

# English-Medium Instruction for the Internationalization of the Curriculum: Teachers' Motives and Expectations

Inglês como meio  
de instrução para a  
internacionalização  
do currículo: motivos  
e expectativas dos  
professores

Inglés como medio de  
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docentes

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## Abstract

This research article presents the results of a research that aimed to analyze the motives and expectations of teachers from a public university in northwestern Mexico when participating in the internationalization of the curriculum through English-medium instruction (EMI). The analysis is based on the variables such as discipline, seniority, type of contract and frequency of teaching in English. A mixed methodology was employed to analyze quantitative and qualitative data, collected through a digital instrument addressed to a total of 42 teachers who were accredited to teach subjects in English, and 36 complete questionnaires were answered. The results allow us to conclude that most professors from all disciplines agree that their main reason for participating in internationalization through EMI is “to support institutional initiatives”; in contrast, “receiving economic incentives from institutional programs” was a reason for participation with marked differences according to discipline and type of contract. The qualitative analysis concludes the existence of positive conceptions around this type of education, as it is favorable for the university and a possible source of economic remuneration. Although teachers express an intrinsic motivation towards training and teaching in English, the lack of equal economic incentives could be a cause of limited teacher participation.

### Keywords

international education; higher education; curriculum; English; teachers

## Resumo

Este artigo apresenta os resultados de uma pesquisa que teve como objetivo analisar os motivos e expectativas de professores de uma universidade pública no noroeste do México ao participar da internacionalização do currículo através do uso do inglês como meio de instrução (EMI). A análise é baseada a partir das variáveis tais como disciplina, antiguidade, tipo de contrato e frequência de ensino em inglês. Para a análise de dados quantitativos e qualitativos, seguiu-se uma metodologia mista, coletados por meio de instrumento digital dirigido a um total de 42 professores credenciados para lecionar disciplinas em inglês, e foram respondidos 36 questionários preenchidos. Os resultados permitem concluir que a maioria dos docentes de todas as disciplinas concordam que sua principal razão para participar da internacionalização por meio do uso do EMI é “apoiar iniciativas institucionais”; por outro lado, “receber incentivos econômicos de programas institucionais” foi um motivo de participação com diferenças marcantes conforme a disciplina e o tipo de contrato. A análise qualitativa conclui a existência de concepções positivas em torno dessa modalidade de ensino, por ser favorável à universidade e como possível fonte de remuneração econômica. Embora os professores expressem uma motivação intrínseca para a formação e ensino em inglês, a falta de incentivos econômicos iguais pode ser uma causa da participação limitada dos professores.

### Palavras-chave

educação internacional; ensino superior; currículo; Inglês; professores

## Resumen

Este artículo presenta los resultados de una investigación que se propuso analizar los motivos y las expectativas de docentes de una universidad pública en el noroeste de México al participar en la internacionalización del currículo mediante el uso de inglés como medio de instrucción (EMI por sus siglas en inglés), el análisis se basa a partir de las variables, tales como disciplina, antigüedad laboral, tipo de contratación y frecuencia de enseñanza en inglés. Se empleó una metodología mixta para analizar datos cuantitativos y cualitativos, recopilados mediante un instrumento digital dirigido a un total de 42 profesores que estaban acreditados para impartir asignaturas en inglés, y se obtuvieron 36 cuestionarios completos respondidos. Los resultados permiten concluir que la mayor parte de los profesores de todas las disciplinas están de acuerdo en que su principal motivo para participar en la internacionalización mediante uso de EMI es “apoyar iniciativas institucionales”; en contraste, “recibir incentivos económicos por parte de programas institucionales” fue un motivo de participación con diferencias marcadas según la disciplina y el tipo de contratación. El análisis cualitativo concluye la existencia de concepciones positivas en torno a este tipo de enseñanza, por ser favorable para la universidad y como posible fuente de remuneración económica. Aunque los docentes manifiestan una motivación intrínseca hacia la formación y enseñanza en inglés, la falta de incentivos económicos igualitarios podría ser una causante de la participación limitada del docente.

### Palabras clave

educación internacional; educación superior; currículo; Inglés; profesores

## Introduction

In higher education, the internationalization of the curriculum (IoC) has been evolving and, especially since the pandemic (Knight, 2021), although de Wit (2020) evidences the difficulty ahead in going beyond intentions and successful practices that occur in isolation. While the analysis of universities in Latin America warns of an increase in the actions of this type of internationalization in recent years (Gacel-Ávila, 2020), it has been a constant that many institutions lack policies for this purpose and a tiny percentage have concrete international learning outcomes for students; in particular, Mexico scores low in terms of educational policies to promote internationalization.

However, various institutions —especially in non-English speaking countries— have been establishing internationalization policies and plans to ponder linguistic aspects and take advantage of the benefits of English, as it is considered the world language of science and education (Fortanet-Gómez, 2020; Altbach & de Wit, 2020). As a result, English-medium instruction (EMI) has become a relevant action for the promotion of the IoC, whose evolution is reflected in the number of English taught subjects that universities are beginning to offer (Jon et al., 2020).

Internationally, teaching with EMI is considered a curricular approach that integrates disciplinary and language learning, whose empirical research in higher education arises and abounds mainly in European and Asian contexts (Hu & Lei, 2014; Nikula, 2017). From this line of knowledge, various studies have emerged (Jon et al., 2020; Banegas et al., 2020) that argue the lack of understanding of how teachers respond to teaching in English, especially in Latin America and Mexico, where empirical research has been scarce.

In addition, there has been an emerging change, quite evident, with the uncertainties that higher education has faced due to the pandemic and the need for emergency remote teaching. According to Marinoni et al., (2020) virtual mobility and COIL (Collaborative Online International Learning)

courses emerged as alternatives for the IoC in 60% of universities worldwide. Although the COIL methodology has been promoted for some years, various research (Edersheim & Dobson, 2022; Kigotho, 2022; Seneviratne, 2022) have shown that the pandemic period highlighted its value in promoting collaborative education and sharing courses with faculties from other countries, mostly in English. Thus, a key element where teaching with EMI and COIL courses for IoC can converge, is precisely the use of English.

From a regional approach in northwestern Mexico, the analysis of the recent reports and annual programs of the main universities with respect to their commitment to the international dimension evidenced the offer of English-taught subjects and COIL courses in some universities, although scarcely. Therefore, the IoC in the universities of this region seems to require strategic planning, since it appears to depend mainly on small individual initiatives promoted mostly by the teaching staff (Stallivieri, 2020).

Specifically, the situation of a public institution in Mexico (University of Sonora) is analyzed, where a program for the training and accreditation of teaching staff in EMI methodology has been promoted since 2017 to increase English-taught subjects for undergraduate and graduate programs. Since the beginning of the training program, 44 teachers have been accredited (UNISON, 2019; 2022a), among whom certain characteristics stand out. On the one hand, in STEM disciplines (Exact and Natural Sciences, Engineering, Biological, and Health Sciences) there is the largest number of accredited teachers (78%), while in non-STEM disciplines (Humanities and Fine Arts, Social Sciences, and Economic— Administrative) the number is lower (22%). On the other hand, of all the teachers who have been accredited, only 23% taught one or more subjects in English between the 2020-2022 period, while the rest (77%) have never taught, despite being accredited.

This situation becomes complex when considering various situations of institutional regulations, such as: 1) study plans and programs are required

to offer a certain percentage of their subjects in English; 2) the type of contract (full-time/per hours) determines that only full-time teachers can access economic incentives through institutional programs, where teaching in English is one of the activities considered; 3) empirically, teaching with EMI evolves and appears also in the virtual stage through COIL courses.

The relevance acquired by the COIL courses is because they contribute to the IoC process, due to a combination of different factors, being considered as an alternative for virtual mobility, involving collaboration with academic peers and between national and international students, in some cases, the use of another language —mainly English. Between 2020 and the beginning of 2022, the institution under analysis reported the participation of 18 academics in COIL courses, of which 78% belong to non-STEM disciplines (UNISON, 2022b).

Based on the evolution that the IoC has had, it has been suggested that divided opinions persist about its importance, for which reflections and studies are required on the perceptions of its actors (de Wit, 2020). Therefore, the process of IoC through teaching with EMI could acquire different meanings among teachers, due to the differences that exist between the disciplines and the needs to internationalize their curricula, as well as the perceived usefulness of English in teaching. Although some teachers — albeit few — have shown interest in participating in the EMI training program, various situations could be preventing the development and continuation of this type of teaching.

This allows us to question, what motivates teachers to participate in the IoC through teaching with EMI? What are the expectations —academic, institutional, work, and personal— that you have about this? Do disciplines and working conditions make a difference? These questions are situated within the framework of different approaches (Clarke & Hui, 2019; Fragouli, 2021; Knight, 2021; Peluffo, 2010) that point to the relevance of considering the perspective of teachers to understand this type of internationalization, as it is a strong influence for development.

Likewise, different studies (Amador, 2016a; Wimpenny et al., 2019) already warned of the need to analyze the motives for teacher participation, the role of the training they receive, and their language proficiency, as well as the particularities of this type of internationalization in the universities of Mexico.

This text aims to analyze the motives and expectations —political, economic, academic, and sociocultural— of teachers in the IoC through teaching with EMI and compare them according to discipline, seniority, type of contract, and frequency of teaching in English.

## **Theoretical framework**

Although there is a typology of practices that are considered forms of IoC (Knight, 2021) such as double degrees, classes in foreign languages, curricula with international themes, interdisciplinary programs, curricula with intercultural approaches, among others, Casallas (2020) postulates how each institution defines, structures, and establishes nuances that make its internationalization process unique.

Some investigations (Amador, 2016b; de Wit, 2020) point out that the main error of universities is to consider internationalization as an objective, instead of a means to improve education's quality; partly, this confusion arises from the definitions and descriptions that institutions attach to this process. In addition, Knight (2021) warns about disagreements that arise around this process among teaching staff, considering it a Western and hegemonic construction, when motives and strategies of other cultures are erroneously included in its definition. There may be multiple local and institutional motives for internationalizing higher education.

In several countries, this process has had an uneven implementation, dictated from theoretical and practical particularities, in addition to regulations of the universities; Sá and Serpa (2020) point out the absence of a single internationalization model for all educational systems, since it is their local contexts that influence its implementation. The IoC is a dimension in which less progress has been made, since discussions of the subject focus on a

more abstract or political level (Foster & Carver, 2018). Thus, research at the classroom level and on teacher participation in specific aspects of this type of internationalization becomes relevant since a fragmented understanding of this process prevails in institutions (Wimpenny et al., 2019).

The IoC is understood as the integration of the international/intercultural/global dimension in the curriculum and the teaching-learning process, whose goals are to develop the understanding of diverse cultures, promote intercultural competence and the use of foreign languages (Arango & Acuña, 2018). Recently, it has also begun to relate to the use of technology and virtuality in the classroom (Knight, 2021), while also reflecting on the before and after internationalization in reference to the pandemic (Hudzik, 2020; Burquel & Busch, 2020), in which it is proposed to rethink this process and adapt it to new possibilities.

At the local and institutional level, a notorious difficulty is overcoming the differences that mark the disciplines according to their particularities; by being communities with different practices and needs, the disciplinary issue has been discussed in relation to the IoC (Clifford, 2009). Disciplines continue to be an important variable to differentiate academic activities, locating them by STEM (hard sciences) and non-STEM (soft sciences) areas (Clark, 1987; Becher, 1992; Estévez et al., 2021). Likewise, two other variables stand out for their relevance when investigating the teaching staff in Mexico and measuring changes in the academy: seniority (academic career stage) and the type of contract (full-time/per hours) (Estévez et al., 2020; 2021).

Another difficulty involves misconceptions, which include beliefs that the IoC is similar and/or that it only refers to teaching in English, or that intercultural competence does not need to be assessed (de Wit, 2011). Although one way to promote this competence is through the offering of programs/subjects taught in English, Leask (2001; 2009) emphasizes the need to explicitly address intercultural communication problems. Due to the importance of language proficiency, and

specifically of English, teaching with EMI is highly relevant for the internationalization of universities. This approach is also known as English as a Lingua Franca (ELF), Integrating Content and Language (ICL), Content and Language Integrated Learning (CLIL), depending on the authors and the context (Hu & Lei, 2014). As diverse as they may seem, they share the interest—to a different degree—and lie in developing and investigating pedagogical models and approaches that involve and integrate the learning of content and languages (Lin, 2016).

The resistance and debates against using EMI have been explained by the erroneous monolingual conception of this teaching (Şahan & Sahan, 2021); on the contrary, there are multiple variations of its implementation. For instance, cases like in China with a bilingual education where both languages (native and foreign) can be used without favoring either, or in Sweden where the simultaneous use of both languages in EMI-type courses is called *parallel use*. This is closer to what Gustafsson and Valcke (2021) call English-medium education (EME), a broader perspective interested in promoting multilingualism, multiculturalism and interdisciplinarity.

This vision is consistent with the internationalization process and its quest to establish multilingualism as an inherent characteristic of universities (Lasagabaster, 2021). However, there is more literature regarding EMI, in which recent studies (Gustafsson & Valcke, 2021; Hunter & Lanvers, 2021; Lasagabaster, 2021; Lee et al., 2021; Şahan & Sahan, 2021) confirm the benefits—improvement of language skills, development of intercultural competence—and limitations of its implementation—little teaching support, excessive emphasis on language skills—.

Similarly, with EMI and the multiple terms that have emerged, in Latin America the COIL methodology is also related to virtual mobility, even though it is more than a simple exchange, since it implies changes in teaching, strategic planning with an academic peer, and mostly handling another language in class (Alvarez & Steiner, 2019; Barbosa et al., 2020). Thus, central aspects relate to

the use of EMI and COIL in universities: the use of a foreign language in the teaching-learning process through planning and mediation by teachers, which can contribute to promoting intercultural competence in students, one of the objectives of the IoC (Arango & Acuña, 2018). However, COIL is arguably a more complex way of using EMI, involving collaboration with teachers and students outside the classroom, as well as using the language in real-life situations.

Although some research in Mexico (Banegas et al., 2020; Meza, 2020; Nuñez-Asomoza, 2015; Pantoja & Goodman, 2021; Ramírez-Marín et al., 2020) have shown that teaching in English, under various approaches (EMI, CLIL, and more recently COIL), begins to develop in institutions as part of their actions for IoC, knowledge about the teaching perspective regarding their motives and expectations for participating is still limited. Specifically in the northern region of the country, it is documented that the IoC can be negatively affected by the practices, values, and cultural expectations that are generated in the universities (King, 2020; 2021). However, the international exchange that is fostered by these teaching approaches can promote the documentation of experiences and practices that favor flexibility in curricular planning (King, 2022; Pantoja & Goodman, 2021).

In this sense, the theoretical notion developed by de Wit (2002) is useful to analyze the motives (rationales) for internationalization in higher education, distinguishing them in 4 types: political, economic, academic, and sociocultural. As Friesen (2012) argues, these motives can be used to analyze the perception and expectations of various groups within an institution, such as disciplines, regarding their participation in the process of IoC. Identifying the motives and expectations of teacher participation that underlie teaching with EMI can contribute to the understanding of convergence and divergence points between teaching and institutional perspectives.

## Method

To address the process of IoC through teaching with EMI, this research was defined from a pragmatic

paradigm logic (Morgan, 2014) and a concurrent mixed design (Creswell, 2003; 2007), with the aim of generating a complete and understandable vision of the study object, presenting quantitative and qualitative data. Based on the definition of a non-experimental, descriptive, and cross-sectional study (McMillan & Schumacher, 2005), an online questionnaire was applied with the purpose of collecting data that would allow an approach to the institutional setting.

## Participants

The analysis of the study object was carried out at the University of Sonora, a public institution of higher education located in northwestern Mexico. The selection of participants considered all teachers accredited to teach subjects in English: 27 men and 15 women (UNISON, 2019). In total, 36 teachers participated by answering the survey, obtaining representativeness of both areas of knowledge (STEM/non-STEM) with the following characteristics: 86% are full-time and 14% per hours; 69% have less than 20 years of work seniority and 31% more than 20 years; lastly, regarding the frequency of teaching in English, it was found that 45% have taught more than once, 22% only on one occasion, and 33% of the teachers have never experienced this type of teaching.

## Data collection and analysis

The survey was used as a technique, and an online questionnaire<sup>1</sup> was applied to teachers, which was sent by email and indicated that the information provided would be anonymous, confidential, reported in a grouped manner, and used for academic purposes. The instrument consisted of two parts: a quantitative part (closed questions) with response options on a 5-level Likert scale (to measure the degree of agreement-disagreement) and a qualitative section (open questions) that allowed arguments about their positions.

For the structuring and analysis of the quantitative data, a database was created in the *SPSS*

1 Online questionnaire: <http://mie.uson.mx/internacionalizacion/>

24 program (Statistical Package for the Social Sciences), and descriptive statistics were used to analyze, classify, and present the data. For qualitative data analysis, the *Atlas.ti 7* program was used for transcription, coding, and category creation. This allowed the delimitation of different categories to later link them with the theory for analytical purposes.

Together, both procedures made it possible to analyze and present results as follows: 1) the participation motives expressed quantitatively by trends according to the disciplines —STEM and non-STEM areas—; 2) the type of contract, seniority; and 3) the frequency of teaching in English — none or more than once—. Subsequently, 4) the teaching staff expectations expressed qualitatively, differentiated by disciplines, and presented by categories.

## Findings

Any internationalization process needs to be analyzed from emerging positions, especially those related to teacher participation motives (Korhonen & Weil, 2015). Thus, through the theoretical notion used by de Wit (2002) and Friesen (2012), teachers' perceptions and expectations are examined, and the main findings are presented.

The interest in expanding the personal resume, compared to the rest of the motives, was the one that stood out the least (see Table 1); in addition, the differentiation between disciplines reveals that this motive was higher in STEM areas (73%), and lower in non-STEM (59%). On the contrary, supporting institutional initiatives was the participation motive that obtained the highest degree of agreement from both populations (non-STEM 100% and STEM 79%).

**Table 1.** Participations motives by type of discipline.

		Disagree	Not agree nor disagree	Agree
To support institutional initiatives	non-STEM	0%	0%	100%
	STEM	7%	14%	79%
To receive economic incentives	non-STEM	57%	14%	29%
	STEM	21%	24%	55%
To expand personal resume	non-STEM	29%	14%	59%
	STEM	10%	17%	73%

Source: Created by the authors, (2021).

Receiving economic incentives from institutional programs was a participation motive, with a significant discrepancy in both populations. Just over half of STEM teachers agree with this (55%), while in non-STEM areas the opposite occurs with 57% disagreeing, revealing that economic incentives do not influence their participation in teaching with EMI.

When analyzing this participation motive according to the type of contract, it was found that per hours teachers are mostly in disagreement with this (80%), as they are not considered in the incentive programs. Opposite case with full-time teachers, to whom these programs are directed, with 58% agreement. These incentive programs have been the subject of research (Castillo et al., 2017),

finding differences between disciplines, being relevant in STEM areas, while in non-STEM ones are considered to encourage individualistic work in the institution.

Participation promoted for teaching preferred subjects varies considerably according to seniority (see Table 2). While just over half of teachers with less than ten years of seniority agree with this motive (58%), all teachers with more than 30 years perceive it as an important participation motive. It is inferred that teaching staff, with the longest working seniority, choose to teach their preferred subjects in English because the experience they have in teaching them, and perhaps feel comfortable enough to do it in a different language.

**Table 2.** Participation for teaching preferred subjects according to seniority.

	Disagree	Not agree nor disagree	Agree
Between 1-10 years	25%	17%	58%
Between 11-20 years	15%	0%	85%
Between 21-30 years	0%	14%	86%
More than 30 years	0%	0%	100%

Source: Created by the authors, (2021).

Another important finding was the motive of experiencing new forms of teaching (see Table 3), with a high degree of agreement both in teachers who have never taught and in those who have taught one or more times in English. It can be deduced that both populations have an intrinsic motivation towards this type of teaching, which can generate

positive long-term effects and is not related to external stimuli, such as the economic ones from institutional programs (Castillo et al., 2017). In contrast, the motives of considering internationalization as a commitment of all teachers and taking advantage of their own language skills, increase their degree of agreement the more they teach in English.

**Table 3.** Participation motives by frequency of teaching in English.

		Disagree	Not agree nor disagree	Agree
To take advantage of the language skills	Have not taught	8%	17%	75%
	Once or more	4%	4%	92%
Internationalization as a teacher commitment	Have not taught	33%	8%	59%
	Once or more	4%	4%	92%
To experience new forms of teaching	Have not taught	8%	0%	92%
	Once or more	4%	4%	92%

Source: Created by the authors, (2021).

Among the different values that underlie the policies, strategies, and reasons for participation in the process of IoC, the academic purposes stand out, such as improving the quality of teaching and learning, which function as a driving force for internationalization in universities (Marinoni, 2019). However, this process acquires different

forms, values, and qualities in the disciplines (Agnew, 2013). For this reason, the benefits that teachers perceive from teaching with EMI, which prompt their participation, were inquired. Academic benefits stood out, mainly in STEM areas, while in non-STEM personal and academic benefits were mentioned equally (see Table 4).

**Table 4.** Benefits of teaching with EMI by types of discipline.

	Academic	Institutional	Labor	Personal
STEM	55%	28%	10%	7%
non-STEM	43%	14%	0%	43%

Source: Created by the authors, (2021).

Finally, the expectations of teachers regarding their participation in this process were investigated based on the frequency in which they have taught subjects in English. When analyzing these expectations (see Table 5), it was found that: 1) teachers who have never taught have personal expectations; 2) teachers who have taught on one occasion have academic expectations regarding their participation;

and 3) the ones with experience teaching more than one subject in English express expectations at the institutional level. It can be assumed that the greater the participation in teaching with EMI, the more expectations evolve from a personal level to an institutional one, in which the importance of this type of teaching is recognized and the benefits that it implies/can be obtained on a large scale.

**Table 5.** Expectations of teaching in English by frequency of participation.

	Academics	Institutional	Labor	Personal
Have not taught	17%	25%	8%	42%
Just once	38%	25%	12%	25%
More than once	38%	44%	6%	12%

Source: Created by the authors, (2021).

### Qualitative analysis

The recognition of expectations helps to clarify the opportunities and benefits of teaching with EMI, as well as the recognition of divergent motivations among teachers. In addition, since the quality of the process of IoC requires the commitment of the teaching staff, as well as the management and administrative staff, it is relevant to recognize its various manifestations in context, based on key questions: why, how, and what of internationalization, if the aim is to promote its adoption and obtain satisfactory results (de Wit, 2011; Agnew, 2013). Hence, teachers' expectations regarding their participation in teaching with EMI are analyzed, in which three main aspects stood out: the positive conceptions around this type of teaching, the favorable trend that it is for the university, and the possible economic remuneration that this type of education entails.

Among the positive conceptions, it was found that teaching with EMI is a process that challenges and encourages teachers to improve and perfect their teaching practice. Likewise, they conceive the ability to teach in English as a quality requirement of every teacher, which increases their teaching experience and preserves their language skills:

*“To know how students face the T-L (teaching-learning) process in English and compare it with our*

*own experience; it will be a good experience and a challenge to our own development as a teacher.”* Informant 21, non-STEM, (2021).

The expectations' analysis allowed to recognize that teachers characterize this process as a favorable trend in terms of globalization for the university and the different programs. The most notable finding was the awareness of certain aspects to consider:

*“Not only with classes in English we are going to internationalize (the university), but it is an opportunity for students.”* Informant 9, STEM, (2021).

It can be inferred that teachers are aware of the benefit of this type of teaching, without assuming that this is the only means to internationalize, coinciding with de Wit (2011), regarding the misconception that teaching in English equals as being an internationalized institution. However, it is considered as an opportunity to practice and increase language skills, for both teachers and students, in their areas of knowledge:

*“An opportunity for local and English-speaking students. Students gain confidence by speaking it and prepares them for future challenges.”* Informant 8, non-STEM, (2021).

An important issue arises, as teaching with EMI is considered beneficial to both local and English-speaking students who could potentially

come on exchanges to the university. Likewise, they express that, whether they agree or disagree, English is a requirement in their academic work since all innovation, in most areas of knowledge, is diffused in this language. English is the world's scientific language and the key to the education of the future, as it has consequences on fundamental aspects such as research methodology, publication, and academic orientation (Altbach & de Wit, 2020). This reveals that English proficiency is considered as an essential requirement in various knowledge fields and its adoption in teaching has several implications:

*"Students' English proficiency as an entrance to a world order in their knowledge field."* Informant 20, non-STEM, (2021).

However, tension emerges in Latin America regarding the promotion of English, as it is considered as an element of hegemonic internationalization that relegates the linguistic and multicultural diversity of the region (Oregioni, 2016). Nevertheless, teachers consider that teaching in English can have an enriching cultural and educational impact on students and teachers, by diversifying the teaching-learning experience:

*"To exchange training, experiences, and information with people from other cultures. To enrich our own culture and training, to contribute about our own culture and training."* Informant 29, STEM, (2021).

*"To offer learning experiences that diversify their (students) skills and to test their academic performance in English."* Informant 35, non-STEM, (2021).

From these results, it can be assumed that internationalization will continue to be a central force in higher education; even though their long-term trends such as teachers' perspectives are strong and stable, various uncertainties can affect their development (Altbach & Knight, 2007). An example of these uncertainties is the necessity to reward those who teach in English. Since not everyone can access financial support programs, teacher participation could be significantly hampered:

*"I have the skill, but it must be paid to justify the extra effort."* Informant 5, STEM, (2021).

Internationalization is a process that requires key efforts and strategies (Taylor, 2004), and even though the results demonstrate that teachers are aware of the benefits of teaching with EMI. Beelen (2011) emphasizes that teacher engagement will be the result of a well-structured and long-term supported institutional policy that offers training and support to teachers during the implementation.

These findings allow us to reflect on the need to go beyond the design and execution of various teaching approaches where the use of English is involved, and to also identify other factors and situations that influence the expectations of EMI courses and their variants with technology. In this sense, King (2022) recommends taking advantage of the lessons learned during the pandemic to cultivate practices that favor student-centered teaching.

## Conclusions

The analysis yielded results from among the four categories (political, economic, academic, and sociocultural), proposed by de Wit (2002) and Friesen (2012), in which mainly academic and political motives stood out, while sociocultural and economic motives were less prominent. The motives and expectations of teacher participation clearly show an intrinsic motivation towards the IoC with EMI, since they want to experience new forms of teaching, which in addition to increasing their teaching experience also allows preserving their language skills. However, when implementing approaches such as EMI, CLIL or others, Marsh and Díaz (2018) explain that, although teachers may be intrinsically motivated due to benefits that they perceive, it is convenient to provide incentives to encourage extrinsic motivation.

Among the motives and expectations of a political nature, in both disciplines (STEM and non-STEM) the interest to support initiatives that the institution undertakes stood out, being a little higher in the non-STEM disciplines. This unfolds two situations: 1) the willingness of teachers towards the IoC

through EMI; 2) the population that teaches the least in English (non-STEM) is the one that has the greatest disposition towards this type of teaching. Moreover, it was identified that, in general, there is an affinity with said process in the disciplines, although it is necessary to establish an institutional synergy towards the interdisciplinary approach during its implementation to achieve greater benefits and results in learning (De la Garza, 2019). However, it is pertinent to continue investigating the cases of the disciplines and to implement specific actions that increase teachers' participation.

In addition, the fact that teaching with EMI is considered as a favorable trend for the university due to the compulsory nature of the language in all disciplines, the job/academic opportunity it represents for students, and the possibility of attracting foreign students, evidences an alignment between institutional and teachers' expectations. According to Friesen (2012), teacher engagement is more severe when institutional and individual rationales are aligned. It can be expected that this type of internationalization will continue to be a central force, even more so due to the growing adoption of COIL-type courses and the interest in virtual exchange, which incentives the use of languages.

Despite this trend, its development in Latin America will continue to be immersed in tensions and debates, due to the danger of linguistic homogenization and the tendency to internationalize exogenously, encouraged by the mercantilist logic (Oregioni, 2017). Consequently, research of this type provides fundamental knowledge on the development of the IoC at the national and regional levels, as it explains how this teaching process is directly experienced and identifies the local reasons that promote it.

Contrary to the importance given to the IoC, its execution is considered mainly as an institutional responsibility; ideally, being a shared responsibility at different levels (Marinoni, 2019). Sociocultural motives and expectations indicate that teachers' commitment to internationalization through EMI increases there more they teach in English. However,

it will be relevant to continue evaluating the results of teaching in English through satisfaction surveys, interviews, and meetings with different disciplinary groups, as proposed by Fortanet-Gómez (2020).

Regarding the motives and expectations of an economic nature, various situations were identified. On the one hand, the differences between STEM and non-STEM disciplines regarding economic incentives are an important participation motive for the former, but not for the last. This evidences once again the need to recognize the diversity of the disciplines and thus know how to stimulate their participation, based on their different needs and/or interests.

On the other hand, the distinction between the types of contracts revealed that teachers per hours do not have access to programs that encourage and/or remunerate their participation, which could affect their interest in participating in this process. However, some studies indicate (Castillo et al., 2017; Jon et al., 2020) that institutional programs/policies sometimes have limited impact on internal practices, organization, and performance of academic activities. That is, economic incentives are not necessarily the primary tool to motivate teachers to carry out changes in their practice.

From this study, it is concluded that IoC through EMI is a viable and beneficial process in the analyzed context, but it is not exempt from complexities and aspects to consider. Although teachers display an intrinsic motivation towards training and teaching in English, the lack of remuneration and/or equal economic incentives could be a cause of limited teacher participation. Although teachers' expectations are similar to what the university seeks to achieve with this type of internationalization, there is a risk of falling into a programmatic understanding (Friesen, 2012): to interpret this process from a merely organizational and theoretical point of view, rather than functional and practical one about what is expected of teaching with EMI.

To conclude, there is a need for further analysis, from different perspectives and the people involved in the implementation, regarding how the disciplinary content and the language are integrated into

classes in various contexts in Mexico (Jon et al., 2020; Villabona & Cenoz, 2021). As Knight (2021) argues, even though internationalization is facing a scenario where its concepts evolve, the understanding of this process and the ways of implementing it seem to suffer few changes. As a result of the pandemic and the rapid adoption of COIL courses, in which teaching in English has a key role as well, it would be advisable to monitor teachers and investigate what is happening with this type of teaching, now also in virtual settings.

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