

## EMI Students' Expectations, Awareness and Learning Practices in Relation to English Pronunciation

ESTHER GÓMEZ LACABEX

Universidad del País Vasco

[esther.glacabex@ehu.eus](mailto:esther.glacabex@ehu.eus)

FRANCISCO GALLARDO DEL PUERTO

Universidad de Cantabria

[francisco.gallardo@unican.es](mailto:francisco.gallardo@unican.es)

The present study explored views on English pronunciation of a group of tertiary students on history and economics undergraduate courses which used English as a vehicular language. More specifically, the students completed a questionnaire on their pronunciation expectations in their current undergraduate courses, their self-awareness about their own pronunciation as well as their English pronunciation practices and how relevant they consider English pronunciation to be for their careers. The survey revealed that these students reported pronunciation to be important for communication and for their future and that they would like to improve their pronunciation skills. The results also showed that they are only moderately confident about their English pronunciation, and that they have little self-awareness when asked about various phonetic aspects of their own pronunciation. Those who identified as being active pronunciation learners indicated that their approach mainly involves informal exposure such as using technology for entertainment or establishing contact with English speakers. Very few students reported using more formal pronunciation instruction such as referring to dictionaries or manuals. Finally, some of these students made a distinction between good pronunciation and nativeness, a tentative indicator of the increasing prevalence of the intelligibility principle in English learning these days.

**Keywords:** English pronunciation; English Medium Instruction (EMI); pronunciation awareness; pronunciation practices

...

## Expectativas, concienciación y prácticas de aprendizaje de la pronunciación del inglés por parte de estudiantes universitarios en enseñanza integrada de lenguas

Este estudio explora las opiniones sobre la pronunciación del inglés en un grupo de estudiantes universitarios que cursan asignaturas en inglés en los grados de económicas e historia. Los estudiantes respondieron a un cuestionario sobre sus expectativas con la pronunciación del inglés, su percepción sobre la pronunciación, las actividades que realizan para mejorar su pronunciación o la relevancia de la pronunciación para su futuro profesional. Los estudiantes indicaron que consideran la pronunciación como un aspecto importante para sus futuras carreras y que desearían mejorar su pronunciación del inglés. También observamos que no están muy seguros de su pronunciación del inglés y que no son muy conscientes de los detalles fonéticos de la misma. Aquéllos que indicaron que se esfuerzan por mejorar su pronunciación especificaron que lo hacen principalmente de manera no formal, usando medios del entretenimiento o mediante el contacto con hablantes de inglés. Muy pocos estudiantes indicaron que mejoran su pronunciación mediante diccionarios o materiales específicos. Por último, algunos de estos estudiantes establecieron una diferencia entre una buena pronunciación y la capacidad nativa, evidenciando el creciente predominio de principio de inteligibilidad, muy presente en el ámbito de la enseñanza del inglés como lengua extranjera hoy en día.

Palabras clave: pronunciación del inglés; English Medium Instruction (EMI); percepción de la pronunciación; aprendizaje de la pronunciación

### 1. INTRODUCTION

One of the indicators of the internationalization of the English language in academia has been the introduction of English-medium-instruction (EMI) on university degree programmes (Coleman 2006; Doiz et al. 2013) in recent years. As the Bologna Process reform (European Commission 2009) placed the role of the learner at the centre of the learning experience, the value of students' beliefs, expectations and impressions about the language learning process becomes a significant factor to take into consideration. In fact, recent research targeting individual differences in language learning (Dörnyei 2005) indicates that learners' views and beliefs have an impact on the language learning process as they help us interpret learners' behaviour (Grotjahn, 1991) or affective aspects such as anxiety and motivation (Dörnyei 2005; Dörnyei and Ushioda 2009). As language learning is presently interpreted as being mainly communicative (Council of Europe 2001; 2020), it is widely acknowledged that pronunciation plays

a significant role in the interpretation of communicative competence (Pennington and Rogerson-Revell, 2019). However, pronunciation is a complex language component which contributes both to linguistic functions of speech (phonetics and phonology) and to its social functions, such as speaker identity (Gatbonton et al. 2005) and listener comprehensibility (Saito et al. 2019). We know that students are not always satisfied with how they learn an additional language (Kang 2015; Calvo-Benzies 2016) and that they exhibit anxiety (Baran-Łucarz 2011; Baran-Łucarz 2014; Szyszka 2017) and/or contradictory beliefs about it (Gómez-Lacabex and Roothoof 2023; Levis 2015). In this study, we gathered data from EMI students attending two universities in northern Spain so as to explore their views, expectations, self-awareness and learning practices with respect to pronunciation, as these data can inform EMI researchers and practitioners and help them better understand the acquisition process as well as meet learning goals. EMI is a language learning community which is experiencing the language from a more functional perspective as they study 'in' the language rather than learn 'about' the language. They are a different community from language and linguistics students, who have frequently been the chosen informants in previous survey work on pronunciation in tertiary education (Nowacka 2012; Doiz et al. 2012; Pawlak et al. 2015; Waniek-Klimczak et al. 2015). Recent studies (Gómez-Lacabex and Gallardo-del-Puerto 2021; Gómez-Lacabex and Roothoof 2023; Waniek-Klimczak and Klimczak 2008) have observed that EMI students concede more attention to intelligibility and communicative goals than to accuracy and native-like norms when they are asked to reflect on English pronunciation.

## 2. ENGLISH MEDIUM INSTRUCTION (EMI)

The concept of EMI was defined in a broad sense by Dearden (2014, 2) as "the use of English to teach academic subjects (other than English) in countries or jurisdictions in which the majority of the population's first language is not English". Applying this definition, the EMI construct can be associated with other terms such as Content and Language Integrated Learning (CLIL) and Content-Based Instruction (CBI), used in both scientific research and educational practice. However, both these terms abound in research focusing on primary and secondary education as well as in practice, whereas EMI applies only to tertiary level education, where it coexists with other terms such as Integrating Content and Language in Higher Education (ICLHE).

EMI has become a flourishing topic in the scholarly literature on higher education in recent years (Macaro et al. 2018) and is undoubtedly one of the many outcomes of globalisation, which in the academic sphere has resulted in the need for institutions to internationalise (Rubio-Alcalá and Coyle 2021). Having been coined as a *lingua franca* (Jenkins 2013; 2019) in international business, media, academia and higher education, the English language is currently undergoing a reconceptualization, being described as *global English* (Rose and Galloway 2019). Some of the attributes of this new appraisal of the language are, for example, its emancipation from native

norms and the acknowledgment of multiculturalism and translinguaging (Cenoz and Gorter 2020).

Nevertheless, the language dimension in EMI tends to be a requisite rather than a goal. As recently acknowledged by Lasagabaster and Doiz (2021), language learning objectives are disregarded in most EMI programmes because of the widely held belief that language learning will happen incidentally as a consequence of students' exposure to English during the teaching of content during their courses. Crucially for the present study, the implicit learning route has overwhelmingly been advocated, since the advent of the communicative teaching approach in the field of applied linguistics, as the main source for the development of students' pronunciation skills, as compared to the explicit teaching input with respect to other language domains. Therefore, typically no explicit language (nor pronunciation) learning goals are formulated in the curricula of the subjects taught through English at university (Unterberger 2014), unlike at primary and secondary education stages, where there tends to be a more balanced focus on both language and content. This lack of concern about language development is undoubtedly one of the harmful effects of higher education policymakers' urge to internationalise their institutions by introducing EMI, perhaps exceedingly rapidly, without taking into account a great number of organisational and pedagogical implications (Richter 2019). Even though "the integration of content and language should be an indispensable feature of effective EMI programmes" (Lasagabaster and Doiz 2021, 2), EMI teachers tend to acknowledge that they are not able to tackle language issues in their lessons (Doiz, Lasagabaster, and Pavón 2019), a fact which seems to be particularly true of the phonetic component (Gómez-Lacabex and Gallardo-del-Puerto 2021). As for students' perspectives, the following section focuses on their views on pronunciation and the few studies which have been conducted to date exploring pronunciation in EMI.

### 3. STUDENTS' VIEWS ON ENGLISH PRONUNCIATION

Students' views on and beliefs about pronunciation in communities or countries where English has a foreign language status (Kachru 1996) are of interest in terms of their impact on language development. Unlike in communities where English is spoken as a mother tongue (L1), target language availability is often lacking in these communities, albeit with an increasing presence in entertainment and social media. This is the case in the European context, where a number of studies on students' views on pronunciation have been conducted. These have mainly explored the connection between phonetic background and pronunciation development. Nowacka (2012) analysed the pronunciation views of Spanish, Polish and Italian tertiary students. These learners, who exhibited highly metaphonetic awareness, reported a desire to have good pronunciation skills and set native-like standards for their own pronunciation. In the Polish context, Pawlak et al. (2015) also highlighted the concerns of English Studies students with respect to the importance of pronunciation for communication. While this study failed to find a connection between learners' views and pronunciation

performance, it did reveal how students who become phonetically knowledgeable are able to become more independent listeners. Also in Poland, Waniek-Klimczak et al. (2015) analysed the role of gender and educational level in pronunciation attitude in higher education. They reported that female speakers tend not to report themselves as Polish-accented in English as often as male speakers, and that undergraduate students are more concerned about Polish-accented features than Masters students. Interestingly, the authors concluded that further work is needed to establish whether more experienced learners are embracing non-native features in L2 English to a greater extent due to identity reasons or because of a pronunciation threshold awareness, hinting at the need to explore more psychological facets in pronunciation learning.

Some research on students' thoughts on pronunciation has also been conducted in Spain. Lasagabaster and Sierra (2002) surveyed university language studies students' preferences for the nativeness of their language teachers in the three different educational stages they had gone through—primary, secondary and tertiary they. This study revealed that students show an increased preference for a native teacher as they progress through the educational levels, and that the language area where they most prefer a native teacher is pronunciation. Interestingly, the study also reported that English Studies students show more inclination towards teachers with native-like pronunciation than those on other language studies courses. Calvo-Benzies's (2016) PhD thesis provides the most detailed account, to date, of Spanish students' views on English pronunciation, as she was able to survey more than 1,000 informants in secondary and tertiary education as well as in language schools in the Galicia region in the north of Spain. Her respondents reported that they considered pronunciation important and useful for their future and, at the same time, insufficiently addressed in language teaching programmes or coursebooks. They also reported not using English outside the classroom even though they exhibited a high incidence of private lesson attendance. This finding was interpreted by the author as pointing to the need to balance the leading role of reading and writing practice in compulsory language learning with the under-developed attention paid to speaking and listening skills, which tended to be boosted in these extracurricular sessions.

As for studies which have explored the views on pronunciation of other student profiles such as EMI students, Waniek-Klimczak and Klimczak (2008) carried out a comparative study in which English Studies students and EMI Economics and Sociology students were surveyed about their English pronunciation attitudes. The authors observed that the EMI students were less interested in achieving native-like pronunciation and did not demand a consistent pronunciation model from their teacher. These students also interpreted their communication aspirations in English to be of an international nature, leading the authors to conclude that these expectations were associated with communicative goals which were less native-speaker oriented. In Austria, Richter (2019) explored the degree of foreign accent exhibited by two groups of university students on Entrepreneurship courses over three academic years, comparing the pronunciation development of an EMI group which received instruction

input from both native and non-native speakers of English with that of a control group who attended English for Specific Purposes lessons. The students' English accent was judged by seven listeners, and the pre-test vs. post-test comparisons yielded significantly greater gains for the EMI group. This finding was interpreted in light of intervening factors such as increased input or the stronger motivation of students in the EMI context. In Spain, Maíz-Arévalo and Domínguez-Romero (2013) described the self-reported linguistic gains of Business Administration and Economics students enrolled on EMI courses. With regard to pronunciation, about 50% of the students considered that their EMI lessons had contributed to a significant improvement in their pronunciation. Gómez-Lacabex and Gallardo-del-Puerto (2021) explored History and Economics EMI learners' views on pronunciation, gathered by means of group discussions. The qualitative analyses revealed that these EMI students i) were concerned about pronunciation and associated this language component with useful communicative skills (e.g., exchanging ideas, making friends); ii) exhibited limited confidence about their phonetic skills but a desire to improve them; iii) believed that one can have an accent but be understood and iv) considered that their teacher having good pronunciation was an additional skill that may not necessarily interact with the teacher's speaking skills. Finally, Gómez-Lacabex and Roothoof (2023) have explored pronunciation conceptualisation and interlocutor anxiety on the part of an EMI group studying in an Engineering faculty, finding that, for these students, pronunciation is more a tool of communication than a subject to be learnt and that they generally exhibit low interlocutor anxiety. Interestingly, the study also revealed a tension between these EMI students' interpretation of pronunciation as mainly being communicatively-oriented and their desire to have adequate and accurate pronunciation.

It is also worth mentioning the results from a study involving subjects with a tertiary education student profile that is close to EMI- that of doctoral students in Spain taking part in an English for Academic Purposes course. A survey of this group by Guillen-Galve (2018) revealed that these students, mainly from the fields of science and engineering, tend to use spoken English during fieldwork, conferences and group meetings and envision orality in the foreign language as "frightening", "disastrous", "problematic" or "critical" (Guillen-Galve and Vela-Tafalla 2021, 115). As for pronunciation matters, they tend to adhere to Standard-English models as they strive for native-like pronunciation rather than for intelligibility. They associate nativeness with aspects of identity more than with aspects of capability or credibility, and consider that aiming for native-like pronunciation does not imply any loss of identity. Paradoxically, although most respondents indicated that they were able to understand non-native accents in English, only a few students (7%) considered that "understanding non-native speakers' accents or pronunciation of English" is not a necessity.

The present survey attempts to provide an overview of EMI students' views and expectations with respect to English pronunciation. More specifically, aspects such as

pronunciation self-awareness, the relevance of pronunciation for their future careers and during their EMI studies will be tackled, as well as EMI students' desires about and actions taken towards improving their English pronunciation.

#### 4. METHOD

##### 4.1. Participants

Sixty-one EMI students participated in the survey. They came from studying at two different universities in the north of Spain and were taking EMI undergraduate courses in History or Economics. They were recruited throughout the four years in which the programme was active. Students from intact classes and groups were approached to take part since groups tended to be small (between eight and twenty students enrolled). All the students in the survey agreed to participate in this study, and were, thus, involved in becoming acquainted with different approaches to language form during some of their EMI classes. The universities did not require the students on the EMI courses involved to provide evidence of any language proficiency qualification, although all needed to have passed the English element of the university entrance exam, which guarantees a B1 CEFR (Council of Europe 2001) level in reading and writing skills. However, it is also customary for such students to attend private English lessons, often enabling them to cope with the English B2 CEFR level. Both universities require teachers on EMI courses to have a C1 CEFR level qualification, which all the teachers in the present project held. The project received the approval of each institution's Ethics Committee and informed consent was obtained from all students.

##### 4.2. Research instrument and Procedure

An eighteen-item questionnaire was adapted from previous published work (e.g., Nowacka 2012; Kang 2015) after having been piloted with a small group of respondents. The specific areas that this instrument addressed were i) awareness of own pronunciation (five items), ii) relevance of pronunciation (three items), iii) development of pronunciation in their current EMI studies (two items), iv) desire to improve pronunciation skills (three items), as well as v) agency for pronunciation improvement, that is, how they believe they can monitor their own pronunciation learning (Code 2020). The students were asked to make fifteen (dis)agreement judgments on a six-point Likert scale (1 = *strongly disagree* to 6 = *strongly agree*). The consistency of the scale was measured and a Cronbach's alpha of 0.67 was obtained. The survey included a follow-up question (item 17) using a six-point Likert scale (1 = *not confident at all*; 6 = *very confident*) that was aimed at discovering learners' degree of confidence with a variety of aspects of English pronunciation (e.g., vowels, consonants). It also included two multiple-choice questions on students' beliefs about the reasons for their difficulties in improving English pronunciation (item 16), and on the actions that they take to improve it (item 13).

Students completed the survey at the end of one of their EMI lessons, being given as much time as necessary. Answers were dealt with quantitatively, and subsequently transferred to Excel and SPSS databases so that descriptive statistics (frequency, mean, mode, and standard deviation) could be computed.

## 5. RESULTS

This section will consider students' views on pronunciation in the eighteen-item questionnaire with regard to the aspects addressed—awareness of own pronunciation (items 1, 2, 15, 16 and 17), relevance of pronunciation (items 3, 4 and 18), development of pronunciation in their current EMI studies (items 10 and 11), desire to improve pronunciation skills (items 5, 6 and 7), and actions taken to improve pronunciation (items 8, 9, 12, 13 and 14). Descriptive statistics were conducted on the six-point Likert scale items (see Tables 1 and 3) whereas the responses to the multiple-choice questions (items 13 and 16) were analysed by calculating percent positive responses (see Tables 2 and 4). As for the former, Tables 1 and 3 shows the frequency distribution of students' answers on the Likert scale as well as means, modes and standard deviations for the same items. As for the multiple-choice questions, Tables 2 and 4 give the absolute and relative numbers of students who responded to the additional questions raised.

TABLE 1. Students' views on pronunciation

		SA (6)	A (5)	MA (4)	MD (3)	D (2)	SD (1)	$\bar{x}$	Mo	<i>s.d.</i>
<b>Awareness of own pronunciation</b>								4.1	4	0.98
1	<i>I am confident with my English pronunciation.</i>		28.3	55.0	11.7	5.0		4.1	4	0.78
2	<i>I can recognise different accents in English.</i>	6.6	24.6	37.7	24.6	4.9	1.6	4.0	4	1.06
15	<i>I think it is difficult to have a good English pronunciation.</i>	6.1	40.8	32.7	10.2	8.2	2.0	4.2	5	1.12
<b>Relevance of pronunciation</b>								5	5	0.86
3	<i>I believe that pronunciation is important when I communicate with native speakers of English.</i>	38.8	46.9	10.2	2.0	2.0		5.2	5	0.86
4	<i>I believe that pronunciation is important when I communicate with non-native speakers of English.</i>	20.4	38.8	34.7	6.1			4.7	5	0.86
18	<i>I believe I will need good English pronunciation skills in my career.</i>	34.4	42.6	19.7	1.6	1.6		5.1	5	0.87



Pronunciation in current EMI studies								4.3	4	0.80
10	<i>I believe that my teachers provide me with good English pronunciation models.</i>	36.1	49.2	13.1	1.6			4.2	4	0.73
11	<i>I believe that I am improving my pronunciation while taking courses taught in English.</i>	6.6	34.4	50.8	4.9	1.6	1.6	4.3	4	0.87
Desire to improve pronunciation skills								5.6	6	0.80
5	<i>I want to have good English pronunciation.</i>	77.6	20.	2.0				5.8	6	0.48
6	<i>I would like to sound like a native speaker of English when I speak English.</i>	49.2	26.2	18.0	3.3	1.6	1.6	5.1	6	1.10
7	<i>I would like to improve my English pronunciation.</i>	59.0	36.1	3.3	1.6			5.5	6	0.81
Agency for pronunciation improvement								4.8	5	0.84
8	<i>I believe I would need explicit instruction to improve my English pronunciation.</i>	18.0	52.5	23.0	4.9	1.6		4.9	5	0.85
9	<i>I believe I could improve my English pronunciation in a non-instructed way.</i>	26.5	44.9	24.5	4.1			4.8	5	0.83
12	<i>I try to improve my English pronunciation.</i>	22.4	51.0	24.5	2.0			4.9	5	0.75
14	<i>I enjoy it when I am trying to improve my English pronunciation.</i>	10.2	40.8	38.8	6.1	4.1		4.5	5	0.92

Note: 6 = Strongly Agree/SA; 5 = Moderately Agree/MA; 4 = Agree/A; 3 = Disagree/D; 2 = Moderately Disagree/MD; 1 = Strongly Disagree/SD.

Students' degree of *awareness of their own pronunciation* was explored through a set of items from Table 1 and the items in Tables 2 and 3. As can be seen in Table 1, 83.3% percent of the participants moderately agreed/agreed with the statement that they were confident about their English pronunciation while only 16.7% did not feel confident in their English pronunciation (item 1). In addition, 69.6% of the group reported being able to distinguish between different English accents while 30.4% admitted to not being able to identify differences between different English varieties (item 2). Finally, 79.6% of respondents agreed to a lesser or greater degree with the idea that it is difficult to have a good English pronunciation, whilst 20.4% reported some level of disagreement (item 15). In a follow-

up question, item 16 inquired about the causes for the difficulties that students might encounter when learning English pronunciation. Forty-one students (67.2%) responded to this item. Table 2 shows the number and percentage of students who selected each reason out of the total number of students who responded to the question. The most chosen reason was 'because it has new and difficult sounds'. A considerable number of students also reported that they had not received pronunciation instruction or correction. The reasons 'because I did not have native teachers' or 'because I have never been taught pronunciation' were also selected a similar number of times. Even though they were given the possibility of adding 'other reasons', students provided no further answers.

TABLE 2. Number of times selected/n. of total students and percentages for reasons for difficulty

16. Reasons for difficulty	selected/41	%
New and difficult sounds	21/41	51%
No pronunciation instruction	17/41	41%
No pronunciation correction	16/41	38%
No native teachers	15/41	36%
Never been taught pronunciation	14/41	34%

To further inquire into students perceptions of *awareness of own pronunciation*, item 17 asked the learners to rate their confidence with using various aspects of English phonetics: vowels, consonants, consonant clusters, stress, fluency, intonation and intelligibility. Interestingly, as can be seen in Table 3, the responses varied very little, the largest group of students responding that they were 'moderately confident'. Intelligibility, vowel sounds and consonant sounds scored slightly higher in terms of students' confidence about their appropriateness in using them than consonant clusters, lexical stress and fluency. However, the modes and the response frequency distributions seem to indicate that these students' responses exhibited a very similar pattern for each of the different pronunciation components asked about for this question.

TABLE 3. Frequency, mean, mode and standard deviation for self-confidence rating (1 = not confident at all; 6 = very confident) of pronunciation aspects

17. Pronunciation aspects	Frequency						$\bar{x}$	Mo	s.d.
	1	2	3	4	5	6			
Vowel sounds	1	6	9	25	11	7	4.02	4	1.18
Consonant sounds	2	4	11	20	18	4	4.02	4	1.17
Consonant clusters	2	6	9	22	14	5	3.95	4	1.22
Lexical stress	1	4	13	20	18	1	3.88	4	1.09
Fluency	3	5	11	22	14	3	3.83	4	1.20
Intonation	2	2	14	20	17	3	3.98	4	1.10
Intelligibility	1	8	7	17	17	8	4.12	4	1.30

The second set of items in Table 1 explored students' views about the *relevance of pronunciation*. Two items inquired whether students felt pronunciation to be an important element for communication, one relating to speaking with native speakers, the other with non-native speakers of English. Students reported similar impressions in that 96% of them agreed (to varying degrees) with the statement about pronunciation being important in communication with native speakers and 93.9% to the statement regarding non-native speakers. Finally, nearly all participants (98.3%) agreed that good pronunciation will be required in their future professions (item 18).

The development of *pronunciation in current EMI studies* was investigated by means of two items in the questionnaire. As can be seen in Table 1, 85.3% of the students reported that they were satisfied with their EMI teachers' pronunciation skills whereas 14.7% (moderately) disagreed (item 10). A total of 91.9% of the respondents also indicated that they felt they were improving their pronunciation while taking EMI courses, 8.1% of the group disagreeing with this (item 11).

The *desire to improve pronunciation skills* was explored via three different items. The survey data exhibits no disagreement among students about wanting to have a good pronunciation (item 5), almost all the respondents (98.4%) also stating a desire to improve this language component (item 7). There was also only a small amount of disagreement when students were asked about whether they wanted to sound like a native speaker when they speak English (item 6), with only 6.6% of this population not expressing a desire to have a native-speaker accent.

Five items explored *agency for pronunciation improvement*. As can be observed in Table 1, the majority of the EMI students (93.5%) reported that they would need explicit instruction to improve their English pronunciation (item 8). Similarly, most respondents (95.9%) indicated that they could also improve in a non-instructed way (item 9). When students were asked about whether they actually tried to improve their English pronunciation, 98% answered in the affirmative (item 12). Item 13 required students to choose from a set of potential actions which they take in order to improve their pronunciation. Table 4 presents these actions, from most frequently- to least frequently identified, as well as the absolute and relative number of students selecting each option. Sixty students responded to this item. The most commonly identified action was informal exposure, namely using technology for entertainment: watching films and series, using the internet to listen to podcasts or watching YouTube, and using streaming media; 8 students (14%) reported playing games on-line. Next, a considerable proportion of students also acknowledged non-technologically-mediated exposure: establishing contact with native speakers or staying broad. More traditional and/or explicit learning methods, such as using pronunciation applications, checking pronunciation in dictionaries or manuals and attending pronunciation courses were far less frequently identified. Finally, for a rather small percentage (10.2%) of students, pronunciation learning was not enjoyable (item 14).

TABLE 4. Number of times selected/n. of total students and percentages for actions taken to improve pronunciation

13. Actions taken to improve pronunciation	selected/60	%
Watch films, series	48/60	80%
Use the internet (podcast, youtube, etc.)	40/60	67%
Use streaming media (Netflix, Movistar+. etc.)	32/60	53%
Contact with native speakers	29/60	48%
Stay in English-speaking countries	24/60	40%
Use pronunciation apps	12/60	20%
Play on-line games	8/60	14%
Check pronunciation dictionaries	8/60	13%
Use pronunciation manuals	5/60	8%
Take pronunciation course	5/60	8%

## 6. DISCUSSION

The data from the questionnaire revealed interesting results. First, EMI students acknowledge the relevance of pronunciation, all of the informants surveyed agreeing on the fact that it significantly contributes to communication. In addition, they all report that good pronunciation is likely to be required from them in their future careers, and that the EMI course is giving them a chance to improve their pronunciation. Accordingly, it is no surprise that they also reported that they wanted to improve their pronunciation. These findings may be indicative of the fact EMI learners, like EFL learners (Barrera Pardo, 2004; Calvo Benzie, 2013; Kang, 2015; Levis, 2015), also care about their pronunciation skills when learning English.

Secondly, the data indicated that EMI students were only moderately satisfied with their own English pronunciation, as has been reported elsewhere (Kang, 2015). Some of the students even stated that they thought it was difficult to have a good pronunciation. Furthermore, their responses to item 17, which explored their confidence with various aspects of pronunciation, revealed that, despite the fact that examples for each aspect were provided in the questionnaire (e.g., 'unstress' (*comfortable*); 'intelligibility' (*how much you are understood*), they failed to use the scale (1-6) to differentiate amongst these various pronunciation aspects. We believe that they most likely understand the aspects, but may have never observed or reflected upon them and, hence, cannot discriminate them in terms of difficulty. In another survey item, a considerable proportion of students similarly admitted not being able to identify differences between types of English accent. In the same vein, learners also failed to characterise explicit instruction vs. non-instructed learning as a preferred learning strategy for pronunciation, which could indicate that these EMI students may not have a strong viewpoint on the learning

strategies through which they could improve their pronunciation. All these responses are indicative of the fact that EMI learners may not be cognizant enough of the different components of English pronunciation and of pronunciation learning strategies to be able to answer with such specific detail. This lack of phonetic awareness may be linked to students' intermediate level of proficiency in English. It could also be the consequence of the limited pronunciation instruction and/or awareness that they have received in their English learning experience (Calvo Benzies 2016; Gómez González and García Muras 2025), as attested by the substantial proportion of learners acknowledging that English pronunciation is difficult because of their lack of pronunciation instruction or feedback.

Finally, while we expected a greater level of pronunciation concern to be associated with interaction with native speakers, as observed with linguistics and English Studies students (Lasagabaster and Sierra 2002), our results confirmed that EMI students did not report differences on account of the relationship between the importance of pronunciation and the (non-)nativeness of their interlocutors. In addition, we would also like to highlight a slight mismatch between these learners' desire to have good pronunciation and their wanting to sound like a native speaker, which is unlike findings from doctoral students in Guillén-Galve (2018). We must acknowledge that the conditional tense in which the item *I would like to sound like a native speaker* was presented may have led the students to interpret native-likeness as a desire that is unlikely to become a fact and foreign-accentedness as an 'inevitable reality', as authors such as Waniek-Klimzak et al. (2015, 33) have pointed out. If this is the case, it may be that the learners are likely to feel that native-like pronunciation is unattainable or very difficult to achieve. However, we should also consider the close connection between pronunciation and affective and social factors (Pennington 2021; Trofimovich et al. 2015). As Levis (2005) has pointed out, the degree and sense of self expressed through the foreign language may condition pronunciation as much as factors such as biological constraints, namely age. Indeed, variables such as ethnic group affiliation (Gatbonton et al. 2005) or social stigma (Bohn and Flege, 1996) may be strongly related to pronunciation accuracy. We shall, then, consider here the extent to which these EMI learners do wish, consciously or unconsciously, to belong to a new speaker community, create a new self, or feel that they lose personality traits. The data gathered in the present study do not allow us to conclude more on this aspect and calls for further development of surveying procedures that help informants reflect on these more introspective aspects (Huensch and Thomson 2017). However, our data may be a shy indicator that this community of speakers may not fully associate good pronunciation with nativeness. The data are also in agreement with recent findings regarding EMI students' conceptualization of pronunciation (Gómez-Lacabex and Gallardo-del-Puerto 2021; Gómez-Lacabex and Roothoof 2023): specifically, that they have a more integrative view of this language dimension component (Müller 2013; Pennington 2021) which is detached from the native norm and is more sensitive to multilingualism and intelligibility. In the studies mentioned just above, EMI students are able to

distinguish between intelligibility and foreign accent, but they are also accepting of their teachers manifesting a foreign accent as well as their own. Taken together, all these results could be indicative that this specific student population, for whom English is a vehicular language, could already be leaning towards intelligibility and starting to build transcultural competence, distancing themselves from the native speaker ideal in favour of intelligibility.

It should be noted, however, that experimental research has demonstrated that the presence of a foreign accent may affect the intelligibility and comprehensibility of both EMI teachers (Gómez-Lacabex and Gallardo-del-Puerto 2023; Valcke and Pavón 2016) and students (Gómez-Lacabex and Gallardo-del-Puerto 2021), meaning that the impact of unintelligible speech in EMI contexts cannot be ignored. In the light of this research, we could interpret the data in the present study as suggesting that these intermediate English level students may not be fully aware of this impact and that they may benefit from a re-conceptualization of pronunciation teaching and learning, as Pennington (2021) has recently pointed out. This can provide students with more in-depth pronunciation knowledge when a multidimensional approach is employed that incorporates a psycho-sociolinguistic perspective in addition to a linguistic component (Levis 2015; Trofimovic et al. 2015). This approach may help EMI students to reflect on their pronunciation knowledge, their own or others' accent and/or intelligibility, and their pronunciation expectations and preferences, as well as to develop their critical perception of how pronunciation contributes to communication, especially in a context in which intercultural/translingual competences (Council of Europe 2020) must be met, as in EMI scenarios. Such an approach will also help students build up their own identity as English speakers. Most importantly, this approach would empower them so that they become more aware, confident and effective English users in an environment where, given the rapid growth in the internationalisation of university campuses, English is more than likely to become the main language for communication.

## 7. CONCLUSION

The present study attempted to explore EMI students' views, awareness and practices with respect to English pronunciation. This student population is a new English user profile, as they experience the English language from a vehicular or practical perspective rather than as a subject to be studied in itself. The data revealed that EMI students acknowledge the relevance of pronunciation, more specifically they all report that good pronunciation will be required from them in their future careers. They also demonstrated that they wanted to improve their pronunciation. However, we identified that these learners were not always satisfied with their own pronunciation, that many reported it to be difficult to have a good pronunciation and that they failed to identify the difficulty of specific phonetic aspects and preferred particular pronunciation learning strategies over others. At the same time, they seem to be relaxed about accented speech and reported that they mainly rely on informal exposure in the form of entertainment

or contact to cultivate their English pronunciation. On a final note, the increasing internationalization of the academic campus seems to have generated a new community of speakers demanding more intelligible speech and exhibiting positive attitudes towards the possibility of improving pronunciation skills. In such a context, we should not miss the opportunity to begin to reconceptualise the teaching of pronunciation in order to provide EMI students with resources to become more phonetically competent, as well as to develop learning strategies which help them associate pronunciation with their own identity as English speakers.

#### ACKNOWLEDGEMENTS

This research was funded by the projects PID2020-115327RB-I00, PID2020-117882GB-I00 (Spanish Ministry of Science and Innovation) and grant IT1426-22 (Basque Government).

The authors have no conflicts of interest to disclose.

#### WORKS CITED

- BARAN-ŁUCARZ, Małgorzata. 2011. "The relationship between language anxiety and the actual and perceived levels of foreign language pronunciation". *Studies in Second Language Learning and Teaching*, 1 (4): 491-514.
- . 2014. "The link between pronunciation anxiety and willingness to communicate in the foreign-language classroom: The Polish EFL context". *Canadian Modern Language Review*, 70 (4): 445-473.
- BARRERA PARDO, Darío. 2004. "Can pronunciation be taught? A review of research and implications for teaching". *Revista alicantina de estudios ingleses: RAEI*, (17): 6-38.
- BOHN, Ocke-Schwen and James Emil Flege. 1996. "Perception and production of a new vowel category by adult second language learners". In James and Leather, eds. 1996, 53-73.
- CALVO BENZIES, Yolanda J. 2016. "The Teaching and Learning of English Pronunciation in Spain. An Analysis and Appraisal of Students' and Teachers' Views and Teaching Materials". PhD diss. University of Santiago de Compostela, Spain.
- CENOZ, Jasone and Durk Gorter. 2020. "Pedagogical translanguaging: An introduction". *System*, 92, 102269.
- CODE, J. 2020. "Agency for learning: Intention, motivation, self-efficacy and self-regulation". *Frontiers in Education* (5). Article 19.
- COLEMAN, James A. 2006. "English-medium teaching in European higher education". *Language teaching*, 39 (1): 1-14.
- COUNCIL OF EUROPE. 2001. *Common European Framework of Reference for Languages*. Cambridge: Cambridge University Press.

- . 2020. *Common European Framework of Reference for Languages: Learning, teaching, assessment – Companion volume*. Council of Europe Publishing, Strasbourg, available at [www.coe.int/lang-cefr](http://www.coe.int/lang-cefr).
- DEARDEN, Julie. 2014. *English as a Medium of Instruction: A Growing Global Phenomenon*. London: British Council.
- DERWING, Tracey M. and Murray J. Munro. 1997. "Accent, intelligibility, and comprehensibility: Evidence from four L1s". *Studies in Second Language Acquisition*, 19 (1): 1-16.
- DOIZ, Aintzane, David Lasagabaster and Juan Manuel Sierra, eds. 2012. *English-medium instruction at universities: Global challenges*. Multilingual matters.
- . 2013. "Globalisation, internationalisation, multilingualism and linguistic strains in higher education". *Studies in Higher Education*, 38(9): 1407-1421.
- DOIZ, Aintzane, David Lasagabaster and Victor Pavón. 2019. "The integration of language and content in English-medium instruction courses: Lecturers' beliefs and practices". *Ibérica*, 38: 151-175.
- DÖRNYEI, Zoltán and Ema Ushioda, eds. 2009. *Motivation, language identity and the L2 self*. Bristol, England: Multilingual Matters.
- DÖRNYEI, Zoltán. 2005. *The psychology of the language learner: Individual differences in second language acquisition*. Mahwah, NJ: Lawrence Erlbaum.
- DZIUBALSKA-KOŁACZYK, Karatzyna and Joanna Przedlacka, eds. 2008. *English pronunciation models: A changing scene*. Peter Lang.
- EUROPEAN COMMISSION. 2009. *The Bologna Process 2020. The European Higher Education Area in the new decade*. Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve.
- GATBONTON, Elizabeth, Pavel Trofimovich and Michael Magid. 2005. "Learners' Ethnic Group Affiliation and L2 Pronunciation Accuracy: A Sociolinguistic Investigation". *TESOL Quarterly*, 39 (3): 489-512.
- GÓMEZ GONZÁLEZ, M. D. L. Á. and R. García Muras. 2025. "EFL Pronunciation Instruction in Spanish Primary Schools: From Prescribed Curriculum to Classroom Practice". *Education Sciences*, 15 (4): 427.
- GÓMEZ-LACABEX, Esther and Francisco Gallardo-del-Puerto. 2021. "Pronunciation in EMI: A preliminary study of Spanish university students' intelligibility and comprehensibility". In Lasagabaster and Doiz, eds., 126-144.
- . 2023. "Pronunciation and intelligibility in English medium-instruction (EMI): Lecturers' views and skills". In Sardegna and Jarosz, eds. 2023.
- GÓMEZ-LACABEX, Esther and Roothoof. 2023. "Pronunciation in EMI: conceptualization, interlocutor anxiety, and attitudes towards lecturer speech". *Journal of Multilingual Theories and Practices*, 4 (1): 77-98.
- GROTJAHN, Rudiger. 1991. "The Research Programme Subjective Theories: A New Approach in Second Language Research". *Studies in Second Language Acquisition*, 13 (2): 187-214.



- GUILLÉN-GALVE, Ignacio. "Investigating the teaching of the pronunciation of English as a lingua franca to adult learners of English for academic purposes: a case for fine-tuning at the intersection of socio-linguistics and English language education". In Guillén-Galve and Vázquez, eds. 2018, 329-382
- and Ignacio Vázquez, eds. 2023. *English as a Lingua Franca and Intercultural Communication: implications and/or applications to the field of English Language Teaching*. Bern: Peter Lang.
- and Miguel A. Vela-Tafalla. "Taking the ethnomethodological lens to enquire into academic literacy development in graduate students". In Muresan and Orna-Montesinos, eds. 2021, 101-121.
- MURESAN, Laura-Mihaela and Concepción Orna-Montesinos, eds. 2021. *Academic Literacy Development: Perspectives on Multilingual Scholars' Approaches to Writing*. Cham: Palgrave Macmillan.
- HUENSCH, Amanda and Amy S. Thompson. 2017. "Contextualizing attitudes toward pronunciation: Foreign language learners in the United States". *Foreign Language Annals*, 50 (2): 410-432.
- JAMES, Allan and Jonathan Leather 1996. *Second-language speech. Structure and Process*. New York: Mouton de Gruyter.
- JENKINS, Jennifer. 2013. *English as a lingua franca in the international university: The politics of academic English language policy*. New York: Routledge.
- . 2019. "English medium instruction in higher education: The role of English as lingua franca". *Second handbook of English language teaching*, 91-108.
- KACHRU, Braj. B. 1996. "The paradigms of marginality". *World Englishes*, 15 (3): 241-255.
- LASAGABASTER, David and Juan Manuel Sierra. 2002. "University students' perceptions of native and non-native speaker teachers of English". *Language Awareness*, 11 (2): 132-142.
- LASAGABASTER, David and Aintzane Doiz, eds. 2021. *Language Use in English Medium Instruction at University: International Perspectives on Teacher Practice*. New York: Routledge.
- LASAGABASTER, David. 2018. "Fostering team teaching: Mapping out a research agenda for English-medium instruction at university level". *Language Teaching*, 51: 400-416.
- LEVIS, John M. 2005. "Changing contexts and shifting paradigms in pronunciation teaching". *TESOL Quarterly*, 39 (3): 369-377.
- . 2015. "Learners' views of social issues in pronunciation learning". *Journal of Academic Language and Learning*, 9 (1): A-42.
- MACARO, Ernesto et al. 2018. "A systematic review of English medium instruction in higher education". *Language Teaching* 51 (1): 36-76.
- MAÍZ-ARÉVALO, Carmen and Elena Domínguez-Romero. 2013. "Students' response to CLIL in tertiary education: the case of business administration and economics at Complutense University". *Revista de Lingüística y Lenguas Aplicadas* 8: 1-12.

- MÜLLER, Mareike. 2013. "Conceptualizing pronunciation as part of translingual/transcultural competence: New impulses for SLA research and the L2 classroom". *Foreign Language Annals*, 46 (2): 213-229.
- NOWACKA, Marta. 2012. "Questionnaire-based pronunciation studies: Italian, Spanish and polish students' views on their English pronunciation". *Research in Language*, 10 (1): 43-61.
- PAWLAK, Mirosław, Anna Mystkowska-Wiertelak and Jacob Bielak. 2015. "Exploring advanced learners' beliefs about pronunciation instruction and their relationship with attainment". In Waniek-Klimczak and Pawlak, eds. 2015, 3-22.
- PENNINGTON, Martha. C. 2021. "Teaching Pronunciation: The State of the Art 2021". *RELC Journal*, 52 (1): 3-21.
- and P. Rogerson-Revell. 2019. *English pronunciation teaching and research. Contemporary Perspectives*. Palgrave Macmillan.
- REED, Marnie and John M. Levis. 2015. *The handbook of English Pronunciation*. John Wiley and Sons.
- ROSE, Heath and Nicola Galloway. 2019. *Global Englishes for language teaching*. Cambridge: CUP.
- RUBIO-ALCALÁ, Fernando D. and Do Coyle, eds. 2021. *Developing and Evaluating Quality Bilingual Practices in Higher Education*. Bristol: Multilingual Matters.
- SAITO, Kazuya et al. 2019. "How do second language listeners perceive the comprehensibility of foreign-accented speech?" *Studies in Second Language Acquisition* 41 (5): 1133 – 1149.
- SARDEGNA, Veronica and Anna Jarosz, eds. 2023. *English Pronunciation Teaching: Theory, Practice and Research findings*. Multilingual Matters.
- SCHMIDT-UNTERBERGER, Barbara. 2018. The English-medium paradigm: A conceptualisation of English-medium teaching in higher education. *International Journal of Bilingual Education and Bilingualism*, 21 (5): 527-539.
- SZYSZKA, Magdalena. 2017. *Pronunciation learning strategies and language anxiety*. Switzerland: Springer.
- TROFIMOVICH, Pavel, Sara Kennedy and Jennifer Ann Foote. 2015. "Variables Affecting L2 Pronunciation Development". In Reed and Levis, eds. 2015, 353-374.
- VALCKE, Jennifer and Victor Pavón. 2016. "A comparative study on the use of pronunciation strategies for highlighting information in university lectures". In Wilkinson and Walsh, eds. 2016, 323-341.
- WANIEK-KLIMCZAK, Ewa and Karol Klimczak. 2008. "Target in speech development: learners' views". In Dziubalska-Kołaczyk and Przedlacka, eds. 2008, 229-249.
- WANIEK-KLIMCZAK, Ewa and Mirosław Pawlak. 2015. *Teaching and researching the pronunciation of English: Studies in Honour of Włodzimierz Sobkowiak*. Springer.
- WANIEK-KLIMCZAK, Ewa, Arcadiusz Rojczyk and Andrej Porzuczek. 2015. "‘Polglish’ in Polish Eyes: What English Studies Majors Think About Their Pronunciation in English". In Waniek-Klimczak and Pawlak, eds. 2015, 23-34.

WILKINSON, Robert and Marie Louise Walsh. 2016. *Integrating Content and Language in Higher Education: From Theory to Practice. Selected Papers from the 2013 ICLHE Conference*. Frankfurt am Main: Peter Lang.

Received 28 February 2022

Revised version accepted 15 September 2023

Francisco Gallardo del Puerto is a Senior Lecturer at the University of Cantabria, where he is the head of the Department of Philology, the coordinator of the Master's in Second Language Learning and Teaching, and the leader of the Learning English as an Additional Language (LEAL) research group. He teaches undergraduate and post-graduate courses in Bilingualism and Second Language Acquisition. His research focuses on the development of second language pronunciation, the acquisition of syntax and task-based learning, particularly in Content and Language Integrated Learning (CLIL) environments.

Esther Gómez Lacabex is Associate Professor at the University of the Basque Country (UPV/EHU). Her teaching involves undergraduate and post-graduate courses in English phonetics and phonology and English-as-a-foreign-language teaching and learning. Her research interests are the effects of phonetic instruction in L2 sound acquisition, the relationship between speech perception and production as well as pronunciation teaching and learning in English-medium learning contexts such as CLIL or EMI.