on the students' belief that, unlike in traditional EFL classes, English is learned incidentally in EMI (Coyle *et al.* 2010; Lo 2015; Pecorari *et al.* 2011; Weimberg, Symon 2017). As one of the participants in Arnó-Macià and Mancho-Barés (2015, p. 68) points out: "you like English, you want to learn … It's new."

The wish to assign the responsibilities over language and content-matter to different figures in the EMI classroom was not only put forward by the students, it is also shared by most content teachers. EMI teachers in different contexts in Europe have clearly stated their reluctance to address language matters (see Airey 2012 for the Swedish context, Costa 2012 for the Italian context, and Dafouz 2011 and Doiz, Lasagabaster 2018 for the Spanish context). Not surprisingly, on the occasions when the participants from our study reported that their teachers had coped with language issues, these were generally limited to oral production (speaking, oral presentation, vocabulary), whereas writing, pronunciation and grammar were not normally addressed. Therefore, it could be argued that the language issues that required a higher level of language expertise (e.g. grammar, writing) or the areas the teachers tended to feel more vulnerable in, such as pronunciation (see Doiz, Lasagabaster 2016, for an analysis of the teachers' self-reported weak points), were not usually tackled in the classroom by the teachers. In this vein, Cots (2013, p. 117) has argued that, in contexts where focus was on content primarily, the lack of attention to language provided by the lecturers "may be due not only to what they see as their imperfect communicative competence in English, but also to their lack of training in language teaching," which would, in turn, involve a lack of

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language awareness (Arnó-Macià, Mancho-Barés 2015). Additionally, Costa (2012, p. 40) speculated that "grammatical clarifications were seen as too obvious an instance of linguistic focus, and thus the lecturers did not feel competent to deal with them," while Basturkmen and Shackleford (2015) claimed that grammar errors were not addressed because they did not hinder communication, a fact that may not be always the case as stated by Arnó-Macià and Mancho-Barés (2015), who discuss a context in which communication is breached due to language inaccuracies.

However, with the exception of a few studies mentioned in Basturkmen and Shackleford (2015), there is still very little research on the actions taken by content teachers to support the learning of academic registers in the classroom. All in all, both the literature and our results indicate that students and teachers agree on the convenience of the language specialist, and not the content teacher, to deal with language issues. But the terms in which the specialist participates in the classroom need to be carefully agreed upon since some teachers have voiced their concern regarding time constraints (Doiz *et al.* 2019), that is to say, they worry that the language specialist will take too much of their class time and that as a result they will not have sufficient time to cover the content of the course. Furthermore, too much emphasis on language matters may take the "magic" of EMI away, and might remind the students of the EFL classroom too much.

Finally, when asked about linguistic abilities in which they would like to receive language support (research question 3), the whole sample of the participants singled out those related to oral production. However, when the answers of the two cohorts were analysed separately, the Spanish students ranked reading specialised texts first, followed by vocabulary, oral presentations and speaking. By contrast, the Italian students preferred to have language support in oral presentations, followed by speaking and pronunciation. The differences between the Italian and the Spanish students' responses may be attributable to a number of factors. First, there seems to be a connection between the language skill each group would like to focus on in class and the degree of difficulty they attribute to the skill in question. In the case of the Spanish students, reading specialised texts was stated to be the most difficult skill; in the case of the Italian students, speaking and pronunciation were judged in second and third place of difficulty. Second, the disparities between the two groups could be attributable to the specialisation or disciplines being followed (Airey 2009; Bolton, Kuteeva 2012; Kuteeva, Airey 2014; Lasagabaster 2018). In this regard, it should be borne in mind that, unlike the Italian students who were engineer majors, the Spanish students were enrolled in business administration, engineering, economics, history, marketing, public administration and a double degree in business and law, all of which may place strain on their ability to read specialised texts and understanding specialised vocabulary. Third, methodological issues such as the tasks the students are asked to carry out in their classes and the course evaluation methods may have also influenced the students' responses. Traditionally, Italians are required to take oral exams and are more likely to feel pressured to work on their speaking abilities. By contrast, Spanish students, who are normally evaluated through written work, may prefer to work on their writing skills. It should be noted that spoken English came second to last in the list of language areas that the participants in the two contexts would like to receive language support in, revealing the fact that studying more informal or less academic English is not one of the students' top priorities in the context of EMI.

As for student evaluation preferences, our study revealed that the majority of the Italian and Spanish students ranked written final tests first, and oral final tests last. Although this matter needs to be researched in detail, the students' response could be

linked to the difficulty that producing spontaneous stretches of speech in the foreign language poses for them, in addition to the fact that oral exams do not allow for planning or corrections. By contrast, students have more control over language matters in the written tests and, consequently, being evaluated through written tests seem to have some advantages over the oral exams. Nevertheless, regardless of the evaluation procedure adopted, the majority of the participants in the sample as a whole and 70.4% of the Italian students in particular, agreed that language aspects should not be taken into account in their final marks. In fact, this view is also shared by the teachers, who do not normally penalize language errors or inaccuracies in the students' marks for three main reasons: (i) they do not perceive themselves as English teachers as reflected in the literature (Airey 2012), (ii) they are mainly concerned with the subject matter (Doiz, Lasagabaster 2017), and (iii) they may not appear to be capable of marking the students' English (Doiz *et al*. 2019). Once again, the participants' position revealed their perception of English as the vehicle for the content, not as an end in itself. Furthermore, as stated above, the students' view on this matter may also reflect their belief that English should be mastered by the time they reach university and it should not be an issue to be considered anymore.

Basturkmen and Shackleford (2015, p. 89) state that "[as] Gibbons has argued, students are engaged not only in learning the conceptual matter of the discipline but also in learning the discourse of register of the discipline." This is especially crucial in the case of EMI, where language concerns take a more relevant role and the teachers' and students' language proficiency is one of the main challenges for the implementation of EMI (Arnó-Maciá, Mancho-Barés 2015; Doiz, Lasagabaster 2018). Hence, while the introduction of language support as one possibility to complement the EMI classroom may seem positive, in order to ensure its success, it is critical that decision-makers at the university establish and define language-learning objectives as part of the goals of EMI. Moreover, it is also their responsibility to provide the blueprint with the advice of experts on the field, and to allocate the means to allow the fulfilment of the objectives. However, since not all content teachers agree on the importance of form in the foreign language in EMI (Basturkmen, Shackleford 2015; Costa 2012), the first step should be to conduct research to determine the effects of addressing language matters on the development of the class and on content learning, and to further investigate the slowly growing research on the teachers and the students' views on the matter. Research results may become the necessary tool to change the attitude of those lecturers reluctant to focus on language aspects in their EMI classes.

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References

Ackerley K. 2017, *What the students can teach us about EMI and language issues*, in Ackerley K., Helm F. and Guarda M. (eds.), *Sharing Perspectives on English-Medium Instruction*, Peter Lang, Bern, pp. 257-284.

Aguilar M. and Rodríguez R. 2012, *Lecturer and student perceptions on CLIL at a Spanish university*, in "International Journal of Bilingual Education and Bilingualism" 15 [2], pp. 183-197.

Airey J. 2009, *Science, language and literacy: Case studies of learning in Swedish university physics*, Uppsala dissertations from the Faculty of Science and Technology, University of Uppsala, Uppsala.

Airey J. 2012, *'I don't teach language.' The linguistic attitudes of physics lecturers in Sweden*, in "AILA Review" 25, pp. 64-79.

Arkın E. and Osam N. 2015, *English-medium higher education: A case study in a Turkish university context*, in Slobodanka D., Hultgren A.K. and Jensen C. (eds.), *English-medium Instruction in European Higher Education*, Mouton De Gruyter, Berlin, pp. 177-199.

Arnó-Macià E. and Mancho-Barés G. 2015, *The role of content and language in content and language integrated learning (CLIL) at university: Challenges and implications for ESP*, in "English for Specific Purposes" 37, pp. 63-73.

Bartik K., Maerten C., Tudor I. and Valcke J. 2012, *A Discussion Brief of Content and Language Integrated Learning (CLIL) at the Faculty of Applied Sciences*, Université Libre de Bruxelles, Bruxelles.

Basturkmen H., and Shackleford N. 2015, *How content lecturers help students with language: An observational study of language-related episodes in interaction in first year accounting classrooms,* in "English for Specific Purposes" 37, pp. 87-97.

Belhiah H. and Elhami M. 2015, *English as a medium of instruction in the Gulf: When students and teachers speak*, in "Language Policy" 14 [1], pp. 3-23.

Bolton K. and Kuteeva M. 2012, *English as an academic language at a Swedish university: Parallel language use and the 'threat' of English*, in "Journal of Multilingual and Multilingual Development", 33 [5], pp. 429-447.

Clark C. 2017, *Perceptions of EMI the students' view of a Master's degree programme*, in Ackerley K., Helm F. and Guarda M. (eds.), *Sharing Perspectives on English-Medium Instruction*, Peter Lang, Bern, pp. 285-308.

Coleman J., Hultgren K, Li W., Tsui C-F.C. and Shaw P. 2018, *Forum on English-medium Instruction*, in "TESOL Quarterly" 52 [3], pp. 701-720.

Costa F. 2012, *Focus on form in ICLHE lectures in Italy: Evidence from English-medium science lectures by native speakers of Italian*, in "AILA Review" 25, pp. 30-47.

Costa F., Mariotti C. 2017, *Students' profiles and their reception of English-medium Instruction in Italian universities*, in Boggio C. and Molino A. (eds.), *English in Italy: Linguistic, Educational and Professional Challenges*, Franco Angeli, Milano, pp. 160-181.

Costa F. and Pladevall-Ballester E. 2018, *Language teachers' perspectives on the CLIL experience in Catalan and Lombard secondary schools*, in "Rassegna Italiana di Linguistica Applicata" 3, pp. 73-96.

Cots J.M. 2013, *Introducing English-medium instruction at the University of Lleida (Spain): Intervention, beliefs and practices*, in Doiz A., Lasagabaster, D. and Sierra J. (eds.), *English-Medium Instruction at Universities Worldwide: Global Challenges*, Multilingual Matters, Bristol. pp. 106-128.

Coyle D., Hood P. and Marsh D. 2010, *CLIL: Content and language integrated learning*, Cambridge University Press, Cambridge.

Dafouz E. 2011, *English as a medium of instruction in Spanish contexts*, in Ruiz de Zarobe Y., Sierra J.M. and Gallardo F. (eds.), *Content and foreign language integrated learning,* Peter Lang, Bern, pp. 189-209.

Dimova S., Hultgren A.K. and Jensen C. 2015, *English-medium instruction in European higher education: Review and future research*, in Dimova S., Hultgren A.K. and Jensen C. (eds.), *English-medium Instruction in European Higher Education*, Mouton De Gruyter, Berlin, pp. 317-324.

Doiz A., Lasagabaster D. and Sierra J. 2013, *English as L3 at a bilingual university in the Basque Country, Spain*, in Doiz A., Lasagabaster D. and Sierra J. (eds.), *English-Medium Instruction at Universities Worldwide: Global Challenges*, Multilingual Matters, Bristol, pp. 84-105.

Doiz A. and Lasagabaster D. 2016, *The motivational self system in English-medium instruction at university*, in Doiz A. and Lasagabaster D. (eds.), *CLIL experiences in secondary and tertiary education: In search of good practices*, Peter Lang, Frankfurt am Main, pp. 127-160.

Doiz A. and Lasagabaster D. 2017, *Teachers' beliefs about translanguaging practices*, in Mazak C. and

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Carroll K. (eds.), *Translanguaging in higher education: Beyond monolingual ideologies,* Multilingual Matters, Bristol, pp. 157-176.

Doiz A. and Lasagabaster D. 2018, *Teachers' and students' L2 motivational self-system in English-medium instruction: A qualitative approach*, in "TESOL Quarterly" 52 [3], pp. 657-679.

Doiz A., Lasagabaster D. and Pavón V. 2019, *The integration of language and content in English-medium instruction courses: lecturers' beliefs and practices*, in "Ibérica" 38, pp. 151-175.

Dörnyei Z. 2007, *Research methods in applied linguistics: Quantitative, qualitative and mixed methodologies*, Oxford University Press, Oxford.

Evans S., and Morrison B. 2011, *The student experience in English-medium higher education in Hong Kong*, in "Language and Education" 25 [2], pp. 147-162.

Inbar-Lourie O. and Donitsa-Schmidt S. 2013, *Englishization in an Israeli teacher education college: Taking the first steps*, Doiz A., Lasagabaster, D. and Sierra J. (eds.), *English-medium Instruction at Universities*, Multilingual Matters, Bristol, pp. 151-173.

Kim J., Tatar B and Choi J. 2014, *Emerging culture of English-medium instruction in Korea: Experiences of Korean and international students*, in "Language and Intercultural Communication" 14 [4], pp. 441-459.

Kim E.G. and Yoon J.-R. 2018, *Korean Science and Engineering Students' Perceptions of English-Medium Instruction and Korean-Medium Instruction*, in "Journal of Language Identity & Education" 17 [3], pp. 182-197.

Klaassen R.C. 2001, *The international university curriculum: Challenges in English-medium engineering education*, Doctoral thesis, Technische Universiteit Delft.

Kuteeva M. and Airey J. 2014, *Disciplinary differences in the use of English in higher education: Reflections on recent language policy developments*, in "Higher Education" 67, pp. 533-549.

Lasagabaster D. 2018, *Fostering team teaching: Mapping out a research agenda for English-medium instruction at university level*, in "Language Teaching" 51, pp. 400-416.

Lo Y.Y. 2015, *A glimpse into the effectiveness of L2-content crosscurricular collaboration in content-based instruction programs*, in "International Journal of Bilingual Education and Bilingualism" 18, pp. 443-462.

Macaro E., Curle S., Pun J., Jiangshan A. and Dearden J. 2018, *A systematic review of English Medium Instruction in Higher Education*, in "Language Teaching" 51 [1], pp. 36-76.

Pecorari D., Shaw P., Irvine A. and Malmstrom H. 2011, *English for Academic Purposes at Swedish universities: Teachers' objectives and practices*, in "Ibérica" 22, pp. 55-78.

Tatzl D. 2011, *English-medium masters' programmes at an Austrian university of applied sciences: Attitudes, experiences and challenges*, in "Journal of English for Academic Purposes" 10, pp. 252-270.

Valcke J. and Wilkinson R. 2017, *Integrating Content and Language in Higher Education: Perspectives on Professional Practice*, Peter Lang, New York.

Wächter B. and Maiworm F. 2014, *English-taught programs in European higher education: The state of play in 2014*, Lemmens, Bonn.

Weimberg L. and Symon M. 2017, *Crossing borders: The challenges and benefits of a collaborative approach to course development involving content and language specialists in different countries*, in Valcke J., and Wilkinson R. (eds.), *Integrating content and language in higher education: Perspectives and professional practice*, Peter Lang, Frankfurt am Main, pp. 135-150.