





# ENGLISH AS A MEDIUM OF INSTRUCTION: CHALLENGES AND OPPORTUNITIES FOR STUDENTS AND PROFESSORS OF PUBLIC HIGHER EDUCATION INSTITUTIONS IN BRAZIL

O INGLÊS COMO MEIO DE INSTRUÇÃO: DESAFIOS E OPORTUNIDADES PARA ALUNOS E PROFESSORES DE INSTITUIÇÕES PÚBLICAS DE ENSINO SUPERIOR NO BRASIL

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ABSTRACT: This article examined the implications of using English as lingua franca to teach regular and technical disciplines on undergraduate level in Brazil with the objective of identifying both benefits and difficulties encountered by the students and teachers involved. The theoretical background was built upon the concept of English as a medium of instruction – EMI – which has been increasingly adopted by colleges and universities in various countries whose native language is not English. The methodology consisted in developing a syllabus for a common discipline, then have it delivered to students at São Paulo State Technological College (FATEC), and later, at the end of the semester, grade their performance and collect their personal view about the experience. Results showed the project was successful given the students' effective learning of technical subjects as well as evidence of their English skills improvement, which were both confirmed by them as takeaways in the feedback session.

KEYWORDS: English as a medium of instruction (EMI); Learning competences; English communicative skills

RESUMO: Este artigo buscou examinar implicações do uso do inglês como língua franca no ensino de disciplinas em nível de graduação no Brasil com objetivo de identificar os benefícios e dificuldades encontradas pelos alunos e professores envolvidos no projeto. A base teórica foi construída sobre o conceito de inglês como meio de instrução, abordagem que vem sendo cada vez mais adotada por faculdades em países cuja língua nativa não é o inglês. A metodologia consistiu em desenvolver um plano de estudos para uma disciplina comum, ministrá-la a alunos da Faculdade de Tecnologia do Estado de São Paulo (FATEC) e, posteriormente, ao final do semestre, avaliar seu desempenho e coletar sua visão pessoal sobre a experiência. Os resultados mostraram que o projeto foi bem-sucedido, dado o efetivo aprendizado dos conceitos pelos estudantes, bem como a evidente melhora de suas habilidades comunicativas, o que foi confirmado por eles na sessão de feedback.

PALAVRAS-CHAVE: Inglês como meio de instrução; Competências de aprendizagem; Habilidades comunicativas em inglês









# **INTRODUCTION**

One of the positive effects of globalization was clearly the shrinking of frontiers from a communication standpoint, allowing people to connect, share, and collaborate worldwide, generating a "cognitive surplus" (SHIRKY, 2011). This author advocates people can make use of their spare time in a constructive way to perform creative actions instead of purely consumerist activities - the possibility of global connections would permit the instant contact among people with common interests, increasing their perception about the reach of both individual and group participation.

Beyond the technical aspects of internet connection, a fluid collaboration among people on an international basis requires a common language, and that *lingua franca* is, usually, English. In that regard, Coleman (2006) highlights the phenomenon of EMI – English as a Medium of Instruction – as a major education tendency in Europe and worldwide.

This article shall discuss the topic of EMI in Brazil by exploring its application through the efforts of a public education institution in the state of São Paulo that seeks to expand its level of internationalization by receiving students from other countries while having Brazilian students exposed to an international learning environment through contact with foreign students and relevant contents delivered in a foreign language - English or Spanish.

The paper is structured as follows: first, further to this introduction, the theoretical background section will point out the main aspects related to EMI; next, the methodology section will cover how the courses were planned, prepared, and executed; after that, the results section will highlight the outcomes of the implementation from both the students' and the teachers' perspectives; at last, the conclusion section will add the final considerations, the limitations of the study as well as some suggestions for further research.

#### **THEORETICAL BACKGROUND**

Changes taking place on a global scale are usually driven by social, political, and economic reasons of different nature. Oftentimes those changes are understood as an effort to promote social amelioration, while others see them as engendering attempts to inflict additional instruments of control. Marsh (2012) asserts that when the project of CLIL – Content and Language Integrated Learning was launched in the European Union in 1994, it raised similar issues, with defenders recognizing its possible benefits to society, and opposers claiming it could imply the loss of countries identity and a cultural impoverishment in the long run. The actual result, as he put it, was that "in forging relationships across disciplines (...) educational innovation became steadily established, resulting in outcomes which led to







new ways of professional cooperation within and across schools, and new ways of teaching and learning". (MARSH, 2012, p.6).

EMI is defined as "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). It is related to the concept CLIL – Content and Language Integrated Learning, a pedagogical approach bearing a dual objective, which is the acquisition of a certain content in combination with the learning of a foreign language. (COYLE; HOOD; MARCH; 2010).

EMI has been recognized as a key tool to promote and convey internationalization of universities and their students – for the former, it carries an aura of prestige, thereby helping boost tuition fees in the private ones; for the latter, it aims at having them prepared to be global professionals (WORTHMAN, 2020). Coleman categorizes that strategy divided into seven dimensions: internationalization of higher education; student exchanges; teaching and research materials; staff mobility; graduate employability; the market in international students; and Content and Language Integrated Learning (COLEMAN, 2006, p.4). Those dimensions, separate or in combination, are shaping and driving efforts of education institutions that seek to respond not only to students' expectations but also that of the employment market, thereby contributing to the challenge of developing international professionals and global citizens (STEARNS, 2009).

For the purposes of this study, however, we shall consider Maringe and Sing (2014) framework which consists of four main elements of education internationalization process: *diversity*, conveyed by the increasing numbers of international staff and students; *cross-culture*, driven by an integrated cultures towards learning; *content internationalization*, by means of changed curricula and pedagogical practices; *cross border learning*, aiming for getting knowledge beyond the limits of the primary institution. Figure 1 presents a summary of those elements.



Figure 1 - Key elements of an internationalised higher education environment

Source: MARINGE & SING (2014)









We understand that students' perceived advantages and benefits of that approach in terms of employability and personal competitiveness on an international basis will come out, as a result of these four elements and are aligned with the objectives of the educational institution we work for.

In Brazil, EMI is still seen as something that is made available for the elite, with a few subjects offered at public universities and extensive or full courses available at private universities (MARTINEZ, 2016). For this author, an attempt to change that situation was the Science Without Borders programme, a government initiative to get the Brazilian students more exposed to an international environment. However, as he put it, Brazil should not try to emulate Europe which has a structured programme like Erasmus and a large amount of funds directed to cross-cultural education while Brazil lacks investment in more useful areas that would possibly benefit the majority of students (MARTINEZ, 2016).

That view is corroborated by Jordão (2016) when she asserts that, without proper structure and preparation, EMI can be rather a burden that an asset to both teachers and students. For students, they could end up having a poor connection to subjects, given the loose bonds and weak sense of belonging to the language used (JORDÃO, 2016). As for the teachers, Mulligan and Kirkpatrick (2000) advocate they need to be aware of that cultural and linguistic diversity, realize that it is different from the regular standard classes they were used to deliver before, and then they should respond to it accordingly, which is usually a major challenge.

A successful approach of EMI applied to regular courses in Brazil was discussed by Escudero and Goldri (2018). These authors belong to Pontifical Catholic University of Paraná (PUCPR), a university that has been offering subjects in English across different undergraduate courses for some years now. As challenges reported by the students that attended the courses, the authors pointed out: the different language proficiency levels in the group to get assignments done; trouble to grasp the professors' concepts because of their accent; difficulties to express their own ideas in English would sometimes get them embarrassed, less confident and overtired, which had them lose motivation in the classes after a while; at last, students questioned themselves if they had learnt the subjects to the depth level required. In terms of the benefits perceived by the students, they highlighted their use of a more mindful communication by learning how to adapt to adverse situations; learning of a specific vocabulary, as well as the improvement of the four communicative skills (reading, writing, listening, and speaking), and finally the practice of English as a more objective language compared to Portuguese. From the teachers' standpoint, the main aspects to consider as challenges were the students proficiency level, the unavailability of books and other authentic materials to teach in English, teachers'









doubts about their own English proficiency, and finally, their concern to keep the quality, breadth, and depth of the course to the same level as it was in Portuguese.

In sum, the adoption of EMI programs seems to be surrounded by controversy: despite stating clear the benefits of that type of approach for the students, it also carries a degree of uncertainty about its successful execution by the institution. That is precisely what shall be discussed in the next section.

# **METHODOLOGY**

The Paula Souza Center, or Centro Paula Sousa (CPS) in Portuguese, is a public educational institution that belongs to the government of São Paulo state in Brazil. It is responsible for the management of 224 secondary and technical schools called ETECs and 75 technological colleges called FATECs, with more than 323 thousand students. It also offers post-graduate courses and all this infrastructure is available at no charge for its students.

The CPS started its operation in 1970 and has grown since then to become a huge governmental institution that is over 50 years old. Its mission is to promote public education within benchmarks of excellence, aiming at the technological, economic, and social development of the state of São Paulo in Brazil (CENTRO PAULA SOUZA, 2022).

ARInter is the department of CPS responsible international relations and has partnership with many universities, companies, and research centres all over the world, with focus on student and faculty exchange programs. There are also initiatives to receive international students to experience courses in English and Spanish (ARINTER, 2022).

One of the first EMI initiatives at CPS was the Startup Experience in Brazil, a 1-week entrepreneurship course that happened in August 2018, with FATEC students and also foreign students who came to Brazil to take part of this English spoken course, that was offered again in July 2019 in the same way, with Brazilian and international students together in class.

Since then, Arinter has offered 1-week courses during the vacation period, called Short Term Programs, and here follows some examples of topics: Brazilian Agribusiness Sustainable Solutions, Sustainable Smart Cities and Circular Economy, IoT: from data collection to data presentation. There were also courses in Spanish and one example is Turismo y eventos en el interior de São Paulo.

The professor selection for a full EMI subject started in October 2021, based on the internationalization of Centro Paula Souza, that aims to offer mirror or extracurricular subjects in English and Spanish for the technological college students. The mirror subject must be as least 70%









similar to a regular one, that is already available for the students. The extracurricular subject is something new to the students, but it must be relevant to the pedagogical project.

The course workload is based on 40 hours during a regular semester: 16 synchronous meeting with the duration of 1 hour and 40 minutes each, and some asynchronous assignments to complete the 40 hours.

The professors that wanted to apply could choose which subject they would teach and should send the course plan, their curriculum, and proof of English or Spanish proficiency. After the first selection, 13 professors were chosen to send a class plan, and teach a half-hour class to an examining board. At the end, 4 professors were selected to work on this EMI project.

Examples of some courses that prepare the professors for an EMI experience:

(1) "Use of English as a Medium of Instruction (EMI) in Higher Technological Education", offered by Arinter, the internalization service at Centro Paula Souza. This 40-hour course content is focused on the following competencies: understand a type of teaching that uses the English language as a medium of instruction in the higher technological education environment, identify pedagogical strategies for EMI, plan the integration into the English language of part of the content taught in a regular higher education subject, and implement part of what was planned and reflect about this pedagogical practice.

(2) "English for Teaching Purposes", offered by the Language Service at the Universitat Autònoma de Barcelona (UAB) through Coursera in a MOOC format. The 24-hour course content is focused on the following competencies: gain the necessary confidence and skills to teach a higher education subject in English, integrate the methodological, pedagogical, and linguistic aspects to put together an English-medium course on a particular subject, describe the characteristics of the university lecture discourse style, understand and perform the basic linguistic macro-functions within English teaching discourse, understand and perform the main micro-functions in English teaching discourse (metalinguistic, informative, evaluative, inductive, and social), and consolidate the oral expression and interaction skills in English.

(3) "English as a Medium of Instruction for Academics", offered by the University of Southampton through the Future Learn platform. This online course explored issues around using English as a medium of instruction in universities. The course covered topics such as practice and research in EMI, global contexts of EMI use, how to use the voice effectively when lecturing and teaching, appropriate language for EMI settings and the importance of intercultural awareness in EMI classrooms. The course worked to build a community of practice around EMI use and to develop confidence in using English in academic contexts.







### **RESULTS**

The subjects offered in the first semester of 2022 were: Marketing Tools, Society and Technology, AWS Cloud Foundations, Mobile Applications Development, and Marketing en Latinoamérica (in Spanish). Currently, in the second semester of 2022, the same subjects are being offered again, and the following were added to the list: Engine Management, Methods on Knowledge Creation, Machine Learning and Applications, and Gestión del Motor (in Spanish).

Based on the subjects that were conducted during the first semester of 2022, the result was very positive. The main points to be mentioned are: (1) many students registered to take the courses, but many of them had problems to prove their English proficiency and, therefore, were not allowed to participate. (2) the great majority of the students could easily understand the class in English, but just a few of them would open their microphones and speak to the whole class. (3) As an example, the AWS Cloud Foundations class started with 14 Fatec Students and 3 Peruvian students: total of 17 students. At the end, all 3 Peruvian students finished the course and 11 Fatec students finished the course.

We follow with some comments from the students that gave spontaneous feedback about their experience and learning in the first semester of 2022:

"(...) the content of the course was great. It was interesting to have the chance to participate in this course and discuss various topics that are related to technology, its development, and its current role in our everyday lives." (Society and Technology course student, from Czech Republic)

"As the weeks passed, the more pleasantly surprised I was. The experience I was presented with was very powerful. I had never given much thought to technology's pivotal role in the development of human behaviour, how the access to those mechanisms have shaped our society as a whole throughout the years. In general, I would say that I got an entire new realm of knowledge in my hands and tried my best to absorb as much of it as I could. Understanding how technology can be used for benefiting people, as well as harming them, was the biggest game-changer for me in particular" (Society and Technology course student, from Brazil)

"Everything was new for me, and I found out that every topic was so interesting, so many things to discuss, I learned a lot! I believe I acquired a lot of new concepts that I didn't know I used them in my everyday life. There's much more behind marketing that I thought." (Marketing Tools course student, from Argentina)

"This course offered a solid overview of varying marketing concepts, among which the most noticeable were probably consumer behaviour, digital marketing, branding, market positioning, service marketing, and strategic planning. As a Business Management student at FATEC, I believe Marketing Tools









was an outstanding complement to the course regular syllabus by diving deeper into several concepts in an enriching multicultural environment, packed with practical examples from Brazil as well as Latin America". (Marketing Tools course student, from Brazil)

"This course helped me understand the little knowledge I had about marketing, and thanks to my participation and involvement by reviewing the educational material shared by the instructor, we received a lot of valuable information (...) Lastly, I want to highlight the wonderful experience I had with this course, especially with XXXXX (teacher's name omitted), he was clear with his explanations and made sure that all questions were solved before continuing, he used a wide variety of examples, showing broad knowledge in different areas and relating them with the subject discussed, he was truly kind and patient, thank you for the opportunity." (Marketing Tools course student, from Colombia)

The quotes confirm that the subjects approached in the EMI courses had much adherence to the students' interests. Groups have touched base about current and relevant topics, which calls for reflection and association with students' immediate reality. Some students may have dropped out the course due to their difficulty to cope remote classes with their physical classes since many were evening students and they had to attend classes on their way to college. Language was always a challenge – if, overall, some people interact little during synchronous classes in their mother tongue, they do it even less when the language used is not theirs. However, with regard to the courses mentioned, everyone had to make presentations on a specific topic of the syllabus, and in general they managed to overcome possible barriers. The final assessment, with conceptual and reflective questions to be answered on an individual basis, and which did not allow for a single answer, demonstrated that students effectively absorbed some of the issues related to the topics and got a critical view on them. Therefore, the purpose of the courses has been fulfilled.

# CONCLUSION, LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

In this paper, we have discussed about a successful case of English as a Medium of Instruction applied to some courses in a public institution in São Paulo, Brazil. The pilot initiative implementation, in the shape of a regular syllabus, and the students' positive response to it demonstrate it is an interesting approach to expand by offering a wider range of topics across different areas and subject matters.

However, this poses some challenges, which in nature are similar to those encountered by previous pioneer experiences in the county: Brazilian and Latin American students variable language skills; the unavailability of authentic materials and resources provided by the institutions; the teachers being not enough prepared – from a language and/or a pedagogical standpoint – to teach subjects











in a foreign language to students with varied cultural backgrounds; the legal obstacles to get core subjects as part of the regular curricula that can be offered in a language other than Portuguese and then being recognized just as valid.

Our view is that institutions can start, and then continue offering those courses as part of their internationalization process to mix local and foreign students in order to get a glimpse of an international learning experience. The turning point, however, would be having students and teachers with a degree of fluency so that language would not be an additional barrier to learning - or teaching; and institutions pulling together a plan to gradually have at least one subject delivered in a foreign language for all of their courses, thereby being part of the curricula. Just as it is currently, it will remain as isolated experiences which might benefit a happy few but leave the majority outside the opportunities that could come up from a structured and long-term EMI proposal, elaborated from the state as part of the education policy to help contribute to the full development of the Brazilian society.

The limitations of the study are chiefly related to the fact that it shows a single case, based on an experience of two professors in one semester only. Therefore, to gain breadth and depth, it would be necessary to keep on running these courses for longer time. In addition, it would certainly benefit from fellow professors who were in the same project. That would be our main suggestion for further research, and we invite our colleagues to share their critical views and contributions to keep developing that valuable discussion.

# REFERENCES

ARINTER. et al. English-medium teaching in European higher education. Arinter Institutional. Available at https://arinter.cps.sp.gov.br/sobre-2/. Accessed on September 17, 2022.

CENTRO PAULA SOUZA. Centro Paula Souza. Available at https://www.cps.sp.gov.br/centro-paula-souza/. Accessed on September 17, 2022.

COLEMAN, J. et al. English-medium teaching in European higher education. Language Teaching, v. 39, n. 1, p. 1-14, 2006.

COYLE, D; HOOD, P; MARSH, D. Content and language integrated learning. Cambridge, Cambridge University Press, 2010.

DEARDEN, J. English as a medium of instruction - a growing global phenomenon. British Council, 2014.

ESCUDERO, F.; GODRI, L. PUCPR English Semester: challenges and lessons learned. 1ST BEMIS - Brazilian English as a Medium of Instruction Seminar. UFPR. December 2018. Available at: https://www.youtube.com/watch?v=OaVJO8vvM8k. Accessed on Sep 18, 2022.

JORDÃO, C. M. Decolonizing identities: English for internationalization in a Brazilian university. Interfaces Brasil/Canadá, v. 16, n. 1, p. 191-209, 2016.

MARINGE, F.; SING, N. Teaching large classes in an increasingly internationalising higher education environment: Pedagogical, quality and equity issues. Higher Education, v. 67, n. 6, p. 761-782, 2014.







MARSH, D. Content and Language Integrated Learning (CLIL) - a development trajectory. Thesis – Doctorate. University of Córdoba, 2013.

MULLIGAN, D; KIRKPATRICK, A. How much do they understand? Lectures, students, and comprehension. Higher Education Research & Development, v. 19, n. 3, p. 311-335, 2000.

MARTÍNEZ, R. English as a Medium of Instruction (EMI) in Brazilian higher education: challenges and opportunities. In FINARDI, K. R. English in Brazil: views, policies, and programs. Londrina, EDUEL, p. 191-228, 2016.

SHIRKY, C. Cognitive surplus: creativity and generosity in a connected age. London, Penguin, 2010.

STEARNS, P.N. Educating global citizens in colleges and universities: challenges and opportunities. New York, Routledge, 2009.

WORTHMAN, C. In search of internationalization: changing conceptions of EMI among Mexican university instructors. In: BOWLES, H; MURPHY, A. (Eds). English-Medium Instruction and the Internationalization of Universities. Palgrave Macmillan, p. 155-179, 2020.

