



Transitioning to English Medium Instruction in Operations Management Courses Taught on Spanish Business Degrees: Perceptions and Diagnosis

José A. Alfaro-Tanco¹ , Hanne Roothoof² , Ruth Breeze¹ 

¹Universidad de Navarra (Spain)

²Universidad Pública de Navarra (Spain)

jalfaro@unan.es, hanne.roothoof@unavarra.es, rbreeze@unan.es

Received: October 2019

Accepted: May 2020

Abstract:

Purpose: The objective of the present study is to analyze the effects of the transition to English Medium Instruction (EMI) on lecturers in Spanish universities in one specific area, namely Operations Management courses taught in Business degrees.

Methodology: After reviewing the bibliography, we designed a questionnaire based on previous research into EMI in non-Anglophone countries. By administering this online, we gathered information from 20 EMI lecturers giving Operations Management courses in thirteen Spanish Universities. The data were analyzed by means of a descriptive analysis of the closed-ended questions and thematic content analysis of the open-ended questions.

Findings: Most professors report that they initially reacted negatively to the idea of having to teach in English, but now realize that most of their fears were ungrounded. They emphasize that it is very important to invest time in training seminars and the exchange of experiences. Other relevant findings are the perceived lack of incentives to teach in English, the need to use tools and techniques to improve the interaction with students, and the considerable amount of time needed for class preparation. Our results are discussed in the light of the bibliography on EMI and recommendations are made with regard to the implementation of EMI in Operations Management courses and related areas.

Originality/value: The results of this small-scale study of EMI in OM shed important light on how EMI is impacting on one field. They are consistent with previous research elsewhere, but also provide some insights that may pave the way for further research and development.

Keywords: English Medium Instruction, Operations Management, adaptation, Spain

To cite this article:

Alfaro-Tanco, J.A., Roothoof, H., & Breeze, R. (2020). Transitioning to English medium instruction in operations management courses taught on Spanish business degrees: Perceptions and diagnosis. *Journal of Industrial Engineering and Management*, 13(3), 529-545. <https://doi.org/10.3926/jiem.3032>

1. Objectives and Background

English Medium Instruction (EMI) now has a significant presence in universities across the whole of Europe. This move towards EMI has been accelerated by the need to offer courses to exchange students who do not know the local language, as well as by institutions' desire to attract international students in general, and the increasing demand for bilingual degrees. All these factors mean that this trend is likely to continue in the foreseeable future (Wächter & Maiworm, 2014).

In Spain, this trend began in the early 2000s, driven mainly by the desire to participate in Erasmus schemes and to attract ambitious students in an increasingly competitive higher education market, and EMI is now an established feature of many university courses. Given the demographic profile of Spanish university staff, this move towards providing an increasing number of courses in English has meant that many experienced lecturers have been placed under pressure to change the language in which they deliver their courses. At the same time, a new generation of academics is coming up for whom being able to impart EMI is an obligation. The implementation of EMI courses at the university level in Spain has been the object of some research attention (e.g. Doiz, Lasagabaster & Sierra, 2012; Fortanet-Gómez, 2013), and previous research has focused on the perceptions and needs of students (Dafouz & Núñez, 2009; Breeze & Miller, 2012; Breeze, 2014), as well as on the attitudes and beliefs of the teaching staff involved (e.g. Fortanet-Gómez, 2012; Dafouz, Hüttner & Smit, 2016).

The experience so far suggests that EMI is being integrated successfully into university programs in Spain, but that the intrinsic level of difficulty surrounding the adoption of EMI varies considerably between disciplines. A large proportion of the research so far has focused on the two main fields in which English-taught programs are common, namely Business Studies and Engineering (Wächter & Maiworm, 2014; Dafouz, Camacho & Urquía, 2014; Aguilar, 2017). However, much of this research tends to draw sweeping conclusions about the situation across whole faculties or broad areas of study. Arguably, one of the problems besetting EMI research is that it tends to overgeneralise: it would certainly not be the same to talk about teaching Medicine and Law, or Physics and Literature, for example, since the linguistic demands of each subject are different, and the degree to which courses might have a local or an international focus also varies considerably. It is clear that there are also major differences between engineering and business, and between different subjects within these degrees, since some are highly number-centred while others make much greater demands on teachers' and students' language competences. To add to the complexity of this intersection, professors with an engineering background are often required to teach courses in schools of Economics, where the approach tends to be less technical and more discursive, placing greater demands on participants' reading, writing and speaking skills. One such course is Operations Management (OM), which in Spain is frequently taught by specialists in production management with an academic training in the area of production engineering. Situated at the intersection between engineering and business, such courses provide an interesting case to study in the context of EMI.

In this paper, we provide an overview of research into lecturers' perspectives on EMI in general. We then describe a survey administered to 20 EMI lecturers in the area of OM in Spain, and discuss the results in the light of the bibliography on EMI, bringing out what is specific about this area, and showing how highly focused studies such as this can be useful to break new ground in EMI research.

2. Background. Main findings in EMI Research

To pave the way for our present study, we will first review the bibliography concerning the experience of EMI from the lecturers' perspective, identifying several broad challenges facing universities and individuals all over the world when they embark on EMI programs. These challenges can be briefly summarized as relating to: language competences, communication practices, methodology, time, training, and specific subject-related issues.

First, regarding English language competence, as Hellekjaer and Westergaard (2002) noted, for reasons that can be traced back to the past educational traditions of specific countries, in some parts of Europe there is a notable difference between the level of English competence among senior professors and their junior colleagues or students. This picture, with the corresponding insecurity among older teachers, has been described by various researchers focusing on EMI in different countries (Ball & Lindsay, 2013; Hu & Lei,

2014; Pulcini & Campagna, 2015; Guarda & Helm, 2016). In the case of Denmark, Jensen and Thøgersen (2011) found that age was one of the main factors conditioning teachers' attitudes towards EMI, with almost 60% of lecturers under 30 feeling positively towards EMI, compared with less than 40% of those aged over 60. On the positive side, Hellekjaer and Westergaard (2002) also noted that discrepancies in English competence did not appear to influence student evaluations of the overall course content (students rated their teachers according to their ability to communicate content, not their accuracy in English). Unfortunately, however, these perceived differences in English skills did affect teacher confidence and morale (Hellekjaer & Westergaard, 2002; Airey, 2011).

Second, even when lecturers have an international profile and felt confident using English, communication has been reported to remain a problem. There is a perceived lack of ease and flexibility, not least because communication with students cannot be guaranteed in the way that it would be when using the first language (L1) shared by teachers and students (i.e. Spanish in Spain) (Collins, 2010). This can have an inhibiting effect, and some teachers feel that their EMI classes are less entertaining or less spontaneous, or that they are less capable of engaging in discussions or interacting with students (Airey, 2011; Westbrook & Henriksen, 2011; Fortanet-Gómez, 2012; Tatzl, 2011). For similar reasons, they may also feel less capable of providing feedback on student work (Uys, van Der Walt, van den Berg & Botha, 2007). The sense that communication is sub-optimum in the shared second or foreign language (L2) has led some researchers to revisit the issue of using the L1 as a resource on EMI programs (Channa, 2012; Söderlundh, 2012; Karakas, 2016; Kim & Tatar, 2017), but the conclusions reached in this sense vary enormously from one context to another.

Third, given the communication problems mentioned above, many EMI lecturers feel that they need to adapt their courses in various ways, which include measures such as increasing the amount of obligatory reading material, or changing their teaching style to incorporate more visual material or more interactive tasks (Dafouz & Núñez, 2009; Doiz et al., 2012; Guarda & Helm, 2016). Others have pointed to the need to reduce course content, since EMI courses proceed at a slower rate (Hahl, Järvinen & Juuti, 2014; Thøgersen & Airey, 2011). Some researchers have related the transition to EMI to broader trends within bilingual education, such as Content and Language Integrated Learning (CLIL) (see Lasagabaster, 2013), a model in which content-related language support for students is specifically factored into the equation (Aguilar & Rodríguez, 2012). Aguilar (2017) used questionnaires and interviews in three Catalan Universities to determine whether lecturers used the CLIL focus or identified their practices as EMI, which consists of simply giving the course in English. She concluded that the EMI focus is clearly the most common: lecturers do not want to teach English or provide linguistic support: they believe their proper role is to impart academic content in their subject area. Her findings concur with those from northern Europe, where Airey (2012) and Unterberger (2014) found that content lecturers generally rejected the notion that they should be helping the students with their English skills.

Fourth, even though most university lecturers usually have considerable experience reading, researching and publishing in English, they generally report that when they start EMI, they need to invest a much larger amount of time in order to prepare their courses in the new language (Vinke, Snippe & Jochems, 1998; Dafouz & Núñez, 2009; Airey, 2011; Fortanet-Gómez, 2012; Başibek, Dolmaci, Cengiz, Bür, Dilek & Kara, 2014). In some circumstances, universities may reduce the teaching load for those involved in EMI, but in others this is not the case.

Fifth, given the challenges outlined above, it would seem appropriate for universities to offer training programs for teachers who are new to EMI (Klaassen & De Graaff, 2001). However, such programs are rare. In their survey of EMI preparation for lecturers at Catalan universities, Mancho-Bares and Arnó Macià (2017) found that top-down policies implementing EMI were rarely connected with actual bottom-up practices to support EMI, and that although the importance of teacher training is recognized, when this is provided, it usually takes the form of language courses. In practice, it is mainly left to the individual lecturers or departments to work out how EMI is to be operationalized, although recent developments such as the EQUIIP Project (EQUIIP Project, 2019) are to be welcomed in this sense.

Finally, as we mentioned in the introduction, one specific aspect of EMI has been largely ignored by researchers eager to generalize across disciplines and contexts, namely, the field of disciplinary differences (Airey, Lauridsen, Räsänen, Salö & Schwach, 2017). Some university courses are highly numbers-focused, centering on the resolution of problems and/or equations, with very little discursive language. In others, language may play the leading role, with lecturer performance – and student grades – determined by their discursive abilities and rhetorical skills. To add a final twist to this, it is also clear that some university subjects deal with matters that are broadly similar across cultures, while others are deeply embedded in a particular culture. It is obviously not the same to teach human anatomy in English and to teach Spanish law or history in English: we can safely assume that anatomy varies rather little from one European country to another, and the terms used in English will have clear equivalents in other languages; but legal and historical concepts are not the same in different cultures, and the vocabulary needed to talk about a particular topic may simply not exist in English. Research on EMI so far has seldom taken such disciplinary differences into account, although it is clear that for some disciplines the introduction of English is seen as less problematic than in others. In a survey focusing on an Italian university, Helm and Guarda (2015) found that most EMI-courses were implemented in the School of Engineering and the School of Economics and Political Science. In Sweden, Kuteeva and Airey (2014) noted that science lecturers accepted the omnipresence of English more readily than lecturers in humanities and social sciences, for whom language is not simply a tool but also a way to create meaning.

For this reason, it is clear that further research is needed to investigate how lecturers face up to subject-specific challenges when they start off in EMI. In this, the field of OM provides interesting scope for a detailed study for several reasons. First, situated between Engineering and Business, and usually taught by engineers to economists, OM courses tend to place heavy linguistic demands on lecturers. Moreover, in the context of EMI, not only do teachers have to adopt a more discursive approach to OM than would be usual in engineering, but they have to do so in a new language. Finally, the OM lecturers in Business degrees in Spain constitute a relatively compact and cohesive group, in constant contact through their professional association ACEDEDOT. This circumstance enables us to address the ways in which an entire professional community addresses the new scenario arising from EMI.

Against this background, the objective of the present study is to analyze the effects of the transition to EMI on lecturers in Spanish universities in one specific area, namely Operations Management (OM) courses taught in Business degrees. Importantly, in the systematic literature review on EMI by Macaro, Curle, Pun, An and Dearden (2018), not a single one of the 11 Spanish studies focused on EMI in the Operations Management context. Thus, to the best of our knowledge, this is the first study which focuses exclusively on the field of Operations Management in the Spanish context, and the first paper that has taken as its object of study a single, highly-defined content area united through its active professional association.

3. Methodology

This study was carried out under the auspices of ACEDEDOT, an organization whose members are mostly lecturers on OM courses in business degrees. This association is characterized by having a special interest in studying methodological issues in the scope of Operations Management courses in Business degrees. Most of its members have an academic background in engineering. Through the association, they collaborate actively to improve their teaching activity and material, meet regularly to discuss pedagogical issues, and produce material that can be shared for teaching purposes. In the first step, through the organization network, we contacted the members of the board in order to get a list of the members and the universities where they work. This permitted us to know that there were 22 universities where there was, at least, one course in English. Second, we identified a contact person in each of these centres, who was always a member of the ACEDEDOT organization, and all of them answered, which shows their high degree of interest in this study as a tool to improve the quality of teaching. In this stage, we established that nine of these universities so far did not offer OM courses in English in Business Administration (BA) degrees. Table 1 shows the 13 universities where OM courses were offered in English in BA degrees and the number of professors that completed the survey.

University	# of EMI Operations Management courses analyzed in Business Administration degrees in 2017-2018
Cantabria	1
Carlos III de Madrid	2
Castilla La Mancha	1
Complutense de Madrid	1
Internacional de Catalunya	1
Murcia	1
Navarra	2
Oviedo	1
Pablo de Olavide	2
Politécnica de Valencia	2
Rey Juan Carlos de Madrid	4
Sevilla	1
Zaragoza	1
TOTAL	20

Table 1. Participating universities and number of courses

As we can observe, 20 professors participated in the survey. As each professor taught a specific OM course in 2017-2018, this study analyzes 20 OM courses, which appear in Table 2.

Course title	# of EMI OM courses analyzed in Business Administration degrees in 2017-2018
Continuous Improvement	1
Corporate economics	1
Operations Management	14
Operations Research	1
Logistics	1
Project Management	1
Quality Management	1
TOTAL	20

Table 2. OM courses given by participating professors

In the third step, the survey (see Appendix) was designed on the basis of previous research conducted by Breeze and Roothoof (2018). The specific questions used were based chiefly on findings by Hellekjaer (2007), Hellekjaer and Westergaard (2002), Dafouz and Núñez (2009), and on issues identified in Doiz et al. (2012), Wächter and Maiworm (2014) and Dafouz et al. (2016). The survey was trialled locally and adjusted to ensure easy comprehension and to eliminate ambiguities. The small scale of this study permitted us to make ample use of open-ended questions, which allowed us to obtain much more detailed information and accounts of experiences and feelings, which would probably have passed unnoticed in a traditional questionnaire carried out with a larger population. Fourth, once all the surveys were received, a descriptive analysis was carried out and also a discursive content analysis to determine the main findings.

4. Findings

4.1. Profile of Professors

The first section obtained information about two features of these EMI professors: age and experience in teaching in English.

4.1.1. Age

Regarding age, 50% were between 40 and 57 years old. This age profile is in itself striking, since among younger professors it is more usual to find people who have obtained their PhD in English-speaking countries or who speak English perfectly.

4.1.2. Experience in Teaching English

Figure 1 shows that most professors are experienced in teaching in English and only 10% have given classes in English for under two years. This is positive for the study because it implies that the answers will be based on experience over several academic years.

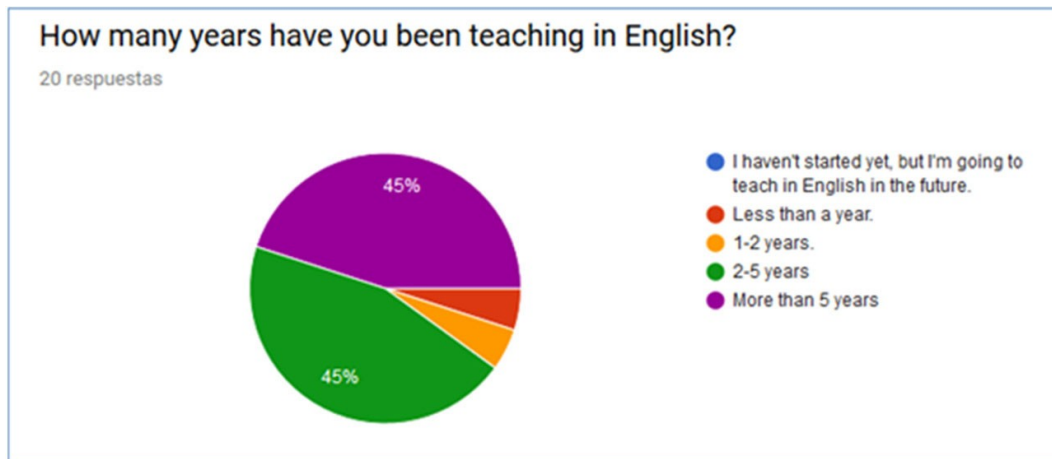


Figure 1. Experience in teaching English

4.1.3. Training in English

Figure 2 shows that most professors have taken official English examinations. We do not know if they decided to do these exams as a personal option or they were obliged to prove their English level.



Figure 2. Examinations

About the type of examinations, the professors signaled TOEIC (1), Proficiency (1), Cambridge Advanced (6), Cambridge First (3), TOEFL (1), and Official Language School (EOI) up to the fourth year (1). The Advanced exam appears to be the most common exam professors use to prove/improve their English level.

4.2. Operations Management as an “English Course”

One question focused on professors’ opinions about the “nature” of Operations Management as a field where it is “natural” to teach in English. The answer was positive: 80% of professors said that OM is an area in which it is natural to teach in English. Some of the reasons they gave were as follows:

“Many vocabularies used in this area is in English”.

“Main OM books are in English”.

“There is more teaching material available (not to mention research)”.

“Most of the research literature is in English, as this research supports most of the content of the Operations”.

“There is a lot of information on the web to support OM teaching, and these materials are mostly in English”.

The facts that most concepts related to OM are originally taken from English and that most of the bibliography and web-resources are also in English are thus the main reasons used to justify why an OM course should be one of the main candidates for EMI.

Regarding the students, we asked lecturers what they thought of their students’ English skills and if the fact that classes were in English benefits the students. On both questions, the answers were positive for more than 50% of the professors, although many of them emphasized that the reality was very variable and the fact that their classes contained both Spanish and international students made it difficult to compare.

5. Main Challenges Facing Professors when Teaching OM Courses in English

In this section, we analyze the following variables: Level of confidence and methodology.

5.1. Level of Confidence

The professors were asked two questions about their attitudes: When you first knew you would have to teach in English, how confident did you feel? How confident do you feel now about teaching in English? The descriptive statistics for each question are described in Table 3.

	Average	Standard deviation
How confident did you feel when you were told you had to teach in English (1-Min; 10-Max)	5.45	3.22
How confident are you teaching in English nowadays (1-Min; 10-Max)	8.35	1.57
How satisfying is the experience (1-Min; 10-Max)	8.15	2.39

Table 3. Descriptive statistics about attitude “at the beginning” and “nowadays”

It is relevant to see that their level of confidence when starting to teach in English was relatively low (even though the standard deviation is high), but it seems we can conclude that the experience has been positive for most professors. At least, the level of confidence nowadays has increased substantially, and the standard deviation is now low. It also seems that the experience of teaching English is really positive for the teachers.

5.2. EMI Lecturers’ Methodology

One of the aspects we are most interested in analyzing is how the professors change their “way of teaching” because of the transition to English. The questions and the results related to this issue were as follows:

5.2.1 Style of Teaching

Eighty per cent of the lecturers answered that their style of teaching changed when teaching in English.

Those professors that answered in a positive way explained in which aspects their way of teaching changed. The most common ones (from most cited to least) were:

- Preparation time (12).
- Less interaction with students (8).
- Putting more information in the Powerpoint or handouts (8).
- Using a different textbook (8).
- Amount of content covered (5).
- Using more videos and multimedia material (4).

About the use of videos, one of the professors explained that:

“I would like to explain that the use of videos is easier (in EMI) because most of them are in English, and students in the Spanish groups do not understand them. Now I have the opportunity to show them this additional material.”

It seems clear that teaching in English has major implications for the time needed to prepare the class, how lecturers interact with students and what tools can be used for the class (leading to greater reliance on power point and multimedia material).

5.2.2. Preparation Time

In the previous section we observed that preparation time was the most relevant change when changing to EMI. Assuming this, we included a specific question about the activities that lecturers do when preparing classes to teach in English. Figure 3 summarizes the results.

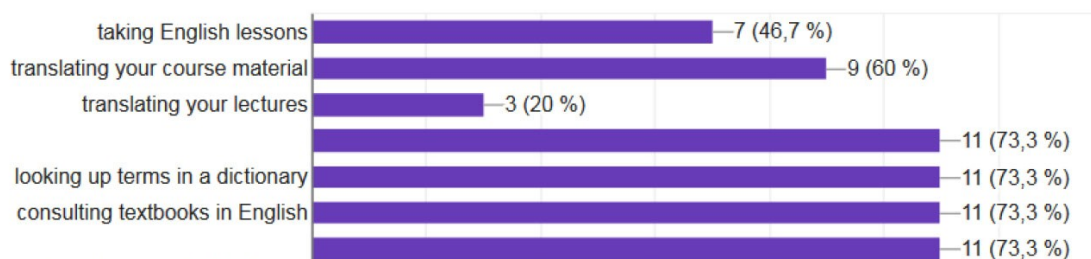


Figure 3. Preparation time aspects

Two additional comments were included:

“Especially during my first years, I used to practice all my lessons in advance. Now, I just review the material and make a similar effort with my English and my Spanish lessons”.

“Preparing my “ear” for two hours listening audios and videos”.

It is thus clear that lecturers invest a considerable amount of time in preparing classes, compared to their classes taught in Spanish.

5.2.3. Language

About the use of Spanish, 80% of professors stated they do not use Spanish at all in their EMI classes, while the other 20% justified the use of Spanish with arguments such as:

“Sometimes to clarify a term.”

“A veces hago paréntesis para dar explicaciones concretas en español a alumnos españoles, pero solo después de varios intentos en inglés.” [Sometimes I do a kind of parenthesis in which I give concrete explanations in Spanish to Spanish students, but only after trying a few times in English.]

“I need to use it when I see them absolutely lost.”

“Realmente lo que creo es que no debería dar las clases en inglés porque los alumnos se llevan menos del 40% de lo que podrían aprender si imparto en castellano.” [Really what I think is that I should not give the classes in English because the students take away less than 40% of what they could learn if I teach them in Spanish.]

“Una cosa que hago es dar a los alumnos un glosario de términos técnicos inglés-español. Siempre les digo que está bien que estudien en inglés, pero que no pueden terminar el curso y no saber cómo se llaman los planes de producción en español, por ejemplo.” [One thing that I do is give the students an English-Spanish glossary of technical terms. I always tell them that it is good for them to study in English, but that they can't get to the end of the year not knowing what production plans are called in Spanish, for example.]

It would therefore be interesting to know how many people are in situations where the students are incoming and mainly do not know Spanish. In such situations, of course, using Spanish is not an option.

When asked whether lecturers should focus on content and/or language (Figure 4), it is striking that a relevant percentage of respondents considered that the teacher should help the students learn language as well as content, even though we are in an undergraduate context where it is assumed that the students' English level should be high enough to cope.

How do you see your role as a teacher giving content courses in English? Do you think you should help the students learn...

20 respuestas

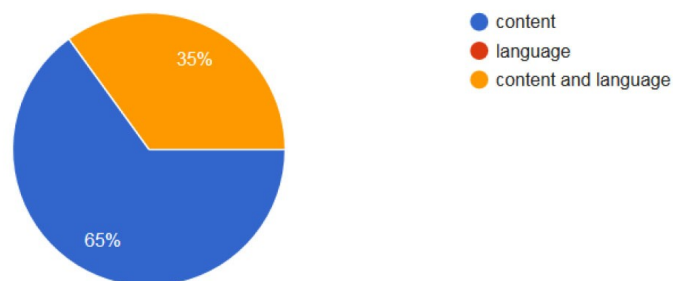


Figure 4. Role as a teacher giving content courses

5.2.4. Interaction with Students

With regard to the question about how easy or difficult it is to give feedback to the students about their grades, 50% said that it is “easy” and 30%, that it is “difficult”. Lecturers made the following comments about methodology and language:

“I tried to change the assessment methods, trying to evaluate content and avoid language assessment. So, in my English courses I usually use test instead of open questions. It is true however that Operations Management modules usually have “a lot of numbers” and they are all the same in both languages”.

“It is difficult because I would like to grade only their Operations Management knowledge, but we are supposed to do both, so I force myself to do it but I don't consider that I am really prepared to. Moreover, if their level is too low, it takes a lot of time because in order to give them an appropriate feedback on their reports, I have to rewrite big parts of them. I really consider that it exceeds my duties”.

It thus seems that language is crucial for interaction with students in evaluation, feedback (solving doubts, for example) for questions, and for encouraging participation. However, lecturers do not feel prepared to work as “English teachers”, and lack confidence when giving feedback to their students, even though many students have a low level of written English.

5.3. Recommendations

We also included a question related to the support provided by the University, the main experiences and difficulties that professors describe, and the most challenging aspects that respondents signaled in the survey in order to define a set of recommendations.

5.3.1. Support Provided by the University

Professors consider that, generally speaking, their university provides adequate support for people who are going to teach EMI OM classes. Figure 5 shows the associated percentages.

Are you satisfied with the support provided by your university to teach effectively in English?

20 respuestas

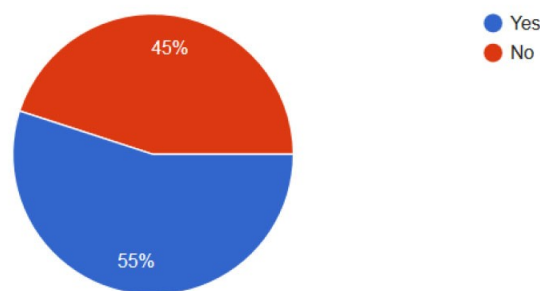


Figure 5. Opinion about support provided by University

Those professors (9) that consider that their university did not provide sufficient support made the following comments and suggestions:

“English classes specifically focused on teaching vocabulary and teaching structures. Sometimes, we do not know how to explain correctly the easiest things (like explaining the general structure of the course, or how the grading will be). I mean that we may not use the specified terms”.

“English courses, correction of the material”.

“My University should offer specific courses to successfully teach in English”.

“[We need] An English editor and a particular (i.e. private) teacher to revise the classes and the material”.

“[We need] Practical sessions with expert/ native teachers”.

Professors highlight aspects related to support for correcting, teaching, editing, financial support, fewer bureaucratic aspects and too many students.

5.3.2. How to Improve the Interaction with Students

Regarding interaction with students, the respondents made the following suggestions:

“I try to adapt my course every year based on the experience I have, the things I perceive while I am teaching and, of course, feedback of the students or even they mark.”

“A greater engagement with Erasmus students.”

One lecturer explained the following experience in this respect:

“I have been strongly influenced by the positive feedback received from my Erasmus students. The first year I had big doubts about my English communication skills, because my Spanish students were not following my indications (when preparing their reports or solving some easy exercises, for example).”

The influence of exchange students thus seems to be positive even if it could be more difficult to interact with them at first.

5.4. Challenges that Remain

One issue that arose out of the questionnaire responses was the problem of coordination between the EMI groups and those groups taking the same course in Spanish:

“The coordination required among the English and the Spanish groups. As long as everything is required to be equal, it implies an extra effort for literally translating everything. “

Another issue concerned deployment of personnel: it is usual for there to be very few professors that are able to teach in English, which makes those concerned feel “alone”.

Moreover, to exacerbate matters, there are rarely incentives to teach in English:

“That it is more tiring that teaching in your mother tongue for several reasons: (1) you have to make a bigger pronunciation effort, (2) you have to be more concentrated, (3) at least in my university there is only 1 English group per subject so you cannot repeat the class in other group, and (4) you have to prepare your own material in English (you cannot use the one in Spanish from your colleagues). For that reason, I think that Universities should keep bonuses (in the form of teaching less hours) for those professors teaching in English”.

6. Discussion

The results of this small-scale study of EMI in OM in Spain are consistent with previous research in the area of EMI in other fields, but also provide some ideas that may pave the way for further research and development.

In line with findings by Kuteeva and Airey (2014), the OM lecturers in this study accepted the omnipresence of English in their discipline. They themselves were mainly engineers by training, and they had no difficulty acknowledging the dominance of English in ‘hard’ disciplines such as theirs. Moreover, our participants were convinced of the international dimension of their specialty. The vast majority of our respondents believed that teaching in English was a natural choice for OM, given that the bibliography, terminology and resources are dominated by sources in English. As Kuteeva and Airey put it (2014: page 543), *“language choice is closely connected to disciplinary practices”*. When a discipline is conceptualized as international in character, subject matter, and methodology there are fewer problems teaching it in English than when the discipline lacks an obvious international dimension, is deeply embedded in local culture, and examples and teaching materials are mainly in the local language. OM is evidently conceptualized as an international discipline, and the application of EMI is perceived as useful and enriching.

As in previous research (Hellekjaer & Westergaard, 2002; Airey, 2011), the OM lecturers generally started out with a lack of confidence in their English skills. In their case, this may be compounded by the fact that OM professionals with an engineering background are here faced with the need to produce a less numbers-focused, more discursive course for Business students, which places more pressure on their language competences. Fortunately, most of the lecturers have managed to overcome their initial insecurities and they generally now feel very competent to teach their subject in English. It is particularly interesting that the lecturers in the study reported a great variation in their initial feelings, including great trepidation in some cases, but their current assessment of their confidence to teach in English is overwhelmingly high.

Nonetheless, as in other studies of lecturers' perceptions of EMI (Vinke et al. 1998; Dafouz & Núñez, 2009) the OM lecturers still struggle with certain aspects, such as the extra time needed to prepare for EMI, which seems to be particularly important in the first year. They also mentioned the difficulty of building rapport and interacting with students spontaneously, which was also noted by lecturers in Sweden (Airey, 2011) and Austria (Tatzl, 2011). Another area of difficulty pinpointed here is that of giving feedback to students, which was also identified as an issue by Uys et al. (2007). Even though half of the OM lecturers stated they had no problems with this, 30% recognized that giving feedback could be problematic, for instance when dealing with poorly written work. In our case, their engineering background may have compounded this problem, since their own training had not prepared them for setting or correcting student essays or projects as would be expected in the case of Business students. This area is one in which further studies are needed, since there is some evidence from the present study and elsewhere that EMI lecturers systematically avoid activities that require attention to language issues (Airey, 2012; Aguilar, 2017), possibly even resorting to multiple choice tests instead of written answers. This suggests that some form of collaboration with language specialists might be useful to design tasks that involve language production, including the appropriate evaluation rubrics, which would maximize the learning opportunities for EMI students.

It was particularly positive to note that some of the OM lecturers in this study stated they had changed their teaching methodology for the better, for example by incorporating more videos and multimedia. The availability of multimedia resources is greater in English, and EMI provides a natural setting for exploiting these resources to the full. According to these participants, abundant material and resources for OM teaching are available online, and this can help them to update and revamp their classes as they make the transition to EMI. This confirms findings by Dafouz and Núñez (2009), Doiz et al., (2012), and Guarda and Helm (2016), who observed that the change of language can lead to innovation in teaching. On the other hand, confirming previous studies (Aguilar, 2017; Airey, 2012), the majority of the OM lecturers believed they should focus on content, and not on language. There is no evidence from these questionnaire results that the OM lecturers had become aware of CLIL methodology, which involves integration of language support for the students, but this is also fairly typical of the situation in Spanish university-level EMI across the board (Aguilar, 2017).

Regarding the use of other languages in the classroom, the OM lecturers also followed the general trend identified elsewhere in countries where the presence of English outside the classroom is restricted (Karakas, 2016; Kim & Tatar, 2017; Breeze & Roothoof, forthcoming). Despite increasing evidence concerning the benefits of codeswitching or translanguaging (e.g., Moore & Nikula, 2016), 80% of the OM lecturers adhered to an English-only policy. Those who did use Spanish occasionally seemed to conceptualize this measure as a last resort when students obviously had not understood important aspects of the class content.

Finally, like many EMI lecturers in other parts of Europe (Mancho-Bares & Arnó Macià, 2017), some of the participants of the study felt that their universities had not provided them with sufficient training and support to undertake the transition into English. Although universities usually provide language courses, this is not enough to guarantee successful EMI: training courses covering aspects such as interaction with students and providing feedback on student work would be beneficial. On a more general level, universities need to plan the implementation of EMI courses more carefully and take into consideration staff capabilities and training needs, the cost and time involved in preparing new course material, and the ongoing implications of internationalization for the institution in general.

It is clear that the experiences and opinions of the OM lecturers in this sample reflect the general trends among EMI practitioners from studies carried out in other parts of Europe. It would therefore be a good moment for them to build common ground with their colleagues elsewhere, perhaps through international associations or professional bodies, and consider pooling their existing resources or developing new ones with a view to optimizing EMI in OM in Spain and beyond.

7. Conclusions

This study has opened discussion of EMI in OM in Spain. Our evidence suggests that Spanish OM lecturers follow a similar path to EMI lecturers elsewhere in Europe and in different subject areas. Although they initially experience some trepidation, they generally respond positively to the challenge of EMI, and find it rewarding, particularly with

more international classes. Regarding the specificity of OM, our findings generally indicate that the lecturers consider it an appropriate subject for EMI, owing to its international focus and the abundance of material available in English. Future studies could be designed to foster positive innovation in two areas: first, it would be useful to bring together resources, tasks and activities suitable for use in EMI in OM; and second, it would be positive to document good practices in this area. Professional associations like ACEDEDOT would once again prove their usefulness and relevance to members by supporting such ventures.

The present study has certain limitations. The group of participants investigated is small and highly specific, and at most provides a snapshot in time of a rapidly changing scenario. However, this specificity can also be understood as a strength. Instead of aiming at broad generalizations, we focused on one cohesive professional community which has the capacity and will to promote the professional competences of its members. Our qualitative analysis of the participants' comments and testimonies enabled us to draw a detailed and accurate picture of the experience of transitioning to EMI in this field. As a concrete outcome of the present study, specialized training for EMI in OM could be organized efficiently through this institution, focusing on the aspects that are particularly taxing for this professional group. In a complementary manner, a shared interest in EMI will enable members to exchange ideas and pool resources through professional meetings and conferences, with a view to promoting excellence in OM teaching. Regarding EMI, now that the initial ground has been broken, further research needs to center more on specific areas of higher education teaching such as this one, so that investigation and peer cooperation can come together in a productive synthesis to ensure high quality EMI.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

References

- Aguilar, M. (2017). Engineering lecturer's views on CLIL and EMI. *International Journal of Bilingual Education and Bilingualism*, 20(6), 722-735. <https://doi.org/10.1080/13670050.2015.1073664>
- Aguilar, M., & Rodríguez, R. (2012). Lecturer and student perceptions on CLIL at a Spanish university. *International Journal of Bilingual Education and Bilingualism*, 15(2), 183-197. <https://doi.org/10.1080/13670050.2011.615906>
- Airey, J. (2011). Talking about teaching in English. Swedish university lecturers' experiences of changing their teaching language. *Ibérica*, 22(22), 35-54.
- Airey, A. (2012). "I don't teach language." The language attitudes of physics lecturers in Sweden. *AILA Review*, 25, 64-79. <https://doi.org/10.1075/aila.25.05air>
- Airey, J., Lauridsen, K., Räsänen, A., Salö, L., & Schwach, V. (2017). The expansion of English-medium instruction in the Nordic countries: Can top-down university language policies encourage bottom-up disciplinary literacy goals? *Higher Education*, 73(4), 561-576. <https://doi.org/10.1007/s10734-015-9950-2>
- Ball, P., & Lindsay, D. (2013). Language demands and support for English-medium instruction in tertiary education. Learning from a specific context. In Doiz, A., Lasagabaster, D., & Sierra, J.M. (Eds.), *English-Medium Instruction at Universities: Global Challenges* (44-64). Bristol: Multilingual Matters. <https://doi.org/10.21832/9781847698162-007>
- Başıbek, N., Dolmacı, M., Cengiz, B.C, Bür, B., Dilek, Y., & Kara, B. (2014). Lecturers' perceptions of English medium instruction at Engineering departments of higher education: A study on partial English medium instruction at some state universities in Turkey. *Procedia-Social and Behavioural Sciences*, 116, 1819-1825. <https://doi.org/10.1016/j.sbspro.2014.01.477>
- Breeze, R. (2014). Identifying student needs in English-medium university courses. In Breeze, R., Llamas, C., Martínez-Pasamar, C., & Tabernero, C. (Eds.), *Integration of theory and practice in CLIL* (143-160). Amsterdam: Rodopi. https://doi.org/10.1163/9789401210614_010

- Breeze, R., & Miller, P. (2012). Predictive validity of the IELTS Listening Test as an indicator of undergraduate student coping ability in Spain. In Taylor, L., & Weir, C. (Eds.), *IELTS Collected Papers 2: Research in Reading and Listening Assessment* (487-518). Cambridge: Cambridge University Press.
- Breeze, R., & Roothoof, H. (2018). *Becoming an EMI lecturer: Cambridge English exams in early-career training and lifelong learning*. Cambridge English Funded Research Programme (CEFRP), Round 8. Final Report.
- Breeze, R., & Roothoof, H. (forthcoming). Using the L1 in university-level EMI: attitudes among lecturers in Spain. *Language Awareness*.
- Channa, M.A. (2012). Teachers' perceptions towards English language as a medium of instruction in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 4(5), 759-764.
- Collins, A. (2010). English-medium higher education: Dilemma and problems. *Eurasian Journal of Educational Research*, 39, 97-110.
- Doiz, A., Lasagabaster, D., & Sierra, J.M. (Eds.) (2012). *English-Medium Instruction at Universities: Global Challenges*. Bristol: Multilingual Matters. <https://doi.org/10.21832/9781847698162>
- Dafouz, E., Camacho, M., & Urquía, E. (2014). 'Surely they can't do as well': A Comparison of Business Students' Academic Performance in English-medium and Spanish-as-first-language-medium Programmes. *Language and Education*, 28(3), 223-236. <https://doi.org/10.1080/09500782.2013.808661>
- Dafouz, E., Hüttner, J., & Smit, U. (2016). University teachers' beliefs of language and content integration in English-medium education in multilingual university settings. In: Nikula, T., Dafouz, E., Moore, P., & Smit, U. (Eds.), *Conceptualising Integration in CLIL and Multilingual Education* (123-143). Bristol: Multilingual Matters. <https://doi.org/10.21832/9781783096145-009>
- Dafouz, E., & Núñez, B. (2009). Content and Language Integrated Learning in tertiary education: devising a new learning landscape. In Dafouz, E., & Guerrini, M. (Eds.), *Content and Language Integrated Learning across educational levels: experiences from primary, secondary and tertiary contexts* (101-112). London: Richmond.
- EQUIIP Project. (2019). *Educational Quality at Universities for inclusive international Programmes*. <https://equip.eu/>
- Fortanet-Gómez, I. (2012). Academics' beliefs about language use and proficiency in Spanish multilingual higher education. *AILA Review*, 25(1), 48-63. <https://doi.org/10.1075/aila.25.04for>
- Fortanet-Gómez, I. (2013). *Content and Language Integrated Learning in higher education. Towards a multilingual language policy*. Bristol: Multilingual Matters. <https://doi.org/10.21832/9781847699374>
- Guarda, M., & Helm, F. (2016). 'I have discovered new teaching pathways': The link between language shift and teaching practice. *International Journal of Bilingual Education and Bilingualism*, 20(7), 1-17. <https://doi.org/10.1080/13670050.2015.1125848>
- Hahl, K., Järvinen, H., & K. Juuti, K. (2014). Accommodating to English-medium instruction in teacher education in Finland. *International Journal of Applied Linguistics*, 26(3), 291-310. <https://doi.org/10.1111/ijal.12093>
- Helm, F., & Guarda, M. (2015). 'Improvisation is not allowed in a second language': A survey of Italian lecturers' concerns about teaching their subjects through English. *CercleS*, 5(2), 353-373. <https://doi.org/10.1515/cercles-2015-0017>
- Hellekjaer, G. (2007). The implementation of undergraduate level English-medium programs in Norway: an explorative case study. In Wilkinson, R. & Zegers, V. (Eds.), *Researching content and language integration in higher education* (68-81). Nijmegen: Valkhof Pers.
- Hellekjaer, G., & Westergaard, M. (2002). An exploratory survey of content learning through English at Scandinavian universities. In Simensen, A. (Ed.), *Acta didactica 3*. Oslo: Unipub.
- Hu, G., & Lei, J. (2014). English-medium instruction in Chinese higher education: a case study. *Higher Education*, 67, 551-567. <https://doi.org/10.1007/s10734-013-9661-5>
- Jensen, C., & Thøgersen, J. (2011). Danish University lecturers' attitudes towards English as the medium of instruction. *Ibérica*, 22, 13-33.

- Karakas, A. (2016). Turkish lecturers' views on the place of mother tongue in the teaching of content courses through English medium. *Asian Englishes*, 18(3), 242-257. <https://doi.org/10.1080/13488678.2016.1229831>
- Kim, J., & Tatar, B. (2017). Non-native English-speaking professors' experiences of English-medium instruction and their perceived roles of the local language. *Journal of Language, Identity & Education*, 16(3), 157-171. <https://doi.org/10.1080/15348458.2017.1295811>
- Klaassen R.G., & De Graaff, E. (2001) Facing innovation: preparing lecturers for English-Medium instruction in a non-native context. *European Journal of Engineering Education*, 26(3), 281-289. <https://doi.org/10.1080/03043790110054409>
- Kuteeva, M., & Airey, J. (2014). Disciplinary differences in the use of English in higher education: Reflections on recent language policy developments. *Higher Education*, 67(5), 533-549. <https://doi.org/10.1007/s10734-013-9660-6>
- Lasagabaster, D. (2013). The use of the L1 in CLIL classes: the teachers' perspective. *Latin American Journal of Content and Language Integrated Learning*, 6(2), 1-21. <https://doi.org/10.5294/laclil.2013.6.2.1>
- Macaro, E., Curle, S., Pun, J., An, J., & Dearden, J. (2018). A systematic review of English medium instruction in higher education. *Language Teaching Journal*, 51(1), 36-76. <https://doi.org/10.1017/S0261444817000350>
- Mancho-Bares, G., & Arnó Macià, E. (2017). EMI lecturer training programmes and academic literacies: a critical insight from ESP. *ESP Today*, 5(2), 266-290. <https://doi.org/10.18485/esptoday.2017.5.2.7>
- Moore, P., & Nikula, T. (2016). Translanguaging in CLIL. In Nikula, T., Dafouz, E., Moore, P., & Smit, U. (Eds.), *Conceptualising Integration in CLIL and Multilingual Education* (221-234). Bristol: Multilingual Matters. <https://doi.org/10.21832/9781783096145-013>
- Pulcini, V., & Campagna, S. (2015). Internationalisation and the EMI controversy in Italian higher education. In Dimova, S., Hultgren, A.K., & Jensen, C. (Eds.), *English-medium instruction in European higher education* (65-87). Boston/Berlin: DeGruyterMouton.
- Söderlundh, H. (2012). Global policies and local norms: Sociolinguistic awareness and language choice at an international university. *International Journal of the Sociology of Language*, 216, 87-109. <https://doi.org/10.1515/ijsl-2012-0041>
- Tatzl, D. (2011). English-medium masters' programmes at an Austrian university of Applied Sciences: Attitudes, experiences and challenges. *Journal of English for Academic Purposes*, 10(4), 252-270. <https://doi.org/10.1016/j.jeap.2011.08.003>
- Thøgersen, J., & Airey, J. (2011). Lecturing undergraduate science in Danish and in English: A comparison of speaking rate and rhetorical style. *English for Specific Purposes*, 30(3), 209-221. <https://doi.org/10.1016/j.esp.2011.01.002>
- Unterberger, B. (2014). *English-medium degree programmes in Austrian tertiary business studies: Policies and programme design*. Doctoral dissertation. Vienna: University of Vienna.
- Uys, M., van der Walt, J., van den Berg, R., & Botha, S. (2007). English medium of instruction: a situation analysis. *South African Journal of Education*, 27(1), 69-82.
- Vinke, A.A., Snippe, J., & Jochems, W. (1998). English-medium content courses in Non-English higher education: A study of lecturer experiences and teaching behaviours. *Teaching in Higher Education*, 3(3), 383-394. <https://doi.org/10.1080/1356215980030307>
- Wächter, B., & Maiworm, F. (2014). *English-taught programmes in European higher education. The state of play in 2014*. Bonn: Lemmens.
- Westbrook, P. & Henriksen, B. (2011). 'Bridging the linguistic and affective gaps' – the impact of a short, tailor-made language course on a Danish university lecturer's ability to lecture with confidence in English. In Cancino, R., Dam, L., & Jæger, K. (Eds.), *Policies, principles, practices: New directions in foreign language education in the era of educational globalization* (188-212). Newcastle upon Tyne, UK: Cambridge Scholars Publishing.

Appendix: The Questionnaire

With this questionnaire, we would like to know more about the experiences of professionals in the area of Operations Management who teach some of their subjects in English. It will not take long to complete. If any of the data are used for publication, your name will not be used. Thank you for your time!

Part 1

Name and surname:

E-mail address:

How old are you?

At which university do you teach?

Have you taken any official English examinations?

Yes No

If yes, which examination and in what year?

Which subjects do you teach in English?

Do you think Operations Management is an area in which it is natural to teach in English?

Yes No Other:

Why do you think Operations Management is/isn't an area in which it is natural to teach in English?

Part 2: Teaching in English

How many years have you been teaching in English?

- I have not started yet, but I'm going to teach in English in the future.
- Less than a year.
- 1-2 years.
- 2-5 years.
- More than 5 years.

When you first knew you would have to teach in English, how confident did you feel?

Not at all confident	Very confident
1 2 3 4 5 6 7 8	9 10

How confident do you feel now about teaching in English?

Not at all confident	Very confident
1 2 3 4 5 6 7 8	9 10

In general, the experience of giving classes in English has been...

Very negative	Very positive
1 2 3 4 5 6 7 8	9 10

Do you think classes in English benefit the students?

Yes No Other:

Do you think that the students have a sufficient level of English to follow the classes satisfactorily?

Yes No Other:

Do you think you change your style of teaching when you teach in English?

Yes No

If you answered “yes”, which of these aspects do you change?

- Preparation time
- Amount of content you teach
- Using more videos and multimedia material
- Using a different textbook
- Putting more information in the Power point or in the hand-outs
- Interaction with students
- Other:

Do you do anything special to prepare for your classes in English?

Yes No

If you answered “yes”, which of these things do you do?

- Taking English lessons
- Translating your course material
- Translating your lectures
- Checking pronunciation of technical terms
- Looking up terms in a dictionary
- Consulting textbooks in English
- Looking for extra material in English
- Other:

Do you think it is ok to use Spanish in your English classes?

Yes No Other:

How do you see your role as a teacher giving content courses in English? Do you think you should help the students learn...

Content Language Content and language

Grading your students’ work and giving them feedback in your classes in English is...

Easy Difficult Other:

Are you satisfied with the support provided by your university to teach effectively in English?

Yes No

If you are not satisfied with the support provided by your university, can you explain what kind of support you would like to get?

What experiences have influenced the way you teach in English now?

Explain a difficulty that you have encountered (and perhaps solved):

Are there any aspects which you still find challenging about teaching your courses in English?

Is there anything else you would like to tell us about teaching in English?

Thank you very much for taking part in this survey!

