

RESEARCH ARTICLES

Emi Pioneers: Exploring Professors' Experiences with English as a Medium of Instruction in a Brazilian University¹

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Abstract

This study is part of a project aimed at mapping the implementation of English as a Medium of Instruction (EMI) at the Federal University of Santa Maria (UFSM). EMI is the use of English in teaching and learning content in curricular courses at universities where the language of instruction is not English (Dearden, 2014). The interest in EMI at the UFSM is linked to national and local internationalization policies. Despite the absence of a specific EMI policy at the UFSM, isolated EMI initiatives have been mapped (Rodrigues, 2019). This study examines perspectives of three professors regarding these initiatives to identify motivations, conditions, concerns, positive and negative outcomes, and needs. Data were collected from three sources: professors' answers to an online questionnaire, interviews, and information retrieved from their curricula on the Lattes platform. Results indicate that the main characteristics of the EMI experiences are confidence in professors' attitudes, support from the disciplinary community, and a pedagogical approach that emphasizes flexibility and diversity in students' English use. These findings are expected to inform institutional actions related to EMI, such as policies and projects to support EMI professors and students.

Keywords: EMI, higher education, internationalization, internationalization at home, language policy

¹ This article is a product of research conducted since 2019 by the authors in the context of the project *Inglês como meio de instrução na UFSM:* políticas, percepções e implementação em direção à internacionalização, which aims at planning actions related to the additional language and academic literacies area. Specifically, the project focuses on mapping policies, legislation, interest, needs, perceptions, and difficulties towards EMI as an option to overcome institutional internationalization.

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Pioneros de EMI: Explorando las Experiencias de los Profesores con el inglés como Medio de Instrucción en una Universidad Brasileña

Resumen

El estudio forma parte de un proyecto destinado a mapear la implementación del Inglés como Medio de Instrucción (EMI) en la Universidad Federal de Santa María (UFSM). EMI hace referencia al uso del inglés en la enseñanza y aprendizaje de contenidos en cursos curriculares de universidades donde el idioma oficial no es este (Dearden, 2014). El interés por el EMI en la UFSM está relacionado con las políticas nacionales y locales de internacionalización. Aunque no exista una política específica para implementar EMI en la universidad, la modalidad es usada en iniciativas aisladas (Rodrigues, 2019). Este estudio examina las perspectivas de tres profesores sobre estas iniciativas para identificar motivaciones, condiciones, preocupaciones, resultados positivos y negativos y necesidades. Los datos fueron recolectados mediante un cuestionario *online*, una entrevista *online*, e informaciones recuperadas de los currículos académicos Lattes de los participantes. Los resultados indican que las principales características destacables de las experiencias con el EMI son la actitud de confianza de los docentes, el apoyo de su comunidad disciplinaria y un enfoque pedagógico que enfatiza la flexibilidad y la diversidad en el uso del inglés por parte de los estudiantes. Se espera que estos hallazgos sirvan de base para proyectos que fomenten el EMI, como políticas y acciones de apoyos para docentes y estudiantes.

Palabras clave: EMI, educación superior, internacionalización, internacionalización en casa, política lingüística

Introduction

English as a Medium of Instruction (EMI) refers to "the use of the English language to teach academic subjects in countries or jurisdictions where the first language (L1) of the majority of the population is not English" (Dearden, 2014, p. 2). The emergence of EMI has been associated with the globalization of higher education through internationalization, and represents a view which takes English to be the *lingua franca* for academic interaction. EMI is seen as strategic in increasing incoming and outgoing mobility (Martinez, 2016; Dafouz, 2018), which seem to be central aspects of internationalization, based on claims that mobility can make the university environment more international and, thus, more attractive to foreign students, as well as preparing home students for international mobility (Baumvol & Sarmento, 2019).

In contexts where resources and opportunities for outgoing international mobility are scarce due to financial and linguistic limitations, EMI plays an important role in contributing to another strand of internationalization denominated "Internationalization at Home" (Knight, 2008). This strand has been perceived as a more inclusive approach to internationalization, reaching a larger number of home students compared to international mobility programs (Baumvol & Sarmento, 2019). It creates opportunities for home students to experience an international environment for English acquisition, through more globally-oriented course programs, potential lectures by foreign professors, and interactions with classmates from abroad. (Iltimately, internationalization (at home) can boost institutional rankings and EMI can provide home students with competitive advantages for studying and working abroad in the future (Leal & Moraes, 2018; Macaro et al., 2018, Galloway, 2020). Yet, there is still no conclusive evidence about the effectiveness of EMI worldwide (Macaro et al., 2018), nor specifically in Latin America (Aliaga Salas & Pérez Andrade, 2023). Conversely, there has been consistent research interest in EMI policy development, as well as the motivations, proficiency levels, and perceived challenges of both teachers and students regarding EMI (as shown in the literature reviews by Macaro et al., 2018; Galloway, 2020; and Aliaga et al., 2023).

In Brazil, the implementation of EMI has been expanding both at postgraduate and undergraduate levels (<u>Gimenez et al., 2018</u>), along with increasing research on the topic (<u>Gimenez et al., 2021</u>; <u>Gimenez & Marson, 2022</u>). The simultaneous implementation and research have been advocated as an advantage for Brazilian universities, leading Brazil to be "the first country in the world to push a research agenda that helps inform EMI decisions and development along with its push towards EMI implementation" (<u>Martinez, 2016, p. 210</u>). <u>Martinez (2016)</u> identifies two positive effects of EMI in Brazil: first, the potential benefits to internationalization initiatives at home; and second, the encouragement of reflective practice among teachers, who may rethink their teaching methods to adopt EMI. This awareness can be further enhanced by collaboration between professors in the discipline and foreign language teaching departments at universities. This collaboration highlights the importance of Applied Linguistics for the context of EMI implementation.

Based on the available literature about EMI in Brazil to date, it remains unclear to what extent research has informed EMI decisions. However, as pointed out by <u>Aliaga Salas and Pérez Andrade (2023, p. 151)</u> regarding Brazil and other parts of Latin America, EMI "has been mostly implemented in a somehow improvised manner", commonly as individual and disconnected initiatives from one another, probably due to lack of local, regional, or national policies. It is not uncommon that this kind of implementation does not problematize motivations and outcomes of language and pedagogical attitudes (<u>Hendges *et al.*</u>, 2020) and this uncritical stance could undermine the inclusiveness of the internationalization at home approach (<u>Martinez, 2016</u>; <u>Gimenez y Marson</u>, 2022).

The present work departs from this scenario, as part of an umbrella research project that aimed at mapping local views, needs, and initiatives regarding EMI at the Federal University of Santa Maria (UFSM—Universidade Federal de Santa Maria), in Brazil (Hendges, 2018). Results of previous phases of the project revealed a consistent interest in EMI at UFSM across all areas and of both professors and students. They also showed that EMI courses were already in use at UFSM, as part of pioneering initiatives by a few professors (Hendges *et al.*, 2020). The focus of the present paper is on these initiatives. Our purpose is to describe characteristics of EMI at UFSM from the perspective of three professors that are among the first to experiment with this modality at the university. We

address five specific aspects: motivations, conditions, concerns, positive and/or negative outcomes, and perceived needs related to EMI. We hope that the results will shed some light on actions for the future of EMI in the institution, primarily by providing language support to professors and students and offering information to subsidize policy development.

Teachers' motivations for adopting EMI in the literature

Teachers' motivations for adopting EMI around the world consistently include attracting international students (Macaro et al., 2018, Hendges et al., 2020; Gimenez et al., 2021; Aliaga Salas & Pérez Andrade, 2023). Baumvol and Sarmento (2016) note that in European and North American contexts the drives for this motivation may be more economic than socio-cultural and scientific, as international students pay higher academic fees than local students. In Brazil, because of the public funded higher education system, which is available to national and international students, recruiting international students is associated with benefits related to developing intercultural citizenship and academic networks (Baumvol & Sarmento, 2016). These gains have been observed in the discourse of teachers in Latin America (Aliaga Salas & Pérez Andrade, 2023) and specifically in Brazil (Hendges et al., 2020; Gimenez et al., 2021). Aliaga Salas y Pérez Andrade (2023) question "these newly perceived" advantages of EMI by comparing them to the role that Spanish may have had in achieving them: "Little is mentioned about how instruction in Spanish may have previously served a similar purpose in the region." (p. 148).

Two additional central motivations in teachers' discourse are the possibility of improving the English language proficiency of home students through EMI and the key role of English in some disciplines, where quality resources are predominantly available in English (<u>Macaro et al., 2018</u>, <u>Hendges, et al., 2020</u>; <u>Gimenez et al. 2021</u>; <u>Aliaga Salas</u> <u>y Pérez Andrade, 2023</u>).

Studies also found that the status of English as the most prestigious language in science also motivates the implementation of EMI. It is suggested, however, that this hegemonic understanding of English language needs to be critically addressed to avoid reinforcing (linguistic) imperialism (<u>Macaro et al., 2018, Gimenez et al., 2021</u>; <u>Aliaga Salas & Pérez Andrade, 2023</u>). Indeed, a critical approach to EMI highlights the need for critical reflection and awareness about economic rationales, socio-cultural impacts, and linguistic imperialism in the field (<u>Curle et al., 2024</u>). For instance, <u>Dearden (2014)</u> refers to social concerns of exclusion rather than inclusion through EMI, as "instruction through English may limit access from lower socioeconomic groups" (p. 2), thus undermining the status of the first language or national identity. <u>Curle et al. (2024</u>) also caution about how an English-only language of instruction along with a neoliberalist internationalization agenda in higher education "might strengthen structural, academic, pedagogical and cultural inequalities between English and local languages" (p. 2). This critical perspective is in line with contemporary theoretical-pedagogical perspectives such as academic literacies (<u>Lea & Street, 2006</u>; <u>Lillis & Scott, 2007</u>) and translanguaging (<u>García et al., 2017</u>; <u>Wei, 2018</u>; <u>Sahan & Rose, 2021</u>), both defined as tools for language awareness and for making learning environments more sensitive to heteroglossia, and more importantly to the voices of socioeconomic vulnerable and linguistically silenced students.

From this viewpoint, the adoption of EMI operates on a continuum of use that varies in institutional and pedagogical terms (<u>Walkinshaw *et al.*</u>, 2017). This flexibility is a characteristic that contributes to internationalization based on situated practices, since it can be adapted to specific needs and possibilities.

Teachers' challenges to adopting EMI in the literature

A consistent finding in the literature regarding teachers' perceived challenges in adopting EMI is the low or varying levels of English proficiency among students (<u>Macaro et al., 2018</u>; <u>Hendges et al., 2020</u>; <u>Gimenez et al., 2021</u>; <u>Aliaga Salas & Pérez Andrade, 2023</u>). This issue could have a "potentially negative impact on content" (<u>Macaro et al., 2018</u>, p. 64). Although there is no consistent evidence supporting this consequence, as pointed out earlier, dominant views about native-like language standards and language deficit models appear to be related to these challenges (<u>Lea & Street, 2006</u>). The relationship between internationalization, EMI, and English language does not presuppose a normative approach towards any native variant, but a critical approach that emphasizes the role of English in producing mutual benefits (Moita Lopes, 1996</u>).

Regarding EMI two further "negative motivations" have been identified, both globally and locally in Brazil (<u>Hendges</u> <u>et al., 2020</u>): "The creation or consolidation of socio-economic elites and anti-egalitarian outcomes for students" and "a lack of teacher professional development and support" (<u>Macaro et al., 2018</u>, p. 64). The critical stance about EMI — and about internationalization — is seen as key for overcoming these challenges, by means of situated actions that balance local and global views, a concept often referred to as glocalization (<u>Finardi et al., 2019</u>). After observing that Brazilian national policies of internationalization lack a critical perspective, <u>Finardi et al. (2019</u>) suggest that institutions and people involved in internationalization processes "work in government policy gaps, to orient their academic community to more responsible and socially sustainable local and global actions" (p. 17).

Additional challenges addressed by teachers in Brazil (<u>Hendges, et al., 2020</u>) included teachers' low proficiency to deliver classes in English; the lack of knowledge about EMI, particularly regarding its strategic relevance to internationalization and its implications on learning; absence of official regulations on EMI at the institution; low relevance of English in some areas/departments; low presence of international students to justify EMI; and insufficient spaces and media infrastructure to teach using EMI. Moreover, according to <u>Macaro et al. (2018, p. 64)</u>, "additional workload for teachers switching to EMI" represents a challenge.

Two solutions to these challenges that are emphasized in the literature are the implementation of workshops on EMI pedagogical and linguistic strategies and the institutionalization of EMI policies in universities. Regarding EMI teacher development initiatives, in the literature two approaches were identified: a strand that suggests a greater effort should be applied towards language literacy (Drljača Margić & Vodopija-Krstanović 2018; Pérez Cañado, 2020) and a strand that proposes focusing on pedagogical development and reflection (Martinez 2016). In the Brazilian scenario, Gimenez and Marson (2022) reviewed publicly available reports on EMI teacher education and concluded that most courses had postgraduate professors as target audience and covered both language and pedagogy-related issues under an instrumental rather than critical view. However, they also believe that concerns with language learning in EMI classes were one of the major aspects on which the reviewed courses focused, probably due to the fact that mostly language specialists have been delivering such courses (Gimenez & Marson 2022).

Method

The methodological approach employed here is primarily qualitative and is based on three sources of data: an online questionnaire, Lattes curricula, and interviews. All three sources were originally in Portuguese and have been translated in this paper for the purposes of citing questionnaire and interview questions, as well as participants' responses. The project was authorized by the Ethics Committee of UFSM under the Ethical Approval Statement n. 3.470.383.

It is important to clarify that the online questionnaire was administered in the previous phases of the research (Hendges, et al., 2020), during which answers from 136 professors at UFSM were collected, revealing that some of them were already using EMI. Up to that moment, official numbers about the use of EMI at the university were inexistent. Since then, UFSM started to publish reports (UFSM, 2020), as part of a national internationalization project called CAPES-PrInt, a national public call in 2017 issued by the Ministry of Education of Brazil that offered funding for institutional projects addressing internationalization (Ministério da Educação, 2017). These reports indicated that 19 postgraduate courses were taught through English at UFSM during 2018 and 2019, but without any details or evaluation about, for example, how these classes were conducted, what approach to EMI was used, the role of English and of Portuguese in each classroom activity, and without being supported by any institutional EMI policy. Previous literature has shown that configuration of EMI may vary significantly based on the extent and nature of English usage in different activities, and is influenced by language policies (Baumvol y Sarmento, 2016). We hope our investigation contributes to informing the implementation of an EMI policy at UFSM.

Participants

The participants were recruited based on two criteria: 1) they had taught courses with English as the language of instruction, and 2) they volunteered to be interviewed. This information was gathered from two questions in the aforementioned online questionnaire.

In the question about experience with the use of EMI, the definition of EMI was narrowed down to *the use of English in curricular courses (compulsory or elective)* <u>to teach contents orally in English</u>. The target audience was provided with this definition because of a) the need to clarify the meaning of EMI of our interest, b) the assumption that it was a relatively new concept among our academic community, and c) the need to increase the generalizability of the answers.

Eight professors declared having used this configuration of EMI in their classes and five of them agreed to continue participating in the study by indicating their email addresses for further contact (<u>Hendges *et al.*</u>, 2020). Hence, five volunteers were initially considered for the current analysis.

Nevertheless, in spite of our emphasis on *oral English* in the definition of EMI, in a further question we found that not all five professors used English to speak in classroom (<u>Hendges *et al.*</u>, 2020). The question asked about how systematically the speaking-in-English skill was used in their classes, and the answers indicated that three (P#1, P#2, and P#3) of the five professors (<u>Table 1</u>) did so, at least "sometimes". Therefore, P#4 and P#5 were excluded from the sample.

Classroom activities	P#1	P#2	P#3	P#4	P#5
Readings (bibliography)	Sometimes	Always	Always	Always	Frequently
Written materials	Always	Always	Frequently	Frequently	Sometimes
Oral presentation of content	Sometimes	Always	Sometimes	Rarely	Never
Oral interaction with students	Sometimes	Always	Rarely	Rarely	Never
Tests	Rarely	Always	Never	Never	Frequently

Table 1. Frequency English is used in different classroom activities

The three participants P#1, P#2, and P#3 teach subjects in the areas of Biochemistry and Molecular Biology (Natural and Hard Sciences), Physics (Natural and Hard Sciences), and Economy and International Relations (Social Sciences and Humanities) respectively. P#1 is female, while P#2 and P#3 are male. For ease of reference to their areas, we will use abbreviations of their discipline in addition to the symbolic references, as follows: P#1BioCh, P#2Phys and P#3EcolR.

Questionnaire and Lattes curricula

As mentioned above, the answers to the questionnaire were collected earlier in the research process (Hendges *et al.*, 2020). In the current study, we selected the answers of three professors that were considered relevant to our purpose here, namely to investigate motivations, conditions, concerns, positive and/or negative outcomes, and perceived needs in previous experiences of EMI at UFSM. The original questionnaire had 35 questions (Hendges *et al.*, 2020), 19 of which were selected for this study (Table 2).

The Lattes curriculum is the official government academic database for Brazilian scholars to publicly record educational, professional and research experiences, activities, and achievements. It comprises 100 topics, 11 of which were analyzed as relevant sources of information about the profile of the three participants (Table 2). These topics included their international mobility and teaching experiences, as well as their frequency of published or presented papers in English. All of these may have a bearing on their motivations for using EMI and on their attitudes towards proficiency, translanguaging, and otherness in general. From now on, we will refer to this curriculum simply as Lattes, as done by the Brazilian scientific community.

Questionnaire	Lattes curriculum	
 What is your Department? How long have you been teaching at (JFSM? In which of the following level(s) do you teach? (Undergraduate, graduate) How would you rate your knowledge of English in each of the four communication skills below? (Writing, reading, speaking, listening) Have you ever been on international mobility? Which modality(ies)? (PhD, visiting scholar, etc.) Do you have projects/partnerships with universities abroad? Check how often these uses of English apply to your classes. (Readings (bibliography), classroom slides, oral presentation of content, oral interaction with students, tests, etc.) Check the level(s) to which each of these situations applies. The "more explicit" version of the EMI is characterized by the use of English in curricular courses (compulsory or elective), when the contents are taught orally in English. Considering this definition, do you use or have you used EMI at (JFSM? In what types of disciplines have you used EMI? (compulsory or elective) Did you rely on any institutional document (regulation, legislation or the like) of (JFSM and/or on your department to use EMI? Which one(s)? Why did/do you use EMI? Did/do you face any obstacles to adopt/maintain EMI? Comment. What is your opinion about the institutionalization of EMI at (JFSM? In your opinion, how important is EMI in the internationalization of (JFSM? In your opinion, what institutional actions are important to stimulate and support the use of EMI at (JFSM? Have you ever had foreign students enrolled in your courses? In your opinion, what topics/support should be part of an EMI workshop? 	Academic education Complementary Training Teaching history (at (JFSM)) Teaching history (courses taught) Research projects Languages Awards and titles Productions - Bibliographic production Productions – Presentations as conferences Committees Supervisions	

Table 2. Topics from the questionnaire and Lattes curriculum

All of the 20 questions had pre-determined answers in the form of multiple choice or checkbox, but most of them also included an "other" option. When selected, this option opened a space for open-ended responses.

Data from both sources were correlated in order to establish redundancies and complementarities, and to direct the next step of the study: online semi-structured interviews.

Interviews

The interview was chosen as a data collection tool to achieve a deeper understanding of previous experiences with the use of EMI at UFSM. Unlike the online questionnaire, which captures global and generalizable aspects, the interview provides data from specific, situated perspectives by focusing on a fuller and thicker description of each interviewee's experiences (Richards, 2009). The aspects of the participants' experiences that were emphasized in this stage were details about all five aspects under consideration: their personal motivations, the institutional and local conditions that enabled or prompted their use of EMI, their perceptions of positive and negative outcomes, and their perceived needs for future practices and policies.

A semi-structured interview protocol was designed to each participant based on a closer look to each one's answers to the questionnaire and on the examination of information from their Lattes. The semi-structured interview was chosen, as it aligns with the research objective, which pre-delineates broad topics to be covered (motivations, conditions, concerns, positive and/or negative outcomes, needs), while at the same time not limiting "the depth and breadth of the respondent's story" (<u>Dörnyei, 2007</u>, p. 136). The open-ended questions and prompts work as a guide that should encourage the interviewee "to elaborate on the issues raised in an exploratory manner" (<u>Dörnyei, 2007</u>, p. 136).

Keeping the balance between control and flexibility while conducting a semi-structured interview seems to be a key aspect for its quality. To achieve this harmony, the researcher needs to "be familiar with the topic and lines of questioning" (<u>Richards, 2009</u>, p. 189). Thus, our interview was grounded on previous literature about EMI experiences in other parts of the world, particularly on professors' perspectives (rather than student' views, or views of administrators) (<u>Macaro et al., 2018</u>; <u>Hendges et al., 2020</u>; <u>Gimenez et al., 2021</u>; <u>Aliaga Salas & Pérez Andrade</u>, 2023).

Due to the need to restrict physical contact by December 2020, because of the COVID-19 pandemic, the interviews were conducted online. Invitations were sent to each participant by email, which included a list of the five topics to be covered and a list of proposed dates and times for the interview.

The duration of the interviews was similar for the two participants of the Natural and Hard Sciences, P#1 and P#2, each lasting around one hour. However, the interview with the participant from the Social Sciences and Humanities, P#3, was twice as long. This helps to illustrate the unstructured element of the interviews in terms of flexibility in accordance with each participants profile, needs and interests. The interviews were recorded using Google Meet Workplace. Each interview was later transcribed manually through recurrent listening to the audio recordings. The analysis began during this process, since it was possible to highlight excerpts that were deemed relevant to the aspects under examination.

Finally, the data generated in the interviews were systematized and compared with the data from the other sources — questionnaire and Lattes. It is important to keep in mind that the data from the questionnaire and the interviews predominantly resulted from the professors' discourses in response to questions that directly address the five aspects, while the data gathered from Lattes resulted significantly from our own interpretation. For example, if we observed that one of the participants did his/her PhD abroad, maintains partnerships with foreign research groups, publishes mostly in English, and yearly presents English papers at conferences, we inferred that these factors may have motivated them to use EMI, as well as impacted their views on EMI and their praxis (following <u>Gimenez et al.</u> 2021).

Results

The results are organized considering the five aspects of the objective: motivations, conditions, concerns, outcomes, and needs related to the previous experiences of three professors in using EMI at UFSM. Each aspect is described and discussed based on correlations of data generated from the questionnaire, Lattes, and the interviews.

Motivations

The motivations for the adoption of EMI consistently referred to by all three participants were international mobility, centrality of English in their study areas, and intrinsic personal interest in languages. The individual reasons observed in each data source (questionnaires, Lattes, and/or interviews) are listed in <u>Table 3</u>.

Data source	Motivations for the adoption of EMI	P#1 BioCh	P#2 Phys	P#3 EcIR
	Foreign student in classroom	Х	Х	
Questionnaire	Attract foreign students		Х	
Stimulate home	Stimulate home students to study English		Х	Х
Laura	Previous experiences in international mobility	Х	Х	Х
Lattes Predomi	Predominance of English in publications in the area	Х	Х	Х
	Interest in languages	Х	Х	Х
Interview	EMI is a common practice in my postgraduate program	Х	Х	
	Help Brazilian students to participate in international mobility		Х	Х
	Expand cooperation networks		Х	Х

Table 3. Motivations for the adoption of EMI

The central role of English in the participants' area of knowledge as a motivation for the adoption of EMI was inferred from their Lattes by analyzing their intellectual production. On average, most of their publications are in English (72%) and almost half of the papers presented at conferences have titles in English (53%), which led us to assume that they were most likely given in the same language (Table 4).

Data source	Intellectual production	P#1 BioCh	P#2 Phys	P#3 EcIR
I attac	Articles published in English	91%	100%	27%
Lattes	Conference presentations in English	49%	50%	60%

The equivalent results of the two professors from the Natural and Hard Sciences may be explained by shared historical and epistemological similarities between these fields. In both areas, the nature and value of information are influenced by the pressure to publish in a timely manner. These are, therefore, "crucial elements that favor the use of the English language" (Ortiz, 2006, p. 13). In the social sciences, the rhythm is different, as Ortiz (2006) points out, it is the rhythm of interpretation and reflection, where the construction of knowledge is strongly tied to language and to context, and for that reason "the making of the social sciences must keep several languages in the process" (Ortiz, 2006, p. 1).

The encouragement to the use of EMI in the contexts of P#1BioCh and P#2Phys contrasts sharply with P#3EcIR's experience, whose decision to adopt EMI stems primarily from personal inclination based on his experiences abroad and on the perception of the importance of English for his students. Also based on P#3EcIR's answers both to the questionnaire (1) and to the interview (2), the adoption of EMI has no supporters in his department due to an "ideological view of English" as an "imperialist language".

P#3EcIR: "The syllabus of the courses where I teach basically prohibit the use of bibliographies in English. Even worse, the development of classes and the requirement for assignments or presentations in English. There is not the least possibility to communicate in English in my work environment, with fellow professors or staff. There is a deep animosity against English in favor of Spanish, a language which is almost useless in science."

P#3EcIR: "In my department, mainly, there is a lot of an ideological view of English, that English
 (2) is considered an imperialist language, you know? This thing from the last century, right? So they refuse to learn English, because English is associated with imperialism, colonialism... there is all this history underlying the learning of English, which for me is nonsense, you see?"

The discourse of P#3EcIR reveals a naturalized approach about the role of English in the process of internationalization, as it was an unproblematic and unquestionable given phenomenon. Because of views like this, the agenda of adopting EMI needs to address critical perspectives regarding the status of English in different academic fields and multilingualism. As discussed by Liberali and Mengale, the spread of English is clearly driven by globalization, which in turn has roots in economic hierarchies, and globalization in Latin America may "mean linguistic consequences, such as the fact that some languages have started to play a large number of functions and the hypercentral place being occupied by the English language" (2016, p. 96).

Conditions

Based on the experiences of the three participants with EMI, a list was drawn with requirements for the implementation of this modality, which were more or less explicitly declared in the data sources (<u>Table 5</u>). Most of these conditions were common to all: positive attitude towards internationalization, EMI, and English; high proficiency in English

(self-evaluated); over 10 years of experience in teaching at the university, at undergraduate and postgraduate levels; post-doctoral educational experiences abroad where English was the main communication language, especially in academic interactions —P#1BioCh, post-doc in the United States of America (2015), P#2Phys, post-doc in Ireland (2004-2006), and P#3EcIR, post-doc in Hungary (2018-2019). Long teaching experiences may influence professors' confidence in their pedagogical practices, which seems to be an important element in EMI "teacher training" for Brazilian professors (Martinez & Fernandes, 2020).

Data source	Conditions for the adoption of EMI	P#1 BioCh	P#2 Phys	P#3 EcIR
	Positive attitude towards internationalization, EMI and the role of the languages department in the process	Х	Х	Х
Questionnaire	Use of bibliography and slides in English in class	Х	Х	Х
	Use in both obligatory and elective disciplines	Х	Х	
	Use only in elective disciplines			Х
	Self-evaluation of English proficiency as advanced (C1) or proficient (C2)	Х	Х	х
Questionnaire and Lattes	Participation in international academic cooperation agreements	Х	Х	Х
	Experience with international mobility	Х	Х	Х
	Long higher education teaching experience (over 10 years)	Х	Х	Х
	Teaching at undergraduate and postgraduate levels	Х	Х	Х
	Teaching postgraduate courses	Х	Х	Х
Interview	Students with English reading proficiency	Х	Х	
	English proficiency test as entry requirement in my postgraduate program	х		

 Table 5. Conditions for the adoption of EMI

Only the participants from the Natural and Hard Sciences, P#1BioCh and P#2Phys, share two conditions: EMI could be implemented both in elective and obligatory courses, and students should at least be proficient in reading in English. The possibility of using EMI in mandatory courses suggests a collective effort in the Biochemistry and Physics postgraduate programs towards EMI. This, however, does not appear to be the case in Economics, according to P#3EcIR's answers reported in the previous section, and so he only used EMI in elective courses.

In addition, since EMI is already integrated into the postgraduate programs for P#1BioCh and P#2Phys, they noted that most students at this level are aware of the central role English plays in their sub-fields and have a good reading proficiency. This is because proficiency in English, especially in reading, is encouraged at the undergraduate level, given that English predominates in the literature. According to P#1BioCh, in the postgraduate program where she teaches an English proficiency test is part of the admission process. The knowledge of English expected from postgraduate students of the Natural and Hard Sciences possibly diminishes potential negative impacts that have been associated to the use of EMI, such as lack of content comprehension (Macaro et al., 2018), as detailed in the next section.

Concerns

In the answers to the questionnaire, P#1BioCh and P#3EcIR agree about four main concerns about the adoption of EMI: unfamiliarity with EMI, lack of institutional policies about EMI, professors' insufficient proficiency to teach in English, and students' low English proficiency (<u>Table 6</u>). The latter was indicated as the biggest limitation to adopt EMI at UFSM by 80% of the participants in the previous phase of the study (<u>Hendges, Rodrigues & Pretto, 2020</u>).

Data source	Concerns about the adoption of EMI	P#1 BioCh	P#2 Phys	P#3 EclR
	Unfamiliarity with EMI	Х		Х
	Lack of policies	Х		Х
Questionnaire	Professors' low proficiency	Х		Х
	Brazilian students' low proficiency	Х		Х
	Few foreign students		Х	
Interview	Students' low proficiency	Х		Х

Table 6. Concerns about the adoption of EMI

In the interviews, the low student proficiency was reinforced by P#1BioCh and P#3EcIR. In the postgraduate program where P#1BioCh teaches, language proficiency is tested at entry level. Still, she was worried about students' proficiency in contexts outside the classroom, such as proficiency tests for student mobility, because in her EMI classes the use of English is less controlled than in these tests, and more personalized according to each student, through translanguaging (<u>Vogel & García, 2017</u>). Each student draws on individual linguistics repertoires (Portuguese, gesture, images) to negotiate and make meaning.

P#3EcIR was the participant that showed more dissatisfaction with student proficiency, indicating that this was a reason for not maintaining EMI in further courses taught by him.

In fact, diagnostic English proficiency tests implemented at UFSM between 2014 and 2019, through the national program called Languages without Borders⁵, suggested by sampling that close to 80% of the academic community was at the basic level (A2 of the CEFR - Common European Framework of Reference for Languages). Similar scenarios seem to be true for other parts of Latin America, as detected by <u>Jiménez *et al.*</u> (2017) about Chilean students reaching higher education with low English proficiency. Thus, concerns about social and educational exclusion rather than inclusion through EMI —as mentioned earlier, for example, based on <u>Dearden (2014)</u>— are legitimate in Brazilian universities and should therefore be computed in EMI policies. For P#2Phys, however, solely the low number of foreign students is the one concern and limitation for the use of EMI. This focus is consistent with the motivations he mentioned: attracting foreign students and expanding international collaboration networks through EMI.

Outcomes

The outcomes of the EMI experiences were explicitly addressed only in the interviews and refer mostly to positive learning outcomes (<u>Table 7</u>).

Data source	Positive outcomes of the adoption of EMI	P#1 BioCh	P#2 Phys	P#3 EcIR
	Focus on communication (not on the language, corrections)		Х	Х
	Use of English transcends the classroom (laboratory, other disciplines)	Х	Х	
	Students become more comfortable with English throughout the semester	Х		
Interview Flex	Flexibility in the use of English, Portuguese is also used when necessary	Х	Х	Х
	Flexibility in the use of English in tests, with questions in English, but students' answers in English or Portuguese	Х	Х	
	More explicit guidance by professors to prepare oral seminars in English	Х	Х	
	Increased awareness about the communicative focus of EMI	Х	Х	

Table 7. Outcomes of the adoption of EMI

In previous studies, the increase in English proficiency is typically expected as a positive outcome, while loss

5 https://isf.mec.gov.br/

of content comprehension is frequently mentioned as a negative outcome (<u>Macaro *et al.*, 2018</u>). Based on this background, we asked the professors to comment on their perceptions about their students' performances in the EMI classes (extracts 3 and 4).

About focus on communication and improvement in language proficiency

P#1BioCh – "...in the beginning there is this issue of them [the students] not feeling, for example, prepared to make slides in English, to speak in English. But what I see is that there is this attempt, during the semester, of conversation. And this attempt, which at first may seem more timid, or a little more, let's say, limited to some topics, I think because they take other disciplines together that I am not aware of, right? But the socialization ends up happening in other places too, not just in the class that I'm teaching. I see that they manage to have a conversation, and sometimes even a... a... an exchange of ideas, even a dialogue in the classroom. One word is in English, another one is in Portuguese, but in the end everyone ends up helping and, you know, flowing, like this... [...] I would say, this initial obstacle, I see it like this: during the semester, this whole situation of being able to talk, of not feeling all that shame of getting a translation wrong... it gets better. "Oh, how am I going to say that word?", right? "How do I put it?", right? "How is it pronounced?", "what if I write a word wrong on the slide". So these fears, which are initial fears, I see that they end up being more tolerable: "ah, the word was written with an "m" and it had two "ms"" or "the word was spoken in one way, but it is another", but everyone understood it! There is an attempt."

About improvement in language proficiency

(3)

P#2Phys – "So what I do is: I offer to help, but I've noticed that the students are kind of doing well, it is rare for someone to tell me [they have difficulties] because there are these foreign students, so they're more used to it, because they've realized that it's [EMI classes] a fast and cheap way to learn English."

About the possibility of loss in content learning

P#1BioCh – "I think this can happen in the beginning, for example, when a concept is not yet thoroughly... learned. Then you can, for example, your concern is to understand what the word is, not in the sense of the context of the content. I see this at first, but not later on! Because, in our area, it's that technical English, right? So there's that set of words, which will be present in the articles, right, it's that terminology. So when the student takes hold of that terminology, I see that, [...] so I think that in the beginning there is really a concern to understand the other language, and not the content, but this is a step that you have to go through, it's written in English or in Portuguese, because you've already mastered the basic concepts to understand it."

<u>Macaro et al. (2018, p.37)</u> call these positive outcomes as "win-win" situations, which here is probably related to the nature and frequency of activities in English in the participants' EMI classes, with low pressure on the students to use English.

In the interviews, the participants confirm their flexibility in the use of English in their classes: the focus of the experiences was on communication and content, and switching —mostly between Portuguese (as the native language of most students) and English— was part of the teaching and learning processes. In his interview, P#3EcIR even mentioned a situation when he used French in order to include a student in a class discussion.

These outcomes can be traced to the professors' motivations to adopt EMI related to expanding collaboration networks, including foreign students, and making Brazilian students more comfortable with this medium of instruction. Moreover, their flexibility in focusing on comprehension regardless of language can be related to other outcomes. Professors indicated that throughout their EMI courses, they attempted to raise students' awareness of this

communicative focus, thus making students more confident to use English. Flexibility is also noted in the participants' decision to use English in the questions of tests and exams, but allowing students to choose the language of their preference in their answers. Furthermore, professors would offer help with the preparation of oral presentations in English students had to give during the semester.

Despite having similar motivations and attitudes towards EMI as P#1BioCh and P#2Phys, P#3EcIR reported no longer using EMI because of low student proficiency and department resistance. This highlights how local cultures encompass a determining role in the success or failure of EMI implementation and that any attempts to institutionalize the modality should be critically and collaboratively constructed (Leal & Moraes, 2018; Macaro et al., 2018; Finardi et al., 2019).

Needs

The major commonsensical need mentioned by the participants was the institutionalization of EMI by means of an official policy. Further needs were drawn from their answers to two questions the questionnaire —"In your opinion, what institutional actions are important to stimulate and support the use of EMI at UFSM?" and "In your opinion, what topics/support should be part of an EMI workshop?"— and to one question of the interview about relevant topics that should be addressed if EMI were to be institutionalized at UFSM (Table 8).

Needs for the adoption of EMI	P#1 BioCh	P#2 Phys	P#3 EcIR
English language workshops for professors	Х		Х
Certification of professors' skills to teach using EMI	Х		
Workshops for professors about pedagogic strategies	Х		Х
Workshops for professors about EMI		Х	Х
Career progression policy for EMI professors			Х
Continuous projects to support professors and students in ongoing EMI courses	Х		
Students EMI awareness-raising actions	Х		
Proficiency tests for students at undergraduate entry level			Х
Reward policy for EMI students		Х	Х
Flexibility to use other languages as medium of instruction	Х	Х	Х
Use of English in admission processes		Х	
Promotion of EMI disciplines			Х
EMI evaluation policy			Х

Table 8. Needs for the adoption of EMI in the questionnaire

Further needs were primarily identified in the discourses and data of P#1BioCh and P#3EcIR. These needs include enhancing the proficiency of both professors and students through funded projects and support actions to EMI teaching and learning, and implementing rewards systems to acknowledge participation in EMI by both professors and students.

Despite the emphasis on English in the participants' education background and in their areas, all of them demonstrated a welcoming approach towards multilingualism in instruction options. Additionally, they showed a flexible and open attitude, noting that the adoption of EMI would be advantageous towards internationalization only if it was not imposed. These views clearly show that any regulation about EMI at UFSM should be the result of bottomup discussions, with comprehensive debates with all the involved actors about EMI, purposes, local realities, means, gains, losses, and so on.

Discussion and conclusion

As a means to describe previous experiences of three professors in using EMI at UFSM, in terms of motivations, conditions, concerns, outcomes and needs, we considered their answers to an online questionnaire, online interviews, and information provided in their Lattes curricula.

Throughout the results, it was possible to perceive three central interconnected characteristics of these EMI experiences, one more oriented towards the individual *—confidence—*, a second one toward the immediate surrounding community *—support—*, and a third one to the pedagogical perspective *—flexibility/diversity* (<u>Table 9</u>).

Dimension	Attributes	Evidence
		Teaching experience
		Mobility experience
Individual	Confidence	Self-assessment of proficiency
		Academic literacies
		Participation in international research networks
		Ongoing offer
	6	Elective and obligatory courses
Collective	Support	Colleagues using EMI
		Presence of international students
		Focus on communication
Pedagogical	Flexibility/Diversity	Flexible use of English, Portuguese or other languages
		according to individual student needs

Table 9. Needs for the adoption of EMI in the questionnaire

We observed that confidence was an essential feature of the three participants that encouraged them to offer courses in English despite the lack of official regulations. This confidence shows a protagonism that involves knowledge gained from long teaching experiences, from living in diverse cultural and linguistic realities during post-doctorates, and the resulting academic literacies in English that are continuously practiced with peers in written research publications and oral presentations in international conferences.

However, these factors may not be sufficient without the collective support of the community, in this case, the local disciplinary communities. P#1BioCh and P#2Phys have such support from their departments and/or postgraduate programs and continuously offer EMI courses, along with other colleagues, creating an internal network and potential space for sharing information, strategies, reflection, as well as practices that help to prepare students for EMI. Contrastively, P#3EcIR had no support and discontinued the use of EMI.

Finally, the third feature that became evident in the use of EMI at UFSM is a pedagogical approach that favors communication over strict language adherence. This approach is flexible, accommodating students' diverse background experiences and opportunities with learning English. In this perspective, English is not imposed on the student. The language may be present in the bibliography, in the professor's slides, in his oral presentation of content, but students can use Portuguese or other semiotic resources to ask questions, interact with classmates and take tests.

Flexibility seems to be the key to a successful implementation of EMI, as the modality allows for adjusting depending on participants, contexts, available technologies, purposes. The participants in our study also reinforce this element when indicating a non-mandatory character of EMI, in its institutionalization. This is in line with the understanding of <u>Walkinshaw et al. (2019</u>) of EMI as a non-binary choice, encompassing a continuum of usage.

Although the size of the sample in this work is small, our findings are in consonance with previous literature about what are important features of EMI and its stakeholders (<u>Macaro et al., 2018</u>; <u>Hendges, et al., 2020</u>; <u>Martinez</u>

<u>&Fernandes, 2020; Gimenez et al. 2021; Aliaga Salas & Pérez Andrade, 2023</u>). The next steps should be to investigate local EMI experiences through classroom observation and including the discourses of students into the equation, from the perspective of Academic Literacies in English, English for Academic Purposes, to inform the Language research and teaching laboratories of the university about EMI support actions.

References

- Aliaga Salas, L., & Pérez Andrade, G. (2023). EMI in Latin America. In: Griffiths, C. (eds) The Practice of English as a Medium of Instruction (EMI) Around the World. Second Language Learning and Teaching. Springer, Cham. https://doi.org/10.1007/978-3-031-30613-6 9
- Baumvol, L. K., & Sarmento, S. (2016). A internacionalização em casa e o uso de inglês como meio de instrução. *Echoes: Further Reflections on Language and Literature. 1ed. Florianópolis: UFSC, 1,* 65-82.
- Baumvol, L., & Sarmento, S. (2019). Can the Use of English as a Medium of Instruction Promote a More Inclusive and Equitable Higher Education in Brazil? *SFU Educational Review*, *12*(2), 87–105. <u>https://doi.org/10.21810/sfuer.v12i2.941</u>
- Curle, S., Rose, H., & Yuksel, D. (2024). English medium instruction in emerging contexts: An editorial introduction to the special issue. *System*, *122*, 103262.
- Dafouz, E. (2018). English-medium instruction and teacher education programmes in higher education: ideological forces and imagined identities at work. *International Journal of Bilingual Education and Bilingualism*, 21(5), 540–552. https://doi.org/10.1080/13670050.2018.1487926
- Dearden, J. (2014). English as a medium of instruction-a growing global phenomenon. British Council.
- Dörnyei, Z. (2007). Research Methods in Applied Linguistics. Oxford University Press.
- Drljača Margić, B. D., & Vodopija-Krstanović, I. (2018). Language development for English-medium instruction: Teachers' perceptions, reflections and learning. *Journal of English for Academic Purposes*, 35, 31-41.
- Finardi, K. R., Guimarães, F. F., & Mendes, A. R. (2019). Pensando la internacionalización (crítica) de la enseñanza superior brasileña. *Revista Internacional de Educação Superior*, *6*, 1–23.
- Galloway, N. (2020). English in higher education. English medium Part 1. London: British Council.
- García, O., Johnson, S. I., & Seltzer, K. The Translanguaging Classroom: Leveraging Students Bilingualism for Learning. Caslon: Philadelphia, 2017.
- Gimenez, T., Sarmento, S., Archanjo, R., Zicman, R., & Finardi, K. (2018). Guide to English as a medium of instruction in Brazilian higher education institutions 2018–2019. British Council.
- Gimenez, T, Calvo, L. C. S., El Kadri, M. S., Marson, M. Z., & El Kadri, A. (2021). Por uma agenda de pesquisa sobre inglês como meio de instrução no contexto de ensino superior brasileiro. *Trabalhos em Linguística Aplicada*, 60(2), 518–534.
- Gimenez, T. N., & Marson, M. Z. (2022). Teacher education in English medium instruction settings: A partial view from Brazil. *Ilha* Do Desterro, 75(1), 155–172.
- Hendges, G. R. (2018). Inglês como meio de instrução (EMI) na UFSM: políticas, percepções e implementação em direção à internacionalização. Research project proposal, Universidade Federal de Santa Maria, Santa Maria.
- Hendges, G.R., Rodrigues, G. S., & Pretto, A. de M. (2020). Views of teachers and students about EMI at a Brazilian federal university: implications for language policy. *Letras*, 97–124.
- Jiménez, P., Rosas, M., & Sáez, C. (2017). Marco Textual y desarrollo de la comprensión de textos académicos en inglés. *Colomb. Appl. Linguist. J.*, *19*(1), pp. 84-102.
- Knight, J. (2008). Higher Education in Turmoil (Global Perspectives on Higher Education). Sense Publishers.
- Lea, M. R., & Street, B. V. (2006). The "Academic Literacies" Model: Theory and Applications. *Theory Into Practice*, 45(4), 368–377.
- Leal, F. G., & Moraes, M. C. B. (2018). Decolonialidade como epistemologia para o campo teórico da internacionalização da Educação Superior. *Education Policy Analysis Archives*, *26*(87).
- Lillis, T., & Scott, M. (2007). Defining Academic Literacies Research: Issues of Epistemology, Ideology and Strategy. *Journal of Applied Linguistics*, 4(1), 5–32.

- Liberali, C. F., & Megale, A. H. (2016). Elite bilingual education in Brazil: an applied linguist's perspective. *Colomb. Appl. Linguist. J.*, *18*(2), 95-108.
- Macaro, E., Curle, S., Pun, J., An, J., & Dearden, J. (2018). A systematic review of English medium instruction in higher education. Language Teaching, 51(1), 36–76.
- Martinez, R. (2016). English as a Medium of Instruction (EMI) in Brazilian higher education: challenges and opportunities. In K. Finardi (Ed.), *English in Brazil: views, policies and programs.* (pp. 191–228). Eduel.
- Martinez, R., & Fernandes, K. (2020). Development of a Teacher Training Course for English Medium Instruction for Higher Education Professors in Brazil. In M. Sánchez-Pérez (Ed.), *Teacher Training for English-Medium Instruction in Higher* Education (pp. 125–152). IGI Global.
- Ministério da Educação. (2017). Programa Institucional de Internacionalização Capes-PrInt EDITAL nº. 41/2017. Brasília: Coordenação de Aperfeiçoamento de Pessoal de Nível Superior Capes. Accessed at: https://www.gov.br/capes/pt-br/centrais-de-conteudo/10112017Edital412017InternacionalizacaoPrInt2.pdf.
- Moita Lopes, L. P. (1996). Oficina de Lingüística Aplicada: a natureza social e educacional dos processos de ensino/aprendizagem de Línguas. Mercado das Letras.
- Ortiz, R. (2006). Social sciences and the English language. Revista Brasileira de Ciências Sociais, 2 (edição especial).
- Perez Cañado, M. L. (2020). Addressing the research gap in teacher training for EMI: An evidence-based teacher education proposal in monolingual contexts. *Journal of English for Academic Purposes*, 48, 100927.
- Richards, K. (2009). Interviews. In J. Heigham & R. Croker (Eds.), *Qualitative Research in Applied Linguistics: A Practical Introduction* (pp. 182–199). Hampshire, England/New York, NY: Palgrave Macmillan.
- Sahan, K. & Rose, H. (2021). Problematising the E in EMI: Translanguaging as a Pedagogic Alternative to English-only Hegemony in University Contexts. In Paulsrud, B. A., Tian, Z., & Toth, J. (Eds.), *English-Medium Instruction and Translanguaging* (pp. 1–14). Bristol: Multilingual Matters.
- UFSM. CAPES/PrInt Projeto de Desenvolvimento Institucional. Retrieved August 30, 2024, from https://www.ufsm.br/projetos/ institucional/capes-print
- Vogel, S. & García, S. (2017). Translanguaging. In G. Noblit, (Ed.), Oxford Research Encyclopedia of Education. Oxford: Oxford University Press.
- Walkinshaw, I., Fenton-Smith, B., & Humphreys, P. (2018). EMI issues and challenges in Asia-Pacific Higher Education: an Introduction. In B. Fenton-Smith, P. Humphreys, & I. Walkinshaw (Eds.), *English Medium Instruction in Higher Education in Asia-Pacific: From Policy to Pedagogy (Multilingual Education, 21)* (Softcover reprint of the original 1st ed. 2017 ed., pp. 1–20). Springer.
- Wei, L. (2018). Translanguaging as a Practical Theory of Language. Applied Linguistics, 39(1), 9–3.

