UNIVERSIDAD COMPLUTENSE DE MADRID

FACULTAD DE FILOLOGÍA

TESIS DOCTORAL

Necesidades académicas de escritura en estudiantes aprendiendo contenidos disciplinarios a través de EME: un enfoque en la Adecuación Funcional a través de un método de triangulación

Academic written needs in students learning disciplinary content through EME: a focus on Functional Adequacy through a triangulation method

MEMORIA PARA OPTAR AL GRADO DE DOCTOR

PRESENTADA POR

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Madrid, 2024

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"Litterarum radices amaras, fructus dulces", I was 16 years old when in my Latin classes I read for the first time these words that would remain perhaps too much engraved in my person for the rest of my life. Today I am well aware that they were very right but that there are many other important things in this life. Since then, I knew that I would get to the point where I am now, what I did not know was how I would get here. This PhD journey has been a whole experience and personal challenge that I can finally say is over and it certainly has not been alone. This thesis is the result of countless people and the help I have received throughout a five-year project. I would like to thank all those people without whom I could not have made it this far and whom I hold in such high esteem.

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List of Abbreviations

CAF	Complexity, Accuracy and Fluency
CEFR	Common European Framework of References
CELTA	Certificate in English Language Teaching to Adults
CEM	Campus Estado de México
CLIL	Content and Language Integrated Learning
CPD	Continuous Professional Development
CT	Content
CY	Comprehensibility
C1	Coherence
C2	Cohesion
EAP	English for Academic Purposes
EFL	English as a Foreign Language
EME	English-medium education
EMI	English medium Instruction
EMP	English medium programme
ESL	English as a Second Language
EU	European Union
FA	Functional Adequacy
HE	Higher Education
ICT	Information and Communications Technology
IELTS	International English Language Testing System
ITESM	Instituto Tecnológico y de Estudios Superiores de Monterrey
L1	First language, mother tongue
L2	Second language
LF	Lingua Franca
RQ	Research Question
SD	Standard Deviation
TESL	Teaching English as a Second Language
TESOL	Teaching English to Speakers of Other Languages

TKT	Teaching Knowledge Test
TOEFL	Test of English as a Foreign Language
TR	Task requirements
UCM	Universidad Complutense de Madrid
USA	United States of America

Abstract

Throughout the history of formal education, it can be observed that the use of a foreign language as a medium of instruction has been a common feature of education. In fact, the adoption of a second language (L2) medium has been more of a norm rather than the exception (Wiley & Sons Lewis, 1976). Until the rise of nationalism, only a select few languages other than those of the great empires, religions, and civilizations were considered competent for conveying the content of a formal curriculum. Initially, Latin served as the medium for both religious and secular education in Europe during a millennium following the collapse of the Roman Empire. Subsequently, Esperanto emerged to enhance international communication and easy acquisition among users. On this topic, classical Arabic is still widely used as the medium of instruction in Muslim countries where many diverse vernaculars are spoken, among many other instances (Johnson & Merrill, 1997).

Each of the Western European imperial powers imposed its language upon the colonized regions, and English, Spanish, French, and Portuguese are still widely used as media of instruction despite the ending of the colonial era. Many second language-medium programs exist today as a consequence of one social group's ability to impose its language, or choice of language, on others, coupled with the desire to promote linguistic, cultural, and national conformity. Immersion education, by contrast, has generally been associated with linguistic choice and cultural pluralism (Johnson & Merrill, 1997). This has led to the contemporary use of the English language as the medium of education at tertiary levels due to the universities' imperative to undergo a process of internationalization during the globalization era.

While there are numerous benefits and reasons behind the implementation of English Medium Education (hereinafter EME), ongoing research continue exploring various aspects of this context. One of those aspects under examination is the predominant focus mainly on the content, with usually no established English language outcomes (Lasagabaster, 2018). Furthermore, the introduction of teaching through English may have contributed to students being underprepared for the demands of Higher Education (HE) (Doiz et al., 2011). Apart from this, the inability to manipulate academic literacy and academic discourse in general terms is directly correlated with students' academic

struggles in HE and prevents learners from advancing in their education (Hirvela, 2011). This situation aggravates with the EME paradigm.

By considering this context, the objective of this thesis is to explore academic language needs in students' written assignments within the Humanities branch in content classes delivered through EME in the country of Mexico. In order to do so, this research considers the professors' perspectives, students' perspectives and the students' own writings. To put pragmatic competence into practice, the reference framework employed is the construct of Functional Adequacy (FA) along with collected academic written characteristics adapted for this research. In accordance with the findings of Kuiken and Vedder's research (2018), FA is an interpersonal construct that assesses L2 writing based on the successful fulfilment of tasks by considering dimensions of content, task requirements, comprehensibility, coherence and cohesion.

Therefore, this study involves the analysis of three types of data: (1) 113 surveys to EME professors, (2) 117 surveys to EME students, and (3) 100 written assignments through an adjusted FA rating scale. Once results were collected and analysed, comparisons were made to identify what writing needs should be addressed in the implementation of EME. By gaining insights into academic language needs in written assignments from multiple perspectives, a more comprehensive understanding of the writing situation is obtained, which could prove beneficial for other institutions involved in the same or similar processes.

This research adopts a quantitative and qualitative approach, employing three different methods where two groups of participants were involved. The methodology follows a triangulation approach, incorporating professor and student surveys, and students' assignments.

The primary conclusions derived from the quantitative and qualitative analyses indicate that participants faced challenges with academic literacy despite their confidence on their language proficiency. It became evident that written genres had not been clearly identified and explained. In addition, a correlation emerged between working on written assignments in class and obtaining better results afterwards. Results using the FA rating scale highlighted that the dimensions of task requirements, coherence and cohesion were recurrent areas for improvement in written assignments. Finally, a sense of abandonment among students and a lack of clear guidelines for professors were identified.

These findings prompt potential suggestions including the necessity to enhance awareness of written genres in English-taught programmes contributing this way to improve learners' writing skills (Salaberri-Ramiro & Sánchez-Pérez, 2015b). The implementation of new methodologies and strategies in EME to incorporate academic writing features, such as English for Academic Purposes (EAP) courses would be highly advantageous. There is a need for greater support among professors through professional education programmes, along with departmental collaboration, as well as policies. Lastly, introducing the construct and development of FA in EME lessons became beneficial and could bring clarity to the assessment of writing competence through the rating scale (Kuiken & Vedder, 2018).

Resumen

A lo largo de la historia de la educación formal, se puede observar que el uso de una lengua extranjera como medio de instrucción ha sido una característica común de la educación. De hecho, la adopción de una segunda lengua (L2) ha sido más una norma que una excepción (Wiley & Sons Lewis, 1976). Hasta el auge del nacionalismo, sólo unas pocas lenguas, aparte de las de los grandes imperios, religiones y civilizaciones, se consideraban competentes para transmitir el contenido de un plan de estudios formal. Inicialmente, el latín sirvió de medio para la educación religiosa y laica en Europa durante un milenio tras el colapso del Imperio Romano. Posteriormente, surgió el esperanto para mejorar la comunicación internacional y facilitar la adquisición entre los usuarios. En ese sentido, el árabe clásico se sigue utilizando ampliamente como medio de instrucción en los países musulmanes donde se hablan muchas lenguas vernáculas diversas, entre otros muchos casos (Johnson & Merril, 1997).

Cada una de las potencias imperiales europeas occidentales impuso su lengua a las regiones colonizadas, y el inglés, el español, el francés y el portugués siguen utilizándose ampliamente como medios de instrucción a pesar del final de la era colonial. Hoy en día existen muchos programas de enseñanza de segundas lenguas como consecuencia de la capacidad de un grupo social para imponer su lengua, o la elección de su lengua, a otros, junto con el deseo de promover la conformidad lingüística, cultural y nacional. La educación de inmersión, por el contrario, se ha asociado generalmente con la lingüística y el pluralismo cultural (Johnson & Merrill, 1997). Esto ha llevado al uso contemporáneo de la lengua inglesa como medio de educación en los niveles terciarios debido al imperativo de las universidades de someterse a un proceso de internacionalización durante la era de la globalización.

Si bien existen numerosos beneficios y razones detrás de la implementación de la educación en inglés (EME es el acrónimo en inglés), la investigación en curso continúa explorando diversos aspectos de este contexto. Uno de esos aspectos que se están examinando es el enfoque predominante principalmente en el contenido, sin que se establezcan normalmente resultados en lengua inglesa (Lasagabaster, 2018). Además, la introducción de la enseñanza a través del inglés puede haber contribuido a que los estudiantes no estén suficientemente preparados para las exigencias de la educación superior (Doiz et al., 2011). Aparte de esto, la incapacidad para manipular la

alfabetización y el discurso académicos en términos generales está directamente correlacionada con las dificultades académicas de los estudiantes en la educación superior e impide que los alumnos avancen en su educación (Hirvela, 2011). Esta situación se agrava con el paradigma EME.

Al considerar este contexto, el objetivo de esta tesis es explorar las necesidades de lenguaje académico en los trabajos escritos de los estudiantes dentro de la rama de Humanidades en clases de contenido impartidas a través de EME en el país de México. Para ello, esta investigación considera las perspectivas de los profesores, las perspectivas de los estudiantes y los propios escritos de los estudiantes. Para poner en práctica la competencia pragmática, el marco de referencia empleado es el constructo de Adecuación Funcional (FA es el acrónimo en inglés) junto con características académicas escritas recopiladas y adaptadas para esta investigación. De acuerdo con los hallazgos de la investigación de Kuiken y Vedder (2018), la FA es un constructor interpersonal que evalúa la escritura en L2 a partir del cumplimiento exitoso de las tareas considerando las dimensiones de contenido, requisitos de la tarea, comprensibilidad, coherencia y cohesión.

Por lo tanto, este estudio implica el análisis de tres tipos de dataos: (1) 113 encuestas a profesores de EME, (2) 117 encuestas a estudiantes de EME y (3) 100 tareas escritas a través de una escala de valoración de FA ajustada. Una vez recopilados y analizados los resultados, se realizaron comparaciones para identificar qué necesidades de escritura deberían abordarse en la implantación de EME. Al conocer las necesidades lingüísticas académicas en los trabajos escritos desde múltiples perspectivas, se obtiene una comprensión más completa de la situación de la escritura, que podría resultar beneficiosa para otras instituciones implicadas en procesos iguales o similares.

Esta investigación adopta un enfoque cuantitativo y cualitativo, empleando tres métodos deferentes en los que intervienen dos grupos de participantes. La metodología sigue un enfoque de triangulación, incorporando encuestas a profesores y estudiantes, y tareas de los estudiantes.

Las principales conclusiones derivadas de los análisis cuantitativos y cualitativos indican que los participantes se enfrentaban a dificultades con la alfabetización académica a pesar de su seguridad en el dominio del idioma. Se puso de manifiesto que los géneros escritos no habían sido claramente identificados y explicados. Además surgió una

correlación entre el trabajo en tareas escritas en clase y la obtención posterior de mejores resultados. Los resultados obtenidos con la escala de valoración FA pusieron de manifiesto que las dimensiones de requisitos de la tarea, coherencia y cohesión eran áreas recurrentes de mejora en las tareas escritas. Por último, se identificó una sensación de abandono entre los estudiantes y una falta de directrices claras para los profesores.

Estos hallazgos suscitan posibles sugerencias, entre ellas la necesidad de potenciar el conocimiento de los géneros escritos en los programas impartidos en inglés, contribuyendo así a mejorar las habilidades de escritura de los alumnos (Salaberri-Ramiro & Sánchez-Pérez, 2015b). La implementación de nuevas metodologías y estrategias en EME para incorporar características de escritura académica, como los cursos de inglés con fines académicos (EAP es el acrónimo en inglés) sería muy beneficiosa. Es necesario un mayor apoyo entre los profesores a través de programas de formación profesional, junto con la colaboración departamental, así como políticas. Por último, introducir el constructo y el desarrollo de la FA en las clases de EME resultó beneficioso y podrá aportar claridad a la evaluación de la competencia de escritura a través de la escala de calificación (Kuiken & Vedder, 2018).

Chapter 1: Introduction

1.1 Origin of this research

Throughout this chapter, an overview of the interest to undertake this research on academic writing needs is presented, as well as the purposes and reasons behind it, emphasising the importance of this study and presenting the research questions this study seeks to answer, to finally conclude with how this thesis is presented in a logical order.

This research finds its origin in the years the researcher was involved at the Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM) employed as a teacher in the country of Mexico. During those years working with diverse students with different motivations, levels, backgrounds and age ranges, a constant need and will for improvement was present which led to awakening curiosity about the academic written language and its connection with the acquisition of content through English and the demand of assignments at the institution.

One of the main focus of the ITESM, a private high school and tertiary educational system with various campuses all over the country of Mexico, is to have all its students graduate with a full command of the English language, hence, a series of English as a Foreign Language (EFL) courses are mandatory and included as part of its undergraduate programs. However, these courses are not necessarily designed to prepare students for academic writing in English, but for EFL in general, even though learners are often asked to complete numerous essays in English throughout their studies, particularly in those subjects offered through EME. From the perspective of the EAP and EFL teacher at this university, the growing worry was the needs found in students' written assignments presented for those classes, which seem to replicate in any other subject taught through the use of the English language, and therefore affected the final academic achievement of these. This, along with the concern of improving the teaching techniques for writing academic assignments, which will follow students throughout their studying and working lives, led to the current research.

In order to facilitate HE institutions to design programmes based on the actual needs professors[1] and students have when facing writing in English, it is key to identify these needs in assignments and to directly ask learners and professors involved in this process for their point of view to be considered. Therefore, research is required and necessary to shed some light about the students' difficulties and needs, how and why they exist and how they could be tackled in class to get better results.

It is the intention of this research that by understanding and learning more about academic language needs in written assignments from three different perspectives, a better understanding of the writing situation may be obtained and the process of learning about their needs and writing preparation may be conducted. In addition to this, the study of all these features may be highly helpful for professional training and improvement in the researcher's academic career, as well as for other professors and universities involved in the same or similar processes.

1.2 Background and rationale behind this study

Academic mobility has roots tracing back through history, with universities maintaining an international character since their creation. During the Middle Ages, scholars and students travelled throughout Europe, converging in universities established across numerous cities from the late eleventh-century onwards (Koski, 1993; Makinen, 2003). In these mobile and interregional communities, communication among scientific and scholarly circles was facilitated by a common language, Latin. However, with the growth of society and universities, vernaculars soon replaced Latin in HE. The mobility of undergraduate and graduate students has become a normal part of university, a clear example of this is the well-known European Erasmus exchange programme. Universities actively recruit international students, increasingly accommodating a Lingua Franca (LF), predominantly English. In this case, entire departments or faculties in non-English speaking nations have adopted English as the main language at HE programmes. This is also seen in research, where international projects often embrace English as the LF facilitating collaborations among countries and creating partnerships. In order to communicate effectively and become a member of this academic community, specialised

[1] The term "professor" is being used along this research to refer to "lecturer".

academic discourses and genres need to be learnt (Bourdieu & Passeron, 1977). Irrespectively of their linguistic backgrounds, new students at institutions undergo secondary socialization into academic discourses. This academic globalization process has stimulated the surge in English-language programmes since the late 1990s and marks a significant development in today's HE landscape.

As EME continues spreading world widely, university professors and students who are L2 speakers of English need to put much effort into the delivery or reception of content (Sánchez-García, 2018, 2019). The process of acquisition of new content is already complex when instructions are being delivered in the L1 of both professors and students. Thus, it may become even more challenging in an L2, in this case English, since education depends greatly on language, even more so when it comes to providing evidence of that knowledge through written assignments.

Regarding the topic of EFL, over the years there has been plenty of research conducted about it with the main purpose of understanding the academic demands, the students' needs and difficulties, the writing processes and the texts (Al-Badi, 2015; Grabe & Kaplan, 1996; Cumming, 1998; Hinkel, 2004; Hyland, 2008, 2011). The main objectives are to upgrade the academic writing of students, look for possible solutions to problems and help students becoming successful academic writers for assignments and dissertations.

Nevertheless, even though the perspectives of researchers and professors play an important role in the writing process, the students' perspective may not have been taken into consideration so strongly. Because of this, and other reasons, the direct involvement of student side has been decided to be included as part of this research, as well as their professors.

Moreover, despite the fact that many students in all this research often may have had mandatory remedial courses to take, these seemed to provide learners with a minimal knowledge and preparation for academic writing, something they were constantly involved in during their complete studies and they should be able to show easily in their subjects taught through English. On the other hand, professors of these subjects seemed to expect students to be able to produce perfectly written academic assignments of the content they taught without referring to the writing process at all, assuming students had learnt this during their remedial/EFL courses. These two situations were another factor

for undertaking this research and the reason why it was key to involve those professors and the academic written works.

Therefore, the researcher's desire and concern for better results in academic writing, together with the awareness of limited research on writing practices, have led this study to undertake research on a number of writing practices of undergraduate students in EME Humanities subjects, to ask for students' perspectives on the matter and also professors' perspectives on those subjects.

By completing this, it is hoped that EME courses at HE may benefit from this research. Finally, one of the main aims of this research is to find potential implications to practical challenges from what was personally observed as problematic during the researcher's teaching time at the ITESM. By doing this, it is expected to bring solutions to these mentioned problems through the findings here and therefore incorporate them into the teaching and development practices in this and similar contexts around the world, as well as contribute to current and future literacy studies.

1.3 Importance of this study

Over the past few decades, the abundance of university courses, textbooks, and various learning resources tailored for L2 academic writers has become an undeniable reality. This trend has significantly impacted the attention of English as a Second Language (ESL), EAP, and writing instructors, leaving them no option but to take notice. Similarly, the swift escalation in L2 teacher-training courses, workshops and HE programmes in Teaching English as a Second Language (TESL) has become a prevalent aspect of the educational landscape. This takes us to also focus on writing at EME.

According to Hirvela (2011) students' inability to manipulate academic literacy and academic discourse in general terms is directly linked to poor success in HE and prevents learners from progressing with their education. Therefore, it is of high importance for researchers and educators to learn and investigate more about undergraduates' academic literacy development.

The issue of new university entrants' academic standards being unsatisfactory is commonly found in the academic world and has already been referred to in the past. In the words of Spack (1997) "despite the ever-increasing number of undergraduates

entering the academy who are said to be underprepared for its demands, we have relatively little substantive knowledge of the processes through which students acquire the academic discourses necessary to achieve success" (p: 3).

Despite this being a common topic of complaint among academia, very few research studies have been undertaken that examine the academic literacy needs of undergraduates in EME, not to mention the lack of research in this matter in the setting of Mexico. Therefore, more research on this topic as well as EME needs for students is needed. Hence, the current study may contribute to the field by focusing its attention on a specific case study with two groups of participants (EME students and professors) whose perspectives and pieces of evidence will be documented and carefully analysed. It is believed that this study is innovative for a number of reasons, first, because it is conducted in an area that is already mainstream practice in many settings around the world, but it is still under researched in many aspects, this being EME. Second, because it focuses on the context of Mexico where there is very little research on the topic and is starting to gain more importance since EME is a relatively new field in comparison with other contexts such as Europe. Furthermore, the participants involved in this study, professors and learners, first language is Spanish and have learnt English through subjects of EFL. Finally, the use of quantitative and qualitative data from professors and learners' perspectives provided this research with a strong basis upon which it was able to develop conclusions for future improvements and needs in the area of academic writing and EME.

The significance of this research lies on the interrelation between assignments, professors and learners, taking into consideration the challenges and difficulties learners are faced with, as well as professors' perspectives in order to finally obtain a holistic view of the complete process. Hence, written assignments, professors and students allow this research to examine the written needs from three different perspectives through a triangulation process.

Furthermore, this research strives to give learners a voice to express their challenges, difficulties, and needs embedded in their academic writing used for their assignments. Therefore, the findings obtained may be of great importance and value to a wide group of academics for future research, developing new curriculums and improving instructions; while at the same time providing insights on strategy development to facilitate learners' acquisition of academic literacy in general and writing in specific.

This entire research may also provide teachers with an opportunity to reflect on their own teaching and the feedback provided to students, as well as expand their understanding of their students writing, based on empirical data yielded from the ITESM and not only on possible intuitive notions of what students generally do or not in their written assignments based only on teaching experience.

Additionally, this study also considers writing as a social practice process since the process of writing is seen is not seen as linear but as recursive (Clark & Ivanic, 1997), which means that the elements in the process are needed and undertaken during the entire task, moving constantly back and forth. This process approach also implies that students need to acquire skills in order to be able to write anything they are required in the academic environment of a university for diverse situations or sociocultural settings. This approach clearly benefits professors, students and their own writings and is further explained along this research.

1.4 Objectives and research questions

The general objective of the present research focuses on investigating the academic language needs of students learning disciplinary content through EME. By tackling this topic, it is expected and hoped to contribute to clarifying some of the recurrent doubts concerning EME (see *Chapter 2 Theoretical framework*). The study aims to add to the body of L2 writing in the EME context by examining the needs of L2 learners' writing skills in academic essays. Having observed and taught a wide variety of groups of students at ITESM, and also having determined they all possessed a good attitude towards learning and improving the English language in a more effective manner, the researcher made the decision to take advantage of their written assignments in a number of Humanity subjects at this university in order to find possible needs in writing for their EME content subjects.

Another motivation of this study is to improve the syllabi of EME subjects in order to obtain better results. This research focuses on assignments from three groups of EME students in the soft applied disciplines of Humanities (*Music and society (M&S), Ethics, person and society (EP&S),* and *Music appreciation (M&A)*).

The development of L2 learner's academic writing ability has largely been studied over the years in terms of improvements in various assessment sections, such as

coherence and cohesion, and organisation, as well as overall performance or production. However, it has been only recent that writing research and studies in the field of writing in EFL have started to focus their attention on the linguistic features of students' writing and the possibilities to improve them (Arnbjörnsdóttir & Prinz, 2017; Benson & Heidish, 1995; Flower, 1993). Furthermore, student course evaluations, instructor feedback and attrition, and faculty dissatisfaction with students' writing performance at university levels suggested that EME instruction was inadequate preparation for academic writing tasks in the Humanities programmes since "learning to write in a different language is not just a matter of developing more fluent linguistic skills" (Arnbjörnsdóttir & Prinz, 2017: 4).

Consequently, the interest in this research lies on trying to answer some questions that arise from EME in order to set firm proven bases through a carefully designed methodology on which to draw conclusions for constant improvement. Much research (Keith & Swain, 1997; Macaro, et. al., 2018; Marsh & Laitinen, 2005) done in education, such as this one, have their purpose found at the very core of searching and generating new useful tools to improve students' performance and faculty's methodological training. Therefore, the aim of this study is encapsulated in an RQ, which is further subdivided into three subordinate questions, facilitating a more detailed exploration and comprehension of the primary question. As a result, the main areas that the research questions of this project would address are the following:

RQ1: What are the students' academic written language needs in EME?

> **RQ1.1:** What are the students' academic written language needs in EME Humanities subjects as seen by professors?
>
> **RQ1.2:** What are the students' academic written language needs in EME Humanities subjects as seen by students?
>
> **RQ1.3:** What are the academic written language needs as reflected in these particular students' own writings?

Answers to these questions may help in improving and advancing EME, taking a step further in how, where and when teaching writing skills in Humanities could be improved or adjusted. In fact, they would help in the design of effective EME programmes which may be based on the pedagogical implications of the results of this investigation.

1.5 Structure of the thesis

This section delineates the division of chapters in which this thesis has been organized. This dissertation is divided into three main parts, which are made up of eight chapters in total. The first part consists of Chapters 1 (Introduction) and 2 (Theoretical framework). The second part involves Chapter 3 (Methodology). The third part includes Chapters 4 through 8, namely, Chapters 4 (Analysis and discussion of surveys RQ1.1), 5 (Analysis and discussion of surveys RQ1.2), 6 (Analysis and discussion of corpus RQ1.3), 7 (Analysis and discussion of the RQs through triangulation) and 8 (Conclusions and pedagogical implications).

To begin with Chapter 1, the origin, purposes, reasons, importance and objectives with their corresponding research questions of this research are explained. Chapter 2 delves into the contextualization of EME, probing the current landscape that includes content teachers, language teachers and involved students. These topics are followed by a general revision of its application in the world, to later focus on the country from where the data was collected, Mexico, and the specific institution. It proceeds to explore various contexts within language instruction, intertwining English for Specific Purposes (ESP) and EME and the perspective of seeing writing as a social practice in EME is presented. Furthermore, this chapter introduces disciplinary literacies, delineates academic discipline attributes, the types of academic genres, and the nature of academic writing, culminating in a discourse on the writing process. A section is devoted to the influence of genres within tertiary education, specifically in university academic contexts, culminating in a discourse on writing in EME. The chapter culminates in an exploration of functional adequacy as a crucial element of L2 writing proficiency, emphasising its relevance to this research through a review of the pertinent literature.

Part two consists of Chapter 3 that presents the participants involved in this research and delineates the qualitative and quantitative methodologies employed. This chapter describes the triangulation and mixed-method design undertaken for this research through the inclusion of surveys directed at professors and students, alongside detailed descriptions of analysed writings as a data source, incorporating the respective rating scale designed for this research. Then ethical considerations arising during the research are also addressed.

The third part includes Chapters 4 to 8, offering specific analyses and discussions pertinent to each established RQ. Chapters 4, 5, and 6 present findings derived from data analyses correlating with the established RQs. Chapter 7 creates a triangulation of the previous findings for a better understanding and comparison of them. Finally, in Chapter 8, the final conclusions of this research are presented for each of the RQs, while also the limitations encountered when conducting this study, the corresponding pedagogical implications obtained from the final conclusions are presented, and, finally, directions for future research on academic writing in EME subjects. This final chapter is followed by the bibliographical references cited throughout the thesis and the appendices that function as complements.

Chapter 2: Theoretical framework

2.1 Introduction

This chapter provides the reader with the theoretical framework required for this research on the nature of academic writing in EME. The chapter begins with a brief introduction to the context of EME, exploring the current ongoing dialogue between researchers, policy makers and teachers on the process of creation of content subjects taught through English and the need for including the importance of language in EME. It continues to differentiate between the responsibilities of content teachers and language teachers in EME, deepening over the writing skill and the needs and strategies needed by students when writing disciplinary essays. These topics are followed by a general revision of its application in the world, to later focus on the country from where the data was collected, Mexico, and particularly the specific institution of ITESM. Then the chapter mentions the various existing contexts found in language teaching leading to a cross-disciplinary relation between English for Specific Purposes (ESP) and EME and the perspective of seeing writing as a social practice in EME. An introduction to disciplinary literacies is then presented along with the characteristics of academic disciplines and the types of genres found in them. The next section focuses particularly on the importance of academic writing in this research and its characteristics by mentioning the various studies that have taken place over the decades in linguistics to finally lead to the description of the writing process. The last section of this chapter considers the impact of genres and its use in the academic context of tertiary education in universities, leading to studies of writing in EME. Following comes, the explanation of justification to functional adequacy and the discussion of several studies as an essential component of L2 writing proficiency chosen for this research.

2.2 A contextualization of the increasing EME phenomenon

As Dearden (2014) mentions in her book, English Medium Instruction (EMI) or EME is 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. In other words:

> EMI is a term used ubiquitously geographically and, usually but not exclusively, applied to Higher Education. In North America the phenomenon is sometimes labelled ‘immersion’ or ‘content-based learning’ or ‘content-based language learning’ or ‘content-based language education’. In Europe, but not exclusively in Europe, it is usually labelled ‘content and language integrated learning’ (CLIL) or ‘integrating content and language in higher education’ or ‘English-taught programmes (Macaro et al., 2018: 1).

Nevertheless, EME differs from CLIL or other similar labels, in the matter of teaching and learning of an academic subject through English, very often without an explicit focus on language learning or specific language aims and it is typically implemented at the tertiary level of education (Dafouz, 2020; Del Campo, 2020). However, it is true that a certain amount of English linguistic skills may be improved due to immersion and lecturers’ promotion of skills such as accuracy, fluency, clarity and use of appropriate register (Del Campo, 2020). Furthermore, this research employs the term EME instead of EMI since the later one focuses on instruction while EME offers a more integrative view as it takes into account both teachers and students (Dafouz & Smit, 2020).

The recent growing interest in EME can be understood by examining best practice in education which suits the demands of the present day. The process of internationalization and globalization as well as the economic, political, institutional and social forces in the world have significantly impacted on who learns which language, at what stage in their cognitive development, and how exactly (Doiz et al., 2011). In this matter, the choice of English has become significant worldwide (Sánchez-García, 2020) since approximately 400 million of the world’s population speak English as their L1 and approximately 430 million speak it as their L2 while also being the most common first choice of learning a second language worldwide (Ament & Pérez-Vidal, 2015). Those various leading forces responsible for the process of language learning differ depending on the country and region, but they share the same objective, to be able to achieve the best possible outcome in the shortest time (Coyle, 2010).

Globally speaking, every day more and more universities, that traditionally saw English as EFL, find themselves in the rush to offer both undergraduate and postgraduate programmes through the medium of English (Lasagabaster et al., 2014; Earls, 2016). There are many reasons for this, but, to mention some, there is a perceived need to

internationalise the university in order to make it more prestigious and there is also the existing need to attract foreign students because of the falling enrolment numbers of home students through changing demographics (Coleman, 2006; Evans & Morrison, 2011; Dafouz & Smit, 2020). Furthermore, there are national cuts in HE investment, followed by the need of the state sector to compete with the private sector (Dafouz & Smit, 2020). In addition to this, there is the pressure to raise status in international rankings, and finally, the status of English as an international language, particularly in the domain of research publications (Macaro et. al., 2018; Cantwell & Maldonado-Maldonado,2009; Haberland et al., 2008).

Regarding the advantages and disadvantages of EME, its use has made accessibility to knowledge easier, it has contributed to research international collaborations, and it may have improved English language proficiency in general terms (Dafouz & Smit, 2020; Wilkinson, 2004). On the other hand, it may have also contributed to the loss of language and cultural diversity, limited student access to HE from lower socio-economic groups while establishing a type of elite instruction (Del Campo, 2020), and forced the educational system of some countries to adapt to the needs of an Englishisation and Anglocentric educational model (Phillipson, 1992, 2003; Dafouz & Smit, 2020). Moreover, the possible lack of mastery in academic content and the learners' problems in producing the language appropriately are recurrent difficulties of this practice (Del Campo, 2020).

On this topic, research regarding professor's needs in EME are numerous (Aguilar, 2017; Dafouz, 2018; Lasagabaster, 2018; Lauridsen, 2017; Valcke & Wilkinson, 2017), however, research focused on learners is very few. In this regard, students might also benefit from certain training relevant in EME courses that focus on, but are not limited to, academic and discipline-specific English courses such as ESP or EAP courses in order to become competent professionals in their discipline (Orduna-Nocito & Sánchez-García, 2022). The introduction and implementation of EME presents methodological changes that are inevitably to take over. They are likely to affect professors and learners since effective teaching and learning does not take place by simply having a high proficiency level in English (Lasagabaster, 2022; Valcke et al., 2022). These changes in methodology might help learners integrate global features to benefit their writing abilities within their own course contents using an L2 (Herraiz-Martinez & Alcón-Soler, 2019).

2.3 The current situation of teachers in EME

2.3.1 Content teachers, language teachers and students

In the context of EME, it is important to differentiate between language teachers and content teachers. Content teachers, or professors versed on the different content disciplines, may have not gone through the linguistic or pedagogical training needed to face the requirements of EME. This is often not the case among language teachers, however, this absence of training may affect students' writing skills in EME. It is also relevant to consider that university lecturers, not being language experts themselves (Dafouz, 2021; Dafouz & Sánchez-García, 2013; Dafouz & Smit, 2020), complain that they cannot (and/or wish not to) attend to language issues when evaluating student performance since they did not feel comfortable correcting students' mistakes, especially concerning grammatical errors over lexical ones (Airey, 2012; Costa, 2012; Aguilar, 2017; Dafouz, 2020: 154). In this area, professors ideally would need to have knowledge of language in their respective content areas and apply it in the planning stages as well as actively engage students in exploring language and content (Dafouz, 2020). Nevertheless, not all content professors agree about this, but those with a strong sense of efficacy tend to be more open towards new ideas and innovations, more willing to experiment with new teaching methods and are better at meeting the needs of their students (Blonder et al., 2014). In some studies (Cammarata & Tedick, 2012; Dafouz, 2020), content teachers in the EME context clearly answered '*no'* to identifying themselves as English teachers, even though the use and practice of some English teaching took certain amount of time from their classes. Another research by Airey (2012) showed that the lecturers interviewed expected their students to accomplish complex content meanings through language, but they did not think their job included teaching that language. Furthermore, those lecturers placed special emphasis on not feeling confident correcting students' English as they clearly stated they did not teach language but only content (Aguilar, 2017). However, this may be due to the fact that these lecturers belonged to a vertical knowledge structure discipline (science), and not a horizontal knowledge structure discipline (humanities) (Bernstein, 1999), where language and meaning may not be viewed as particularly problematic since the content in any language is very similar (Airey, 2009, 2012). In hierarchical structures, knowledge rests upon the same foundation and builds on empirical enquiry found in the sciences, whereas in humanities knowledge is built on different interpretations of the same phenomena (Kuteeva & Airey, 2014).

Learners, however, are expected to have previously acquired the necessary language skills in order to be able to complete an English Medium Programme (EMP), usually through complementary courses of EFL, ESP or EAP (Airey, 2012; Dafouz, 2021). On this note, content teachers believe that due to the language exams taken upon university entrance by students, the proficiency level of those students is already covered and therefore time focusing on disciplinary language needs is not necessary (Breeze & Dafouz, 2017; Dafouz & Smit, 2020). In some cases, these courses have even been removed from the curriculum on the assumption that they are no longer needed since the instruction is in English (Breeze & Dafouz, 2017; Dafouz, 2021; Fortanet-Gómez, 2013). Nevertheless, and generally speaking, it is true that students in EME tend to be supported by language lessons and are therefore exposed to more formal teaching of English, beneficial for academic language, and the use of EME benefits the constant development of disciplinary knowledge and language proficiency (Sánchez-García, 2020). However, EME rises the issue among researchers that its learners may not be receiving enough support to develop appropriate academic skills in their disciplines in order to produce the necessary written forms (Airey, 2009; Breeze & Dafouz, 2017). Because of this, the tendency shows little or no correction of learners' mistakes neither in class nor in assignments, since the focus is completely on content, learners do not receive enough and necessary feedback on their language skills (Ament & Pérez-Vidal, 2015).

> If lecturers cannot provide appropriate language input, if students are not provided with adequate opportunities for interaction in the foreign language, if students do not already possess a command of the language that allows them to benefit from English-medium instruction, the hoped for enhancement of students' language skills may remain forthcoming (Sercu, 2004: 548).

Thus, it seems content teachers are not aware of the power and benefits of the language in their classroom when it comes to the teaching and learning process (Sánchez-García, 2020). Nevertheless, their point of view as well as their perceptions of text quality need to be noted since they are the ones grading students' assignments. On this topic, research by Dafouz (2020) and Cammarata and Tedick (2012) have shown that teachers undertake a process of awakening by initially identifying themselves as content experts to ultimately envisioning themselves as partly responsible for teaching the language of their discipline (English). Despite teachers' concerns regarding language, Aguilar and Rodriguez (2012) mention in their research the fact that they also felt reluctant to

methodological training or professional development programmes due to a possible absence of incentives or support provided by the institution for those requested to teach through English or a possible frustration with all the teaching requirements (Nashaat Sobhy & Sánchez-García, 2020).

2.3.2 The unavoidable need for support

The original idea that Continuous Professional Development (CPD) offered at HE for the academic staff should solely focus on language acquisition or accuracy for teachers is found to be a too restrictive model even though some researchers may support this idea (Macaro et al., 2018). It is true that most HE institutions demand a certified high level of English in order to be able to teach through successful classroom communication (Orduna-Nocito & Sánchez-García, 2022). However, support regarding teaching or pedagogical skills to be more efficient in EME need to be more encouraged (Valcke et al., 2022). These programmes are starting to address disciplinary language differences and pedagogical issues as well as offering training on English language proficiency when needed (Dafouz, 2018; Lasagabaster, 2018; Lauridsen, 2017; Valcke & Wilkinson, 2017). Furthermore, support offered to teachers in their effort to make acquisition of disciplinary literacy is also relevant (Dafouz, 2018). For instance, in Sánchez-García's study (2020) there is mention of a professional development programme directed to EME teachers at a specific HE institution that addresses methodological implications of EME, strategies to develop academic and disciplinary competences in teaching, group dynamics and interaction between learners, and how to address intercultural issues. This is understanding since "professional development allows teachers to take a proactive responsibility for mentoring new recruits, engaging in curriculum redesign or renewal and driving transformation" (Valcke et al., 2022: 73).

Thus, content and language teachers' familiarity with the ontological and epistemological assumptions of each other's disciplines may be a recommended requirement for a desirable cooperation between them (Aguilar, 2017; Weinberg & Symon, 2017; Brown, 2017). The use of disciplinary literacy in EME may not be explicitly taught by content lecturers who, as mentioned earlier, are experts on their disciplines but not on language and, therefore, may not be ready to explain the linguistic

conventions found within it (Dafouz, 2021). In this case, EME provides an opportunity for language awareness and its importance in this context (Dafouz, 2018). Through this process of awareness, learners would benefit from acquiring the academic and disciplinary literacy necessary to become professionals in their respective practices (Sánchez-García, 2020). Therefore, even though it is important for EME teachers to possess a high level of English proficiency as mentioned earlier, teachers' need to accommodate the disciplinary content through the language of instruction in order to facilitate the process of learning is even more relevant (ibid). In addition, the English standard variety that EME lecturers believe to be using is a limited version of the different roles the English language plays in the context of EME where it is relevant to consider institutional, pedagogical, societal and communicational functions (Dafouz, 2021).

Since university content teachers are often expected to also deal with language issues inside the classroom, linguistic aspects may tend to be neglected (Doiz et al., 2011). Therefore, some adjustments are likely and needed to be made as effective learning is possible only under certain conditions (Marton et al., 2004). Some of the adjustments are additional support from the English language department, meaning EFL, ESP or EAP, working closely with the content teacher in a collaborative manner as well as training in methodologies in the shape of professional development programs provided by the institution through interdisciplinary collaborations (Dafouz, 2021; Dafouz & Smit, 2020; Fortanet-Gómez, 2013; Sánchez-García, 2020; Valcke & Wilkinson, 2017; Valcke et al., 2022). Therefore, "instead of separating language learning programmes, language and content teaching need to be addressed in a holistic and integrated manner" (Dafouz & Smit, 2020: 51). The purpose of this is to answer, clarify and illustrate possible problems found when it comes to speaking and writing in English. This is achieved by first selecting appropriate content according to the context. The professor needs to consider the students, institution and culture among many other variables in order to provide an appropriate EME content subject. The support provided by the institution may include the establishment of new policies regarding learning outcomes as well as a clear framework for assessment in second language instruction as content teachers often feel uncomfortable assessing language. This may include relations with language experts, support when establishing rubrics, help in the classroom or teaching strategies (Valcke & Wilkinson, 2017). However, the above-mentioned rapid implementation of EME has out-paced the measures of its impact. For instance, in Spain, some EMPs have paradoxically

operated from a bottom-up perspective, when individual teachers or departments may even embark in EME on an experimental level (Dafouz, et al., 2014: 227), therefore, the decision-making process completely falling on content lecturers. In general, the policies undertaken are usually done through a top-down procedure entailing lecturers and students to cope with the required language changes indicated in the policies (Nashaat & Sánchez-García, 2020). Thus, this community may see these policies as a top-down imposition that affect their attitude or preparation in EME.

On this topic, Sánchez-García (2020) suggests in her research a professional development programme that prepares teachers to help students in developing "adequate discourse for disciplinary learning" (p. 7). This is a training that is initial and constant throughout teacher professional development and an observation and mentoring process for new academic staff. In this collaboration process, Airey (2016: 18) states that

> both parties need to understand what the other can bring to the table [...] the content lecturer should not view the language expert as a low-level technician dealing with issues of secondary importance and who is responsible for a 'quick language fix' [nor] the language expert fall in the trap of criticizing what may appear to be underdeveloped or naive approaches to disciplinary discourse on the part of the content lecturer

Dafouz (2021) also mentions a location change of ESP from the English department at HE to those faculties where they are required in order to work in a more closely relation with lecturers and that way building their disciplinary knowledge so familiarity with goals regarding academic literacy expectations is achieved.

Another factor of EME to be considered is the fact that content teachers would need to adapt their lessons to the EME context by slowing down the lecturing pace, providing a higher number of illustrations and examples to support their explanations or uploading permanent online materials for student consultation (Dafouz, 2020: 162; Morell, 2020). In addition, a common complain among professors regarding EME is the fact that they need more preparation time and therefore have a harder workload when teaching in English, which is also shared by learners enrolled in EMPs (Airey, 2012; Ament & Pérez-Vidal, 2015). Moreover, since content teachers sometimes may not be fully proficient in the language of instruction, the use of written words, visual materials and body language might benefit their speech (Morell, 2020). These types of adjustments would frequently mean that content teachers find themselves in the situation where they needed more time,

not only to plan their lessons, but also to teach in English as well as their disciplinary content, sometimes leading to reducing syllabus coverage (Ament & Pérez-Vidal, 2015). Although, as stated by Airey, "undergraduate learning in a monolingual setting undoubtedly involves some measure of disciplinary language learning – discipline and language are inextricably entwined." (2012: 64). Furthermore, Ament & Pérez-Vidal (2015) mention the fact that both teachers and students behave differently in EME classes. Students tend to ask less questions and interact less with each other or the teacher, while teachers show a tendency to stick to their planning more and directly follow the slides of their presentation without much interaction with students. This may affect interaction with the L2 and their corresponding abilities.

In Pecorari's research (2006), it was seen that content teachers paid little or no attention to planning exposure to English, specified no English language outcomes in formal course documentation, and expressed concerns about their abilities to teach in English. On the other hand, pedagogical aspects like scaffolding and interactive methodology, such as the use of questions with the audience, constant feedback and discussions, are of great importance rather than common teacher-fronted lectures (Lister, 2007). Nevertheless, still some lecturers show little interest in receiving methodological training (Benson & Heidish, 1995). In addition, Costa's research (2012) mentions that even though lecturers refuse to teach English, they still use a pre-emptive focus on form during their lessons in order to improve results, thus, revealing a close connection with content expertise. However, there is a low amount of tandem courses, meaning content and language specialists working together, found in Airey's research (2012).

2.3.3 The importance of teaching content and form in written disciplinary literacy

On this topic, the existent relationship between content and form for texts requires precise study and practice in both for optimum results. First of all, when mentioning form in a text, it is referred to those elements regarding organization in an essay, divided between the basic introduction, development and conclusion sections. Apart from this, it considers the way paragraphs are built and structured. It also includes the presentation features that are required such as cover, index, headings, bibliography or others. And

finally, the various linguistic elements of grammar, punctuation and correct spelling (Johns, 1997). Then, when mentioning content in a text, it is referred to the meaning and ideas that are included in them.

Along an academic text there should be a sense of movement which indicates progression, and it is also part of the presentation and organization. This can be clearly noticed in a text with defined sections such as introduction, analysis, discussion, etc. or linking phrases like "in this section the topic for discussion will be…" (ibid).

It is worth mentioning that according to Johns (1997), depending on how content and form interact with each other, in terms of structures, provided information, topics, features, etc., a specific type of text or genre will be created, such as reports, projects, dissertation, essays, among others. This has become an important issue that needs to be explained and taught in class by professors, being one of the main plausible solutions to provide learners with feedback on content and form in order to help them face the demands of university levels (Fathman & Whalley, 1990; Ferris, 1997).

There are various thoughts on this matter from many researchers and professors, for instance, Johns (1995) affirms that form has been neglected in teaching due to the fact that there is an ongoing debate on its usefulness. However, in terms of grammar being a fundamental part of form, Truscott (1996) is against correcting since he argues that it hampers the students' ability to write. Whereas Clark and Ivanic (1997) propose that during the process of writing every feature should be taught individually. Meanwhile, Spack (1988) mentions that the focus should be only on form and its teaching, but Belcher (1990) on the other hand suggests that professors must teach form and also provide students with enough feedback in order to improve their written essays.

Interestingly enough, Froedsen (1995) points out that if language teachers were the ones giving feedback about writing to students, they might not be able to address it correctly for content specific topics and particular vocabulary because of lack of familiarization with the subject taught, but they could provide them with rhetorical development and language use in their writing.

Although the ability of language teachers being able to give feedback on content specific topics in students' writing is not a matter that will be discussed here, it is worth mentioning that in that scenario there could be some discrepancies between teachers. Then, the final decision will fall under the content professor's judgement, who, after all, has the final word in that subject. There might be even the case that disagreement exists between various content professors of the same subject in terms of what to teach and what

to assess in writing depending on their own values, beliefs, views and the syllabus. Some studies have shown that content professors tend to focus more on correcting content in assignments or essays than in form, allowing mistakes on grammar (Janopoulos, 1992; Santos, 1988; Vann & et. al., 1984). However, this research, because of personal experience in the context of Mexico and the almost lack of literature regarding this matter in the country, took the point of view of what professors consider to be key to learn and how that learning is assessed for each subject. Furthermore, the study of Barton (1998) reinforces the view that the teaching of form, meaning in this case grammar, should not be discarded in order to focus more on content since there exists a close relation between both of them, and therefore, one cannot function without the other for the purpose of achieving a good communication through writing. Additionally, teachers and learners' beliefs constitute "a complex combination of intuitive, subjective knowledge about the nature language, language use and language learning, taking into account both cognitive and social dimensions, as well as cultural assumptions" (Baker & Hüttner, 2017; Hüttner et.al., 2013: 269) and they need to be taken into consideration for research purposes and professional development programmes. What is more, research about beliefs seem to suggest that changes in teacher behaviours or attitudes inside or outside the classroom cannot be implemented in a successful way without considering them (Hüttner et.al., 2013).

As it can be seen, there are some issues that English-medium lecturing rises, such as lecturers' responsibility towards teaching disciplinary literacy in their subjects for better results, greater support and being rewarded by their university since they are integrating language within their content subjects (Aguilar, 2017). It even seems reasonable to claim that EME lecturers should be trained and made aware about minimal necessary pedagogic adaptations that even a good EME teacher requires. On this note, it seems relevant to consider again beliefs when shaping teachers' professional identities in order to include both language and content in their subjects (Dafouz et al., 2016). Additionally, English language specialists could take over in this context to cater for student (and teacher) proficiency as well as accuracy, in order to ensure quality and good practices within EME (Aguilar, 2017: 12). Even more, Del Campo (2020) and Aguilar and Rodríguez (2012) studies mention that EME lecturers' main concern in the use of English is linguistic accuracy and fluency.

Thus, as many teachers may not have received any methodological training or professional education programs, it is of great importance that they are provided with support from the institution (Ellison et al., 2017). In addition to this, content teachers in EME may work in tandem with language teachers in preparing lessons and materials, even though this is often not the case as teachers tend to work in isolation (Ellison et al., 2017). Therefore, adjustments in terms of content delivery may be required, teachers may need to be more language conscious and sensitive to students' both content and language needs. Therefore, a change in teachers' perception may be required from, not only a transmitter of knowledge, but also a facilitator of learning (Ellison et al., 2017; Valcke & Wilkinson, 2017).

2.4 EME beyond Europe

Despite the fact that the vast majority of research focus in terms of EME resides in Europe, the internationalization process of English goes beyond this area. To illustrate this expansion, it is imperative to consider Kachru's perspective (1985) that presents the spread of this language considered from the position of three concentric circles that represent the types of spread, the patterns of acquisition and the functional domains in which English is used across cultures and languages. He names them the *inner circle*, the *outer circle* (or *extended circle*) and the *expanding circle*. As seen in Figure 1 below, the inner circle refers to the traditional bases or regions where the L1 is English, being the countries of USA, UK, Canada, Australia and New Zealand. The features of the outer or extended circle are that English is spoken as well as other languages in the same country and English holds an important status, it refers to those countries that were colonialized by those in the inner circle. The expanding circle territories do not necessarily have a history of colonization by the users of the inner circle, it is currently expanding and has resulted in numerous performance (or EFL) varieties of English. (Kachru, 1985).

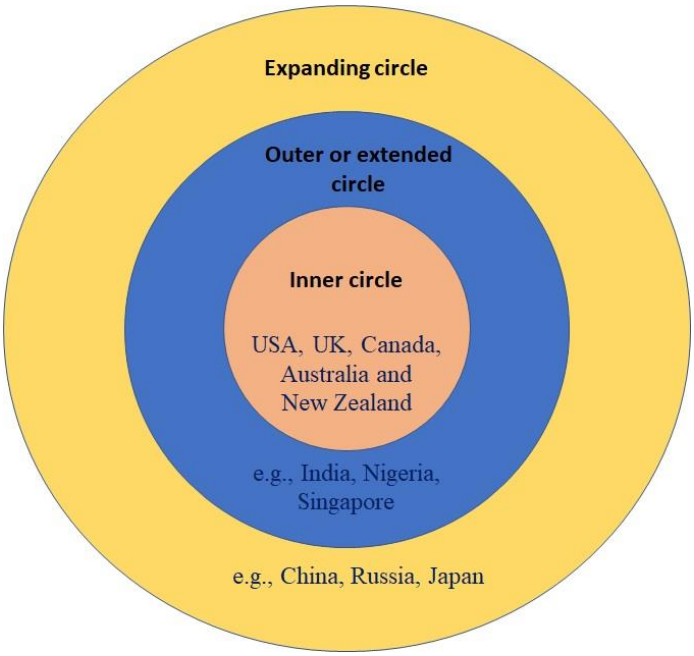


Figure 1. Kachru's circles of English (1985).

As we move out from the inner circle, English starts to be used as an additional or alternative language due to modernization, the use of technology and globalization which have implications for the learning and teaching through English. This brings us to today's use of EME in HE.

EME is particularly present in the expanding circle of Nordic European countries with the Englishisation process of HE (Dafouz & Smit, 2020). It has been particularly effective in European universities for attracting international students as part of the Bologna agreement. This agreement also includes Erasmus exchange programmes, which contributed to the compatibility between European university systems (Bologna Process, 2010; Doiz et al., 2013) as well as developed cultural, economic and professional collaboration among countries (Herraiz-Martinez & Alcón-Soler, 2018). Nevertheless, the presence of EME courses and their implementation was at first uneven throughout Europe (Coleman, 2006).

In the expanding circle of Asia, more specifically in countries such as Taiwan, China or Japan, EME has been implemented through incentives and top-down support to help these countries achieve the goals and follow the policy targets required in each of them, showing increasement in the amount of EME courses offered (Dafouz & Smit, 2020). This is also the case of Korea where there has been an improvement of students'

English proficiency due to EME, despite its implementation across academic disciplines, a support system and appropriate qualified instructors are still needed in order to reinforce it (Dafouz & Camacho-Miñano, 2016). Furthermore, in the United Arab Emirates, the interest in EME is high due to its international work force, its booming economy and the status the English language holds in society. However, professors and staff in this country mention having difficulties with students' academic reading and writing that inevitably affect the chance to develop the necessary academic literacy skills (Dafouz & Smit, 2020; Schmitt, 2000). Therefore, the need for content and language professors to create a collaborative partnership across disciplines has been suggested when remodelling the syllabi depending on the academic literacy (Dafouz, 2021; Dafouz & Smit, 2020; Jacobs, 2007; Sánchez-García, 2020; Schmitt, 2000).

Continuing in the expanding circle of European countries, the amount of EMPs across all academic disciplines has increased tenfold since the beginning of the century (Dafouz & Smit, 2020; Wächter & Maiworn, 2008) as part of the European Commission plan towards improving the quality of tertiary education and strengthening the position of English across Europe seen in their paper (1995):

> Languages are also the key to knowing other people. Proficiency in languages helps to build up the feeling of being European with all its cultural wealth and diversity and of understanding between the citizens. [Therefore] it is becoming necessary for everyone, irrespective of training and education routes chosen, to be able to acquire and keep up their ability to communicate in at least two Community languages in addition to their mother tongue. (European Commission, 1995: 47).

This paper, along with the European Commission's (2008) goal, highlighted the importance of improving language skills and enabled European citizens to acquire two other languages apart from their L1 (Herraiz-Martinez & Alcón-Soler, 2018). However, there exists an important difference in distribution from the north to the south of Europe showing the diversity in national policies from country to country. The use of English as an academic language at HE in northern countries, such as Sweden or Norway, dates back to the 1950s. Its use was reinforced through national language policies, which explains their high rank in English proficiency across the world (Ament & Pérez-Vidal, 2015; Dafouz & Smit, 2020; EF, 2019;). In this context, learners have been reported to use various learning strategies to improve acquisition in EME context such as previous reading of work before class or complete listening attention during lectures (Airey, 2009;

Dafouz & Camacho-Miñano, 2016). Nevertheless, this was not the case for other European countries such as the Netherlands or Germany where EMPs had to switch to English. In these cases, the role of language teachers in EME was originally stated towards developing and teaching EME courses, but later was reduced as to support by mainly providing academic writing training when needed. This meant that the worries on language proficiency were fading as time passed when students improved their English language competence (Dafouz & Camacho-Miñano, 2016; Dafouz & Smit, 2020; Wilkinson, 2004). If the focus is now on Spain, the introduction of EME may have been seen as a threat to students' academic performance due to low levels of English proficiency in comparison with northern countries (Doiz et al., 2011; Dafouz & Smit, 2020). A possible explanation for this could be the importance given to the Spanish language, its prestige and weight in the world as the second most spoken language only surpassed by Mandarin Chinese (Sánchez-García, 2020). During the internationalization process, Spain started to implement CLIL in an effective and rapid manner becoming one of the European leaders in practice and research (Coyle et al., 2010; Sánchez-García, 2020). However, during the EME implementation at HE, professors and staff among various universities have mentioned the need for language support in English since the Spanish government fostered and promoted the implementation of EMPs as part of the national education initiative to improve the level of English from an early age that was started in the 2000s (Dafouz & Camacho-Miñano, 2016). As a result, specific language recommendations regarding EME and teacher development programs are being presented in order to show the importance of language in EME (Dafouz, 2018; Doiz et al., 2011; Fortanet-Gómez, 2013).

As it can be seen, the difficulties related to the implementation of EME among different countries are many and tend to be shared between them.

> In many countries the educational infrastructure does not support quality EMI provision: there is a shortage of linguistically qualified teachers; there are no stated expectations of English language proficiency; there appear to be few organisational or pedagogical guidelines which might lead to effective EMI teaching and learning; there is little or no EMI content initial teacher education (teacher preparation) programmes and continuing professional development (in-service) courses. (Dearden, 2014: 2).

Different models have been adopted in each country and university as each case is different and adapts EME to fit their own unique needs (Ament & Pérez-Vidal, 2015),

however, what it seems clear is that the role English plays in all of them as a medium of instruction needs to be reconsidered (Valcke & Wilkinson, 2017).

2.4.1 The case of EME in Mexico

One of the largest parts of the expanding circle is also Latin America which has a young history regarding EME as well as an important division in education between public and private sectors. This country presents a narrow spread of EME, usually found only in private HE institutions (Dafouz & Smit, 2020; Egron-Polak & Hudson, 2014). The educational system of a country is a reflection of its social structure and educational needs. Therefore, HE in Mexico went through an expanding period that included reforms in their educational system to overcome difficulties regarding equity, quality, access and relevance during the end of the 20th century by creating a debt to the public sector (Gacel-Ávila, 2007, 2012). This expansion contributed to the increase of student enrolling at university with a 12% of population accessing HE, although it remains a low number in comparison with other European countries (Instituto Nacional de Estadística y Geografía, 2020). The general teaching model found in Mexican HE tends to present a traditional approach of expository and note-taking methods, without much contribution to developing problem-solving abilities or transversal competencies as well as autonomous learning. In addition, the requirements for professors to teach at university levels often simply consist of possessing a BA degree, with MA or PhD titles not being as relevant, and many of these professors working part time (Gacel-Ávila, 2007). Therefore, learners are often the ones suffering the consequences of an outdated academic offer, an obsolete educational model and unqualified faculty members (Gacel-Ávila, 2012).

Regarding the teaching and acquisition of the English language, one of the main obstacles in the internationalisation process at HE refers to low proficiency levels of English among students and professors (Egron-Polak & Hudson, 2014). According to the British Council (2015) around 20% of the population of the entire country (nearly 24 million people) study English in diverse and multiple contexts, as well as both sectors, private and public; and at different educational levels, from primary to tertiary education. The various channels from where this education is offered are organisations, educational institutions, online learning and other venues, which are divided into different

specializations with specific focus on certain approaches such as EFL, EAP, Business English and EME.

Based on the information gathered in the EF English Proficiency Index (2019), Mexico, is ranked in the 67th position worldwide, and in the 16th position among Latin-American countries, in terms of the average level of English language skills amongst those adults who took the EF test. The average score of this country was 48,99, being the Netherlands in the first place with 70,27. Consequently, Mexico was placed under the category of low proficiency countries in comparison with other countries around the world. It is important to keep in mind though, that Mexico is a large country with a complex, multidimensional, and diverse educational system, with an enormous influence from its neighbour, the United States of America.

There is not an exact date established for when EFL was first introduced within the curriculum of Mexican schools, but various dates are offered by different experts. For instance, Calderón (2015) places it in 1926, whereas Reyes Cruz, Murrieta Loyo and Hernández Méndez (2011) do so in 1992, and Bremmer (2015) in 1954. Language centres had been the main source of courses and teacher training programs found available until the mid-nineties. Nevertheless, as the field continued to evolve, the demand for more language courses and the demand for teachers increased along with it (Calderón, 2015). Universities in Mexico followed this EFL tendency and began to offer distinct teaching programs for both undergraduate and graduate levels and, consequently, various professional associations and private institutions started to appear as well to offer their services (Encinas et al., 2007). Therefore, language teaching and researching situation has grown and developed in the past decades along with various international trends including EME. As a possible solution to the internationalization demands, the rector of one of the largest and most prestigious public universities in Mexico during a presentation about Mexican higher education offered a prescription to improve their institutions which consisted of recruiting more faculty members with PhDs from American universities, producing more English publications, and offering more courses taught in English (Cantwell & Maldonado, 2009). On this note, Mexico is not an exception when it comes to scientific publishing, following the worldwide trend of disseminating papers in English (Dafouz, 2021).

The recent need to include English as the means of instruction in subjects at HE institutions in Mexico has in recent years become a constant in policy discussions among private and public universities in Mexico as well as funding which is typically found in the private sector due to the lack of public funding available (Reyes Cruz et al., 2011; Dafouz & Smit, 2020; Gacel-Ávila, 2007; Egron-Polak & Hudson, 2014). Some of the recurrent topics of these policies are planning, budgeting and quality assessment procedures (Gacel-Ávila, 2007). Thus, the tendency indicates an increase in the role of EME in the expanding circle of Latin America, the Middle East and North Africa (Dafouz & Smit, 2020). Education in Mexico is going through an internationalisation process through different strategies such as promoting intercultural understanding, updating academic content or developing global awareness (Gacel-Ávila, 2012). In order to improve the relevance and quality of HE in this internationalisation process, an adjustment in policies to be comprehensive and transversal is required. As a result, Mexico is now starting to face the demands EME entitles. It is true that the implementation of EME is at a slow pace in Mexico and Latin American countries in general in comparison with other countries, although new opportunities and scenarios are starting due to the attractiveness of the Spanish language (Sánchez-García, 2020) and its growing global importance for students and staff (Dafouz & Smit, 2020).

Focusing the attention now on research in EME in the country of Mexico, there is a shortage of systematic information on the topic due to its newness that makes the analysis process difficult for this research and "is a first sign that such strategies are not based on a carefully planned process of decision making" (Gacel-Ávila, 2012: 499). Programmes taught in English are almost non-existent in the country which does not benefit the attraction of foreign students or faculty. The 2020 – 2024 Sectorial Education Programme of Mexico[2] highlights the acquisition of indigenous languages, as well as English, and the international exchange of knowledge and ideas among countries through academic programmes, although no apparent strategies have been implemented to make it a reality. Furthermore, since most of HE institutions depend on the national guidelines for subsiding purposes, contributions to the internationalisation process are very limited and therefore, quality of education is not at international standards yet. Any international projects in education are mainly carried out by a small circle of private elite institutions

[2] Programa Sectorial de Educación 2020 – 2024
https://www.dof.gob.mx/nota_detalle.php?codigo=5596202&fecha=06/07/2020#gsc.tab=0

creating a clear division between public and private universities. In this matter, public universities seem to present a strong leadership in research, whereas private universities are strong on student mobility (Gacel-Ávila, 2007). Due to the implementation of the Bologna Process in Europe, debates towards its work in Mexico started and concluded that this model presented great limitations for this particular country or Latin America in general, although it opened the door to establishing new adjustments in the educational models (Gacel-Ávila, 2012). It is worth mentioning that although these features do not necessarily apply to all universities in Mexico, they are linked to a significant majority. However, considerable progress has been seen at the beginning of the 21st century in terms of improved professional education programs for faculty staff, better infrastructures, higher numbers of students enrolled in HE, quality procedures or more productive research sector (Gacel-Ávila, 2007).

Only few HE institutions seem to be integrating global, intercultural or international topics in their syllabi (Gacel-Ávila, 2007). It has been argued that a significant problem with the introduction of EME had to do with finding teachers who are qualified in both language and content. Therefore, Mexico encounters this issue, which shares with other world areas when it comes to implementing it (Lara-Herrera, 2015). This issue is particularly pronounced in Mexico, where many teachers lack a solid education in either second language teaching or in specific content areas. Furthermore, teachers do not often have ready access to reliable information in English (Encinas et al., 2007) and, once discovered, such information usually requires substantial modification in order to render it suitable to the level of students' content and language abilities (Lara-Herrera et. al., 2015). An illustrative example of this Mexican situation can be found at ITESM in Mexico. Teaching staff at ITESM find themselves in the EMR environment without linguistic or pedagogical training nor professional education programs as it also happens in other contexts (see sections *3.2.2 and 3.2.3*)

2.4.2 Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM)

First of all, it is worth mentioning that ITESM is not representative of Mexican universities in terms of internationalisation, and that it prides itself and its prestige on

being ranked number one in private Mexican universities and number two among all Mexican universities (QS, 2021). The ITESM institution, although its origin is located in the state of Monterrey, is found across the country of Mexico divided into 26 campuses. These are Aguascalientes, Central de Veracruz, Chiapas, Chihuahua, Ciudad de México, Ciudad Juárez, Ciudad Obregón, Cuernavaca, Estado de México, Guadalajara, Hermosillo, Hidalgo, Irapuato, Laguna, León, Monterrey, Morelia, Puebla, Querétaro, Saltillo, San Luis Potosí, Santa Fe, Sinaloa, Tampico, Toluca and Zacatecas (see Figure 2). The reason for choosing this HE institution and particularly the Campus Estado de México (CEM), was the accessibility of data due to the researcher's work experience there as it was mentioned in Chapter 1.

Figure 2. ITESM campuses across Mexico (adapted from Tecnológico de Monterrey, 2022)

Regarding the requirements for professors to teach EME subjects at ITESM, based on the information included in their website (Tecnológico de Monterrey, 2022[3]), those professors who are employed to teach any subject in English are required to provide

[3] Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM) (https://tec.mx/es, accessed 11 February 2022)

evidence of a minimum of C1 level following the same requirements as European universities (Del Campo, 2020) even though this requirement may vary across contexts and may depend mainly on human resources or institutional policies (Dafouz, 2021). Furthermore, the professional development programmes the ITESM provides to its teachers include updating courses in the discipline (Cursos de Actualización en la Disciplina (CADi)) depending on the subject they teach at the end of each semester spread and offered throughout the entire network of ITESM campuses in the country (Tecnológico de Monterrey, 2022). Some examples of these CADi can be teaching, statistics, philosophy, literature, engineering or computer studies among many others. These courses are necessary as it is essential that professors know their disciplinary literacies since they have to teach their students to become professionals in their disciplines. These CADi programmes would work as external consulting courses taught by experts in each field taking place in the ITESM facilities. However, no professional development programmes regarding EME have been implemented even though it is becoming more and more relevant in this institution.

In order to start making EME a reality at ITESM, this HE institution developed some measures, since to prepare students to be able to take part in content courses offered in English is part of the objectives and mission of the ITESM. As it was mentioned in Chapter 1, another objective of the ITESM was also to train better bilingual professionals to higher standards and strengthen its students and staff (Tecnológico de Monterrey, 2020a). Therefore, improving teacher's competence of English played an important role as well in this training and are considered one of its priorities. In addition, current education and Information and Communications Technology (ICT) trends call for a solid foundation in English for academic and professional achievement (Aguilar, 2017). In order to do so, the institution performed the measure of designing and offering Remedial courses of English in the shape of EFL subjects for students to become better bilingual professionals in their future. This was done because during the enrolment process for undergraduate studies at ITESM, students coming from different high schools, even including the ITESM high school, may not necessarily arrive with a high competence of the English language or the desired level of proficiency mentioned above. It is because of this that all students wishing to enter and study in this institution are required to take a placement test of English. Then, depending on the results, they are placed in their corresponding level English course. If they certified a B2 level (CEFR), they are eligible

to take a semester of any language students choose or an EAP course during what is called a Remedial Semester. However, if their level is lower than B2, they are enrolled in support English courses, from Remedial I all the way to Remedial V (see Table 1) and required to sit the official English exam of TOEIC to obtain a minimum level of B2.

Remedial Semester				
Code	**Name**	**CL**	**L**	**U**
F1001	Introduction to Physics	3	0	8
H1001	Remedial English I	5	0	8
H1002	Remedial English II	5	0	8
H1003	Remedial English III	5	0	8
H1004	Remedial English IV	5	0	8
H1005	Remedial English V	5	0	8
H1015	Spanish Composition	5	0	8
MA1001	Introduction to Mathematics	6	0	16
TC1001	Introduction to Computer Science	3	0	8

Table 1. Remedial semester subjects and credit information (Tecnológico de Monterrey, 2020c)

During the Remedial Semester, students also take other subjects regarding Physics, Spanish composition, mathematics and computer science in order to have a solid basis where to start their degrees from. These remedial courses have no college credits and focus on writing, listening, speaking and reading in general English. Each of these courses consist of a total number of 5 hours a week during a whole semester. Once students reach the level of B2 through these courses or by passing an official exam certificate the university pushes on the students, then they are able to enrol in EME subjects, this is the same procedure followed in other international universities such as Spain or Austria (Del Campo, 2020; Salaberri-Ramiro & Sánchez-Pérez, 2015a). Additionally, the minimum level of B2 is one of the requirements students need to pass at this institution in order to be able to graduate.

In addition to those English courses, even though ITESM CEM did not have EMPs, it offered degrees that included EME subjects within the areas of *Environmental Building, Law, Economy and International Relations, Creative Studies,* and *Engineering and Science*. Within the area of *Creative Studies*, the following table (see Table 2) indicates the degrees that offered EME courses at the ITESM CEM during the academic year of 2018/2019.

CREATIVE STUDIES	
Degree	**Percentage of credit hours in EME**
Architecture	At least 40%
Digital Art	50%
Communication	75%
Design	60%
Innovation in Education	50%
Journalism	75%
Digital Music Production	**50%**

Table 2. Degrees that offer EME courses and percentage of credit hours in EME (Tecnológico de Monterrey, 2020b)

The degree of interest for this research is *Digital Music Production* that complies a total number of 9 semesters to be completed that include a total of 162.8 semester credit hour of courses, in addition to 30 more during the Remedial Semester. However, this research will only focus on the first and third semesters that include the academic disciplines of interest highlighted in bold below (see Table 3).

First Semester				
Code	**Name**	**CL**	**L**	**U**
AD1000	Management	3	0	8
EH1005	**Music and Society**	3	0	8
F1002	Physics I	3	1	8
H1017	Analysis and Verbal Expression Workshop	5	0	8
H2000	Music Theory and Ear Training	3	0	8
IM1000	Introduction to Digital Music Production Engineering	2	0	2
Third Semester				
Code	**Name**	**CL**	**L**	**U**
F1004	Electricity and Magnetism	3	1	8
H1018	**Ethics, Person and Society**	3	0	8
H2029	**Music Appreciation**	3	0	8
IM2000	Ear/Instrumental Training Lab	4	0	8
MA2002	Mathematics for Engineering III	3	0	8
TC1002	Programming Fundamentals	3	0	8

Academic credits

CL The letter "CL" indicates the number of class-hours perweek.
L The letter "L" indicates the number of laboratory-hoursper week.
U The letter "U" represents the equivalent time in courseslasting 15 weeks, of weekly work that the student dedicates to the course to meet its objectives. They include the "class hours", as well as the time dedicated tothe student's independent work.

One semester credit hour implies one 50-minute class-hour plus 100 minutes of independent work per week, over at least 15 weeks.

One course of 8 semester academic units is equivalent to one course of 3 semester credit hours.

Table 3. First and third semesters subjects and credit information (Tecnológico de Monterrey, 2020c)

Finally, apart from the Remedial English courses and the EME education, the Language Centre at the ITESM CEM also offered extra EFL courses and a section called the Writing Centre that provided support to those students interested in having their writings reviewed by language teachers or learning how to improve them for any EME subject. The Language Centre would also be responsible of creating workshops for specific purposes where students and professors could voluntarily attend and participate. The purpose of those courses and workshops was to provide students with the possibility to improve their skills in the language, make the transition to EME courses smoother and even obtaining an official English certificate.

In terms of the ITESM strategical structure, this institution was undergoing a new strategy plan called Tec21 that would initiate new methods and changes over a period of 10 years to improve students competence in their respective areas of study in order to face the constant changes, challenges and opportunities of the current century (Tecnológico de Monterrey, 2020a). These competences included leadership, undertaking, innovation, critical thinking, problem-solving, ethics and citizenship, global perspective, intellectual curiosity, passion for learning, collaborative work, communication in Spanish and foreign languages and data management. All of those would be complemented with the disciplinary competences. The projects that would make these competences possible would be the new educational model Tec21 to ensure training of future leaders, establishment of educational programmes and the development of entrepreneur spirit among professors and students. The success indicators of those projects and models would be a global vision and internationalization expressed through students who became entrepreneurs during or after their studies. Increasing the amount of exchange programmes, receiving exchange international students and full-time international

students, complete degrees offered in English and finally the ITESM position in the QS World University Rankings in terms of employment.

2.4.3 Towards a cross-disciplinary relation between ESP and EME

In EMPs found in non-English speaking countries, the role of English varies depending on the context where it is used. The traditional paradigm in Mexico follows an EFL approach as mentioned in section *3.2.4 Mexico*, since EFL has become a tool to enhance job prospects around the world (Del Campo, 2020) and so has obtaining a university degree that was taught through EME (Ament & Pérez-Vidal, 2015). EFL is used in settings where English is learnt as an additional foreign language to the one used by the learners (Nashaat Sobhy & Sánchez-García, 2020). Furthermore, EFL uses a study-entry or exit requirements which implies that the agents are speakers or other languages and that means they are in the process of acquiring English (Ortega, 2003) as mentioned in the previous section (*3.2.5 Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM)*). Therefore, EFL, as well as EAP, courses is designed for those learners who are interested in improving their level of English for academic or professional reasons. However, these labels, EFL and EAP, also have some limitations when it comes to describing their roles.

In the 1980s and 1990s changes in the teaching of academic English emerged in England towards enhancing learners' knowledge and contributing to obtaining advanced levels in specific subject areas, hence, ESP rose. The ESP term was used at first to address learners' specific language needs, but later was adopted in non-English speaking countries and developed also the term EAP (Ament & Pérez-Vidal, 2015; Dafouz, 2021a; Jordan, 1999). While ESP contributed by providing the necessary tools for communication in English among learners corresponding to their respective disciplines, EAP helped tertiary level students of multilingual contexts (Fortanet-Gómez, 2013; Ament & Pérez-Vidal, 2015).

EAP has its focus on academic study skills commonly found in HE, while ESP takes the form of specific communicative language that would help learners in the use of English in their professions (Dafouz, 2021b). According to Evans and Green (2007) the general aim of ESP is to develop discipline-related teaching practices with the focus on learners in HE whose objective is to learn English for specific educational purposes.

In the paradigm of EAP, EME and CLIL, EAP sees academic language as a set of skills that can be acquired regardless of the content area and it sees language as its primary focus (Dafouz, 2021a). CLIL main goal, on the other hand, is to develop both language and content equally at primary and secondary levels (Coyle et al., 2010). Finally, EME uses English merely as a tool for teaching with no explicit English language outcomes (Dafouz, 2021b). To adjust the last one and integrate the importance of language specifically in higher education, the term Integrating Content and Language in Higher Education (ICLHE) has started to gain relevance in order to have content and language learning aims (Valcke & Wilkinson, 2017).

Generally speaking, ESP teachers are professionals who have been through EFL training first and then received further training in ESP. These teachers, and EAP teachers, had the responsibility of "identifying key features of genres and [then] translating them into effective teaching materials" (Dafouz, 2021a: 6) without necessarily being experts in disciplinary content. Moreover, the importance of competent writing skills in a range of genres is one of the main concerns for teachers (Dafouz, 2021a) as it may determine access to future job opportunities, and it is closely related to EAP.

As for learners enrolled in ESP or EAP courses, they are often allowed to validate those credits by providing an official certificate of their English proficiency as it is the case of Spain and Mexico (Dafouz, 2021b; Tecnológico de Monterrey, 2022). Furthermore, these courses tend to be mandatory as part of the degree requirements, whereas in EME enrolment is voluntary (see section *3.2.5*).

In terms of materials, there is a wide variety of textbooks and resources implemented in ESP or EAP courses that reflect students' needs and used corpus linguistics and genre approaches (Swales & Feak, 2012), although EME lack tailor-made materials and makes use of books addressed to an English-speaking audience.

Regarding assessment in ESP, the target is on accuracy and fluency in students' language, whereas in EME, as it has been previously mentioned, the focus is on content. Therefore, language tends to be omitted in official assessment even though many lectures have admitted giving lower marks to students when the amount of language errors was too high despite the fact that there was no clear mention of language use in the syllabus (Dafouz, 2020). As a result, a stronger cross disciplinary relation between EME and ESP (Dafouz, 2021a).

Dafouz (2021b) views academic and disciplinary skills in ESP and EAP as social practices in which learners' knowledge, perception and interests are considered and

language is seen as a relevant tool in the process of acquiring knowledge and building a disciplinary identity (Hyland, 2011). Therefore, the involvement of students in EME regarding student-centred learning, would be beneficial in the course designing process (Dafouz, 2021a; Wilkinson, 2013). During the process of becoming socialized, students become members of their disciplines' communities and, therefore, acquisition of academic literacies through speaking and writing is engaged effectively (Dafouz, 2021b). In the case of ESP, this discipline examines how genres are used across disciplines and individuals use language to establish communities (Hyland, 2012), as well as encourages research in construction of disciplinary literacies (Dafouz, 2021b) which would benefit EME in its language learning goals. Based on this, writing as a social practice will be now explained.

2.4.4 The social practice of writing applied to EME

By considering writing as an approach process, it gains popularity among language teachers (Johns, 1995; Santos, 1988; Spack, 1988). This process made an important contribution to the teaching of writing by stating that the writing process is not linear as in simply the introduction, development and conclusion sections are applied. As Clark and Ivanic (1997) mention, the process of writing is recursive, which means that the elements in the process are needed and undertaken during the entire task, moving constantly back and forth. This process approach also implies that students need to acquire skills in order to be able to write anything they are required in the academic environment of a university. However, it might be the case that the very same skills may be applied when it comes to writing a friendly letter or maybe an essay, but they may be used differently for diverse situations or sociocultural settings.

The idea of teaching writing as a set of skills as part of the thinking process may be influenced by the use of textbooks in EFL classes that tend to follow a skills-oriented approach, therefore, writing is a process of putting thoughts into words, in order to do so we depend on fixed skills used only in specific stages of the entire process (Wingersky et al., 1995). Unfortunately, the use of these textbooks means that the dynamic nature of the process and the factors that affect it are not being considered (Clark & Ivanic, 1997), and neither the many different ways of writing that exist and how they may be considered

valuable differently in diverse settings, for instance, at a university or within a discipline at a university assessing essays or other kind of academic assignments in EME.

Moreover, Clark and Ivanic (1997) insist on the importance of including a social view for the writing process since quite often learners enter higher institutions with their own discourse that not necessarily fit with the academic conventions, thus, they find themselves in the situation of having to learn and acquire a new academic discourse for the purpose of adapting to the new conventions in that institution. This is what is addressed as academic acculturation (Ying Xian Wang & Li Bai, 2021). Therefore, this social approach would take into consideration more elements than by simply addressing it as a set of skills. For instance, it would consider the process, strategy, purpose, choices and attitudes towards writing (Ivanic et al., 1999).

A wide variety of elements need to be considered when preparing learners to meet and deal with academic writing in EME, and not only the level of fluency in the language (Coleman, 2006; Cosgun & Hasirci, 2017; Doiz et al., 2011; Evans & Morrison, 2011). Furthermore, the main focus in learning how to write in an L2 is on creation of personal writings or experiences, and less common on academic writing for completion of essays in which students are required to manipulate information (Paquot, 2010). Introducing a social practice of writing in EME subjects may benefit professors to make decisions regarding writing practices, what aspects of writing learners need or are required to follow.

Leki (2007) states that language and literacy development, the ability to complete course assignments, and academic growth, are all linked to the success, stability and extent of socio-academic relations learners build and, in some cases, cannot progress until such mentioned relationships have been established. First of all, the term literacies is best understood as a set of social practices that can be inferred from events which are mediated by written texts (Barton, 1994; Ivanic et al., 1999). However, literacy is involved differently depending on the area where it is being used. Thus, there are many ways the literacies or written word are used for each one of the many scenarios in life (Barton, 1994; Ivanic et al., 1999). For instance, it is very essential in tasks such as writing emails, completing assignments for studies or reading the news; and less central when watching a movie, travelling or doing sports. As it can be seen, some literacies become more dominant, visible and influential than others, but all in all, literacy is embedded in daily activities of our lives (Barton, 1994; Ivanic et al., 1999). When talking about literacy it is

impossible not to mention some aspects that are part of the process such as those of practices and events.

Regarding practices, these refer to the common and general possibilities that exist of using the written word which people draw upon in their lives (Ivanic et al., 1999). They involve feelings, social relationships, values and attitudes, processes that are of internal nature for the human being. Literacy practices can be understood as existing in the relations between members of the same group or community and are shaped "by social rules which regulate the use and distribution of texts, prescribing who may produce and have access to them" (Ivanic et al., 1999: 8).

In terms of events, these refer to the different activities undertaken where literacy has a role, often referring to at least one written text or repeated activity within the context and domains of workplaces, schools, universities or welfare agencies (Ivanic et al., 1999). In the context of this research, a literacy event could easily be found in the process of learners asked to complete a series of essays for their marketing subject, when also many variables such as attitudes, feelings, social relationships and decisions are involved, for instance, how many pages to use, what type of font or how to present the final result among others.

These points mentioned before are not only worth mentioning but also key to be considered since those learners in this study not only have to follow this process but also do it in English. In view of the foregoing, writing is, in fact, a social practice. In the context of HE, demands are placed upon learners through the completion of academic writing texts which involve a process different to every individual, that is depending on the purpose, their environment or event among many other circumstances. Hence, the complete process is not simply a cognitive one but more complex.

2.5 Academic writing characteristics

Academic writing has garnered particular attention as researchers and language teachers attempt to understand how academic writing develops, and how pedagogical materials can support the development of what is perceived as a 'complex' variety of language. Academic writing can be defined as the following:

> Combining description, narration and exposition with research to present a logical argument in response to certain questions and topics (Davis & Mckay, 1996: 68).

The concept of academic writing has been considered as a series of constant practices, instead of simply a set of skills, by being a more useful way of addressing writing taking into consideration the key factors that will shape the writing, the purpose and context provided (Clark & Ivanic, 1997). Higher education students during their degrees very often engage in academic writing for their specific disciplines and that is translated into producing a series of different texts for their subjects which may vary highly from one course to another one depending on the genre required, hence, they engage into writing practices. As Berkenkotter and Hucking (1995) mention, the wide variety of genres available are a common medium for academic writers to be able to connect with their corresponding disciplines since they show clear signs of values, norms and information often related to each discipline.

In order to complete an academic paper, one must follow and meet certain standards. To begin with, written English, alike spoken English, may be divided between two main styles or registers, formal or informal. However, since the focus of this study remains on academic writing the style used is formal. It is an important issue to remember that there should be uniformity and consistency throughout the writing style, while at the same time also taking into account the easy understanding for the reader or audience. This is supported by Swales and Feak (2012), whose research focused on helping graduate non-native speakers of English students with their academic writing by aiming to develop academic writing and improving academic texts. Furthermore, the language should be appropriate for the context in which it is being written. Despite of this, it is true that there is no one correct style of academic writing, and students should aim to develop their own 'voice'. In this line, a wide variety of different authors throughout the years have mentioned some common features of academic writing as seen in Table 4.

Halliday & Hasan (1976, 1985)	Johns (1997)	Jordan (1999)	Hinkel (2004)	Hyland (2001, 2008)	Bailey (2011)	Swales (1990) and Swales & Feak (2012)
Referring devices	Formal, impersonal and objective style	Formal, impersonal and objective style (Cortes and Csomay, 2015)	Avoid personal pronouns	Self-mention	Formal standard English	Impersonal and objective style
Organizational structure/coherence	Organizational structure	Organizational structure	It-cleft constructions	Reporting verbs	Use of passive voice	Use of passive voice (Biber, 1988; Myers, 1989; Poole, 1991)
Cohesion	Hedges	Hedges	Cohesion	Hedges	Tentative language (hedges)	Negative forms
Collocation	Academic vocabulary	Academic vocabulary	Avoid indefinite pronouns	Discursive argument and analysis and synthesis of information from multiple sources	Correct use of vocabulary	Avoid run on expressions
Signposting/referential bundles/metadiscourse	Signposting	References/citation	Use of enumerative catch-all nouns	References/citation	Signposting	Limit the use of direct questions
Ellipsis	References/citation				Full verb forms	Place adverbs within the verb

Conjunction	The author-evacuated prose				Use precise numbers	Avoid contractions
Reiteration					Use of statements	
Substitution					Avoid personal attitude adverbs and personal pronouns	
					Avoid run on expressions.	
					Use Latin rooted forms	

Table 4. Academic writing categories by author (adapted from Halliday & Hasan (1976, 1985), Johns (1997), Jordan (1999), Swales (1990), Swales & Feak (2012), Bailey (2011), Hinkel (2004) and Hyland (2001, 2008)).

Throughout the time, there has been some unanimity regarding the characteristics of academic writing, although more specific features have been added. Halliday and Hasan's (1976, 1985) research focuses on the use of language and its function depending on the social context, in other words, how humans are able to achieve their communicative purpose through the use of words. On this topic, some of the features mentioned referred to grammatical and lexical cohesion, as well as coherence or organizational structure, and how sentences are organized in a text through the use of linguistic resources. Some of these resources referred to the use of collocations, reiteration, conjunctions or linking devices, ellipsis, substitution, referring devices and signposting or metadiscourse.

In Johns' study (1997), she mentioned the use of vocabulary and grammar, academically speaking, in a similar line to Halliday and Hasan (1976, 1985) along with the organizational structure and signposting these authors shared. In addition, there was a corresponding mention to the use of impersonal construction, complex hedging and passive voice as common features of academic writing. However, the author emphasized how in EFL/EAP writing instruction, the topic of depersonalization in the register of academic texts is not addressed or it is but barely, when in fact it is key to acquire a proficiency level in courses. This refers to the use of personal pronouns within the text to indicate the voice of the writer and address the reader directly. This is not a common feature of the English language in general but more specifically in academic discourse where the idea is for the writer to detach from the writing as much as possible by simply presenting the information. The writer needs to be personally and emotionally removed from the text in order to acquire a formal academic register, this is sometimes done with the use of passive voice. There are a number of important textual functions for the use of passive voice in formal writing like detachment of the author from the text, projecting academic indirectness of personal thoughts or ideas and objectivity of the results without the author being directly involved in it, or in other words *the author-evacuated prose* (Johns, 1997). This term takes place when the author's personal voice is not clearly identified in the text due to an absence of first-person pronouns, a strong preference for the passive and arguments are generally muted. This is considered a requisite in writing for Western scientific tradition as well as humanities, natural sciences and engineering (Hinkel, 2004).

According to Jordan (1999), and in agreement with Johns (1997), the main features found in academic writing are a formal, impersonal, and objective style. This is often done through the use of impersonal pronouns and phrases as well as passive verb forms. On this note, a study by Cortes and Csomay (2015) confirmed that there is a lack of clear and explicit information in textbooks regarding the use of personal pronouns in college-level academic writing, and that teachers often hesitated about whether to focus their corrective feedback on these elements as it seemed to them that, at this point in students' language development, there are other language features that demanded more of their attention, both grammatical (e.g. verb tenses, subject-verb agreement, word forms) and rhetorical (e.g. paragraph development, organization of ideas, supporting evidence). However, teachers after noticing this, started to discourage students from using the pronoun *'you'* and to put more emphasis on the importance of an impersonal, objective tone in academic writing, particularly in research-oriented texts (Cortes & Csomay, 2015). Cautious language or hedges is highly frequent in reporting research and making claims. Moreover, a range of vocabulary appropriate for particular academic contexts is used, this may involve specialist or technical words. In addition, the structure of the writing and its sections vary according to the specific type (genre), for instance, essay, report or thesis. Finally, academic writing often contains references to other writers' publications, sometimes including quotations too when needed.

Hinkel's (2004) research shares the feature of cohesion with the previously mentioned items of academic writing. However, since demonstratives, such as *'this', 'that', 'those', 'here', there'*, represent the simplest cohesive device, L2 students frequently overuse them in their text or employ them in inappropriate contexts. The popularity of demonstratives can be reduced to some extent if learners' lexical repertoire is expanded to include enumerative catch-all nouns. Furthermore, the use of indefinite pronouns, such as *'everybody', 'nobody', 'somebody'*, with their exaggerative or vague meanings should be avoided at all costs (Hinkel, 2004: 138). Finally, apart from creating an impression of detachment and objectivity, an important function of the passive voice is to develop cohesive text by organizing information in sentences where the important idea is shifted to the end of the sentence and, therefore, it helps to create a lexical and

semantic cohesive chain by connecting the end of the first sentence to the beginning of the next one (Hinkel, 2004).

Continuing with this author's characteristics of formal register, there is the overuse of personal pronouns, this is frequently mentioned in early literature on features of EFL and in Jordan (1999). Generally speaking, the uses of specific personal pronouns differ by genre and text types. Therefore, the work on pronouns represents only one aspect of a bigger picture which is the one of teaching students to identify their audience and adjust their text accordingly. According to Hinkel (2004), first-person pronouns, such as *'I', 'my'* or *'me'*, are common in personal narratives and occasionally fiction, but they are relatively rare in academic prose. By the same token, second-person pronouns, such as *'you'* or *'your'*, are associated with direct appeals to and/or establishing common ground with the audience. This type of text is particularly rare in Anglo-American academic prose. Third-person pronouns, such as *'he', 'she'* or more commonly *'it'* can be useful in avoiding repetition of proper nouns. However, uses of third-person pronouns require care to ensure that pronouns refer to specific and easily identifiable nouns in the preceding text. *It*-cleft constructions are common in academic text because they project authorial distance and depersonalization. Regarding the use of the pronoun *'you'*, even though there may be legitimate uses of second person subject pronouns in some types of general academic writing found in second language textbooks, such as 'process' essays, studies on pronoun usage in academic writing indicate that 'you' is not commonly found in professional academic writing.

Regarding Hyland (2008), referencing and citation of other sources are common features of academic writing as well as the use of hedges as previously mentioned. On the other hand, based on Hyland (2008) another characteristic of academic writing is to present a discoursal view during the writing process which is central to the entire writing process. It is often difficult for writers to avoid projecting an impression of themselves and their personal thoughts in relation to their own arguments, disciplines, and readers. According to Hyland (2008), this is done because this way writers are able to emphasise their personal contributions, express their believes and seek recognition. This also presents a distinction from other writers' work and sets the writer's perspective from which readers should interpret the information. Even though that is the norm in some cases, it is not applied for all. The general norm among writers is that of constantly

seeking to downplay their personal role in order to highlight the phenomena that is going under study as it is common of academic texts. These writers are looking to distance themselves from interpretations and are only presenting their information as it is, objectively and uncontaminated by human activity, similarly to the case of EAP teachers. This is done in some case by avoiding the use of personal pronouns and using dummy 'it' subjects instead (Hyland, 2008: 13). Differently to Hinkel (2004), when writers explicitly insert themselves into their texts, they tend to use first person pronouns (Kuo, 1999; Hyland, 2001; Tang & John, 1999). However, in another study, it was reported that many novice writers felt uncomfortable using such register due to the fact that it denotes a position of authority that novice writers may not want to adopt (Hyland, 2002). Additionally, those students reported that tutors in the University Writing Center strongly advised against using those personal pronouns and this should be a consistent message towards students by all instructors.

Thus, it has been established that there are no rules for academic style that apply to every single situation. Nevertheless, Bailey (2011) provides a list of characteristics to follow as a guideline to help the writer develop a style of his own but still accorded to academic writing. These features include the use of vocabulary accurately, since there are differences between specific lexical terms which students are expected to know if they study subjects that involve them. An intention to be as precise as possible when dealing with facts or figures. The use of tentative language should be the norm by avoiding absolute statements such as *unemployment causes crime* and instead using cautious phrases such as *unemployment may cause crime* or *tends to cause crime*. Although academic English tends to use the passive more than standard English, it should not be over-used as both are needed depending on what the focus of the sentence is. In general, academic writing should attempt to be accurate, impersonal and objective (Jordan, 1999), an example of this could be the use of formal standard English by avoiding idiomatic or colloquial vocabulary (*kids, boss*), avoiding adverbs that show personal attitude (*luckily, remarkably, surprisingly*) or using Latin rooted forms (*continue* or *raise*) instead of two-word verbs (*go on* or *bring up*). Using conjunctions or signposting instead of numbering sections of the text. When writing lists, avoid run on expressions (*etc* or *and so on*). Using full forms of the verbs instead of contractions. Finally, use statements instead of question forms directed to the audience.

Based on Swales and Feak (2012), who also support the idea of depersonalization of text in academic writing, present some possibilities such as the use of *'there'* to function like nonreferential *'it'* which also removes the proposition to the secondary clause position. Academic texts are constructed differently than other types of text, such as unstructured writing genre like fiction, free writing, personal correspondence, notes, news reportage or journal entries for instance (Biber, 1988; Biber et al., 1999; Swales, 1990). This has been seen with Swales (1990) when identifying and combining rigid forms of constructing and organizing discourse with expectations of certain use of grammar and vocabulary. Also with Biber et al. (1999) in their analysis of features of texts in written genres including "the cross-genre uses of nouns, determiners, pronouns, verb tenses, and semantic classes of verbs, adjectives, adverbs, and clauses" (p. 30). This tells us that written academic text, with its uses of almost every textual feature, is clearly distinguished from many other types of texts, such as academic lectures, conversations and personal narrative among others. Considering the results of these studies, the use of syntactic, lexical, and discourse features of text and errors in the uses of these characteristics, have an influential effect on the perceived quality of students' text. Some of the difficulties in writing regarding word order, verb tenses, impersonal constructions, passive voice and subordinate clauses often lead to the misunderstanding of the message. Regarding the uses of the passive voice, this has been found to be extraordinarily common in academic writing, and the use of it is based on the academic discourse conventions, according to many researchers such as Biber, 1988; Myers, 1989; Poole, 1991, Swales, 1990 and Bailey, 2011. Few constructions in written English are probably such subject to constant debate as the use of the passive voice in the academic world. There exist different opinions about active and passive voice in the academic world, for instance the opponents claim that:

> The active voice is more emphatic, vigorous, and clear than passive […] when using active the doer of the action is placed in the sentence subject position and […] active verbs are usually more effective because they are simpler and more direct (Hacker, 2000: 241).

All these evaluations are undoubtedly true, however, based on the corpus analyses of academic prose, it appears that in real academic writing discourse, outside of the

teaching of composition, passive voice is ubiquitous and remains a prevalent feature of academic text in various disciplines including Humanities (Biber, 1988; Johns, 1997; Swales, 1990). Accuracy in all those aspects as well as syntactic and lexical features are considered of high importance throughout all disciplines from natural sciences to humanities. Therefore, not following their rules and causing syntactic and lexical errors may develop to lower grades (Hinkel, 2004).

By considering all these categories and researchers' studies, it may be concluded that an exposure to substantial amounts of reading as well as experience with writing in diverse academic contexts does not guarantee students to obtain the necessary writing skills for this purpose or to become aware of discourse and sentence-level linguistic feature of academic writing. Therefore, explicit instruction in advanced academic writing and text is needed (Chang & Swales 1999: 23). Moreover, there have been many detailed and extensive studies proving that students do not acquire effective academic written discourse by simply being exposed to L2 grammar, vocabulary, formal written text and discourse (Ellis, 1990; Hinkel, 2002; Nation, 2001; Norris & Ortega, 2000; Schmitt, 2000). To give some examples, Hinkel's study (2002) identified significant differences in the features of L1 and L2 writing in similar genres and concluded that even school-age learners or highly educated adults required years of language training in order to produce effective writing with high levels of proficiency. While Schmitt's research (2000) that focused on L2 vocabulary acquisition mentioned a period of time for acquiring the necessary skills and from numerous exposures. In other words:

> In addition, proficiency in L2 conversational linguistic features, familiarity with L2 writing, and "telling" what one already knows in written form do not lead to producing cognitively complex academic writing that relies on obtaining and "transforming" knowledge (i.e., logically organizing information and employing linguistic features and style that attend to audience expectations and the genre). (Hinkel, 2004: 7)

2.5.1 The importance of explicit instruction in academic writing

Writing is a difficult skill to obtain since it is not a simple cognitive process but, a complex cognitive process that requires discipline, concentration and careful thinking

(Al-Badi, 2015). Herraiz-Martinez and Alcón-Soler study (2019) revealed the importance of exposure to different genres and academic tasks for promoting writing development in EME. On this topic, academic writing is seen in various forms, therefore, there are a number of writing conventions of which teachers are needed to be aware along with the importance of writing depending on the different genres required in their academic disciplines (Herraiz-Martinez & Alcón-Soler, 2019). In fact, academic literacy is enhanced in students' learning when the focus is explicitly on genres (Dafouz, 2021a). In addition, genres may benefit both students and teachers in the process of mastering disciplinary texts and also in identifying 'hybrid or blended genres' (Dafouz, 2021b) which make use of academic English literacy and other rhetorical traditions in a blended manner resulting into an inadequate output in both contexts (Brown, 2017).

On this topic, learners, may often find themselves in the situation of struggling to recognise similarities in frequently used texts. Then, after repeating the same situation for a number of times, those learners are able to read, understand and write in an easier manner based on the same genre. The whole purpose of the process is for the writer to create a text the reader will easily recognise, comprehend and expect since genres specify conditions for beginning, structuring and ending a text. However, it is commonly known that teachers are equipped with a wide knowledge of specialised genres (Hyland & Hyland, 2006). These genres help to express clearly, effectively and efficiently the message by following the conventions established to organise it. This helps the reader to recognise the text and be able to follow the ideas described easily (Hyland, 2008).

Using the words of Bronia (2005):

> To enable students to cope with a wide range of genres in today's world, it is important to help them acquire not only the knowledge of the rhetorical context, audience, generic conventions, as well as overlaps and distinctions, but more importantly also with the knowledge and understanding of intertextuality and interdiscursivity in genre writing (p. 77).

Many teachers are uncertain of what the genre is, they often see it as a research tool rather than a teaching one, but it is actually in fact a robust pedagogical approach perfectly suitable for the teaching of academic writing in various contexts as its purpose is that of "illuminating the constraints of social contexts on language use" (Hyland, 2008: 1).

Difficulties found in academic writing in EME may be the result of not connecting learners with the domain-specific academic genres and registers required in the disciplines at the early stage of developing disciplinary knowledge (Dafouz & Camacho-Miñano, 2016; Hellekjaer & Wilkinson, 2003).

A useful tool that students are provided with is the use of writing strategies as the entire process of writing and learning by writing is already proven effective. The major focus of research within the process-oriented approach of writing is found on strategies that L2 writers employ while composing their texts. The general understanding is that successful writers tend to use a wider variety of strategies than less successful ones (Manchón, 2001) since writers often share the tendency to return to previous steps of writing in order to continue and improving the current one. This is referred by Mu and Carrington (2007) as a decision writers make when in search of a possible solution to a particular issue or concern.

When talking about writing, there are four important elements that are key to consider in order to obtain the most successful outcome possible:

1) the topic is the what of a piece of writing
2) the purpose refers to the why
3) the audience is the who, the reader
4) the format refers to the how of a piece of writing or how the information is presented.

Based on this, Flower (1993) regards writing as both a social and cognitive process and a problem-solving process. She creates a division within English writing that consists of nine steps and offers a variety of strategies for taking these steps in order to help writers during their process as it will be seen and explained in the following figures below. In her investigation, Flower (1993) classifies writing processes into four stages (1) planning, (2) generating ideas in words, (3) designing for a reader and (4) revising for effectiveness matching with corresponding strategies (see Table 5). Stage 1 includes two steps of first exploring the rhetoric problem faced and then making a plan through self-exploring ideas and actions such as explaining to oneself what is being requested, planning what to do and say, making operational goals, listening to any possible changes in that plan, revealing it to the reader and using collaborative planning. Stage 2 continues with a total of three steps, generating new ideas (Step 3) and organising your ideas (Step 4) by turning off the editor and brainstorm, talking to the reader, exploring the topic, letting it rest for

a while, expanding the code words and placing the ideas in a nutshell. Within Stage 2 there is a final step of knowing the needs of the reader (Step 5) by analysing the audience and anticipating the reader's response. In Stage 3, there are two steps, the first one being transforming writer-based prose into reader-based prose (Step 6) through establishing a shared goal, developing a reader-based structure and developing a persuasive argument. The second step in this stage, Step 7, focuses on reviewing the paper and its purpose (goals, gist and discoveries) and backtracking. The last stage, Stage 4, takes place by testing and editing the writing (Step 8) and by editing for connections and coherence (Step 9) through a revising process that includes editing for economy and structured style, transforming sentences, and revealing the logic of each section.

#	Stage	Step	Strategy
1	Planning	Step 1: Explore the rhetoric problem	• Explore your image of the problem. • Explain the assignment to yourself. • Make a plan to do and a plan to say. • Make your goals more operational. • Listen to intuition and change your plan. • Reveal your plan to the reader. • Use collaborative planning.
		Step 2: Make a plan	
2	Generating ideas into words	Step 3: Generate new ideas	• Turn off the editor and brainstorm. • Talk to your reader. • Systematically explore your topic. • Rest and incubate. • Expand your own code words. • Nutshell your ideas. Build an issue tree.
		Step 4: Organise ideas	
		Step 5: Know the needs of the reader	• Analyse your audience. • Anticipate your reader's response.
3	Designing for the reader	Step 6: Transform writer-based prose into reader-based prose	• Set up a shared goal. • Develop a reader-based structure. • Give your reader cues. Develop a persuasive argument.
		Step 7: Review paper and purpose	• Review your goals, gists, and discoveries. Backtracking.
4	Revising for effectiveness	Step 8: Test and edit writing	• Detect, diagnose and revise. • Edit for economy. • Edit for a forceful style. • Transform list-like sentences. • Reveal the inner logic of your paragraph.
		Step 9: Edit for connections and coherence	

Table 5. English Writing Strategies stages (based on Flower (1993))

This is relevant for both professors and students to know and reflect upon before starting to write. By following these steps and strategies proposed, a successful communication between reader and writer through a clear message is achieved. However, the presented order of these processes does not necessarily have to be linear but recursive over the task of writing. Thus, some of those strategies mentioned, such as revising, may be used in the whole process including revising the plan and organisation of the paragraphs along the text (see Figure 3).

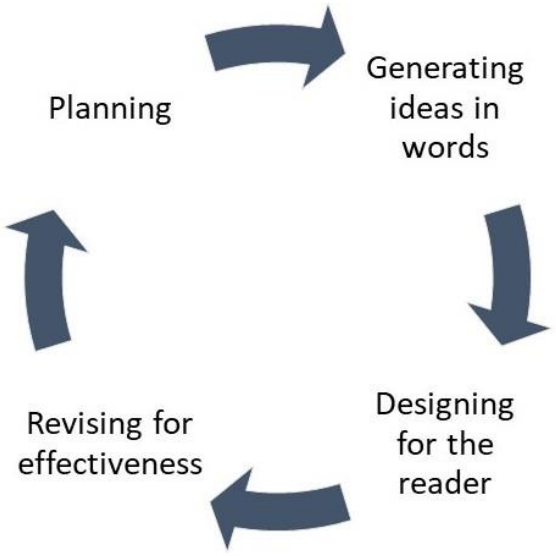


Figure 3. English Writing Strategies process (based on Flower (1993))

2.6 Disciplinary literacies applied to writing

Disciplinary literacies (DLs) are defined according to Airey (2012) as the ability to appropriately participate in the communicative practices of a particular discipline. One of the key aspects to be taken into consideration at HE level is to achieve academic success which is undoubtedly linked with a successful writing performance. Students' results in courses and

subjects are often determined by their performance showed through tests, examinations and written assignments, thus, writing skills are given a special status among the language skills (Leki & Carson, 1994). Among the student community, the unavoidable requirement of writing in an L2 has been found to be a common source of difficulty for both undergraduate and postgraduate learners as Zhu (2004) mentions in his study. According to him, writing skills are addressed as a common factor found among those EFL students who fail when it comes to meeting institutional literacy expectations. Keeping in mind mainly L2 learners who have chosen to continue their studies in HE upon finishing previous studies of secondary, there exists a general feeling of lack of preparation for this major change in their academic future (Zhu, 2004), which, indeed, already involves a challenging effort from them in order to make it into the university experience and what this involves. One of these many challenges is learning to write in an academic style that is required for all of their future assessments. Furthermore, referring to postgraduate students in particular, academic writing skills are in fact indispensable for L2 learners at the university level (Pecorari, 2006). Moreover, Petri (2007) also mentions the difficulties students face when writing in an L2, the requirements they face and the lack of preparation provided from previous studies. Writing a first university assignment is a complex process since student-writers are expected to manifest a deep and thorough understanding of the subject matter, to present their ideas logically and to communicate efficiently using appropriate academic tone and language (Krause, 2001), and this, therefore, becomes an even greater challenge in EME.

Despite of this, learners studying HE degrees are expected to possess a set of skills that will benefit them in the process of constructing a well-developed written assignment to hand in. Unfortunately, this is often not the case among the vast majority of them due to the big number of challenges that need to be faced (Lasagabaster, 2010). It is true that there is an exponential amount of these same challenges that fall under the category of linguistic nature of the language. For instance, in terms of linguistic difficulties, L2 students understandably might not possess the required English language competence in order to be able to cope with

their writing assignments, this may also be the case with those students using their L1 (Huang, 2013). The issue of difficulties in L2 writing has been studied substantially (Bitchener & Basturkmen, 2006; Evans & Green, 2007; Leki & Carson, 1994; Silva, 1993). Some other difficulties L2 students might be facing could be to understand and keep up with the challenge of reading materials on which the assignments are based. In addition to this, they may struggle with complex use of grammar and syntax, as well as vocabulary, in the academic texts at university (Lasagabaster, 2010). On this topic, there exists a tendency among non-English speaking countries, with both graduate and undergraduate students, to complete their university essays in an inappropriate academic manner after many years of training in EFL, the problem is found when failing to use conventions and features of academic written prose. This was appointed by Johns (1997) when explaining that students produce academic papers and essays that are perceived to be vague and confusing, rhetorically unstructured and overly personal by faculty. She expressed their thoughts from many interviews performed revolving around students' writing lack of sentence-level features considered as to be basic – for instance, modal verbs, balanced generalizations, correct uses of hedging, exemplification, active and passive voice use (commonly found in essays and papers) and even pronouns. It was also pointed out that many university students experience isolation and frustration since they believe that professors have a tendency to expect unreasonable and exclusive demands for students' own efforts put on paper, they believe to be unrecognized and unvalued as a result of those faculty views of the general use of the language and particularly writing skills. Moreover, the employment of an academic style with the use of hedges is a relatively difficult skill to master among English speakers. Thus, this issue doubles for writers whose L1 is not English, and it is an evidence of an experienced and professional writer (Hyland & Milton, 1997).

It is confirmed that there is currently no doubt that, under certain conditions, the effects of bilingual education can be clearly beneficial (Wiley & Sons Lewis, 1976). For instance,

in Aguilar's research (2017), lecturers interviewed mentioned the many benefits of bilingualism through EMI or CLIL seen in their students for employability purposes and facing the needs of a globalised world. In fact, the great majority of studies done in additive bilingualism settings, situations where the number of balanced bilingual students is greater, have definitely confirmed the positive effects of bilingual education as seen in Lasagabaster's research (2010).

On a related note, it has also been argued by some researchers (Cai, 1993; Connor, 1996; Hinkel, 2002; Hirose, 2003) that one of the main reasons for L2 learners' difficulty with producing well-constructed arguments lies in the influence of their native culture (L1) on their writing in a foreign language (L2). That is, in other words, when referring to learners of diverse cultural backgrounds, there exists a tendency to transfer their L1 writing conventions to academic writing in English. It is widely known that one of the most common features of the Spanish language is the use of long and complex noun-phrases in writing, even in academic settings, with the use of relative clauses and complex nominals and noun-phrase modifiers (Bibel, 2001). This characteristic is in complete opposite with English features which tend to keep their ideas short and direct in a more paratactic manner (Pallotti, 2009). As Dafouz (2003) mentions, "Spanish writers prefer to produce longer sentences coordinated by additive markers, the British-English writers use shorter sentences separated by full stops" (p. 41). Because of this, Spanish speaking students in HE may transfer this habit to an L2, English, when writing resulting into extremely complex sentences but grammatically correct (Neff et al, 2004). This may affect negatively the levels of syntaxis and therefore their coherence and cohesion skills, and it may be due to a limited mental lexicon from students or simply a pragmatic choice from the writer (Palloti, 2009).

At university levels, and lower levels, writing continues to be the way in which students are assessed, their understanding of various subjects are consolidated and demonstrated over this. Through writing, students are also introduced into academic practices, including native English speakers, by engaging in new roles and ways of expressing knowledge when entering

university education. When accessing university for the first time, a series of different habits of meaning-making, identities and understandings are brought by the variety of backgrounds from where learners come, and this leads to a more diverse range of subjects. Therefore:

> Tutors cannot assume their students will possess the understandings and learning experiences that will equip them with the literacy competencies traditionally required in university courses. (Hyland & Paltridge, 2011: 173)

As a result, greater emphasis is starting to be placed on academic literacy and on EAP programmes to help students achieve better results and also meet the demands of their courses satisfactorily (Neumann, 2001). Furthermore, academic discourses are being extensively studied to inform of this pedagogic need and to create new adapted syllabi. Thus, by making teachers aware of linguistic resources and discourse strategies available to them, pedagogic goals regarding a better acquisition of disciplinary knowledge and literacy can be facilitated (Sánchez-García, 2020).

Another reason for this growing interest in academic discourse for writing purposes has been the power it wields in the careers of individual academics within different fields. One of the most important aspects in an academic context that need to be acquired is learning to write effectively. This is because first, it makes students part of a discourse community, the acquirement of new knowledge through writing is obtained, and last but not least, it is the most common mean by which students' content knowledge is assessed in a large number of academic disciplines (Hirvela, 2011; Hyland, 2011).

The aspect of learning to write effectively, introduced by Hyland (2011), can be understood with the approach of viewing writing as a "textual" product. This approach treats writing as an outcome of composing activity rather than an activity in itself. When looking at a writing from the textual perspective, written texts are seen as "autonomous". In other words, they can be analysed on their own, independently of the writing environment, writer

or audience. There are two specific theories focusing on texts that are relevant to keep in mind when analysing texts, these are perceiving texts as "objects" and perceiving texts as "discourse" (Hyland, 2011). As regards to the first theory, a piece of writing is examined as an "object", when its specific features, such as the academic register, mitigation or hedging, grammatical accuracy, lexical richness, density and some other aspects of written performance are being analysed. Turning now to the second theory, considering text as "discourse", this implies perceiving writing as a kind of social action which involves "assisting students to link language forms to social purposes and contexts" (Hyland, 2011: 23). Even though both of these theories are relevant when an analysis of text is performed once students have been acculturated, this research inclines towards considering writing as a social action, focusing on the process and not the final product.

It is well known, that, during the last decades, universities in several countries have been facing the challenge of ensuring the progression of a growing population of students with poor academic literacy skills. As Nuzzo and Bove (2020) mention "most of their weaknesses lay in the functional dimension of language use, like content selection and organization, or the application of genre features and register variation" (p. 22).
Teachers have expressed certain amount of concern towards students' low levels of academic language proficiency since the 1990s (Lavinio & Sobrero, 1991; Nuzzo & Bove, 2020; Dafouz, 2021) regarding functional aspects of language use in writing such as the logical organization of arguments and the use of genre conventions, as well as difficulties in producing comprehensible and communicatively effective texts, while also the need to adopt a formal register.

Research regarding the academic writing performance of L2 learners has mainly focused on improvements in the areas of organisation, coherence, cohesion and overall results (Green & Weir, 2002). It has only been recently that research has widen its scope to more specific linguistic features and their improvement as students' proficiency levels

increase in different HE contexts (Connor-Linton & Polio, 2014). It should be noted that it is difficult to generalise from a sample size of one university, as was used in this study. In a study (Shaw & Liu, 1998), it was carried out an investigation in the written performance of a group of undergraduate students. This study mainly focused on linguistic features and found that in the area of formality and impersonality, students' writing performance notably increased with the use of academic features as the EAP programme continued. The findings suggested that on the EAP course, the students learned to use an academic register but did not demonstrate noticeable linguistic development. Their written language became more academic and their ideas were found to be more logically arranged; however, the vocabulary used by the writers was not richer or more varied, and the texts did not become significantly longer by the end of the programme.

There are several examples found in diverse countries regarding certain preferences towards the use of some features in writing over others that when placed in academic scenarios would be categorized as the wrong use of register. Due to the use of social media and the English language influence on young people through movies or TV series for instance, that often use informal slang, among other factors, students may have picked up expressions that are not appropriate in academic contexts and therefore include them without realizing it in their daily speech completely changing the register. Some of these examples could be the overuse of the word 'besides' in written reports of Taiwanese students (Chen, 2006); the highly mark of the conjunction 'because' and the adverb 'so' in German learner writing (Lorenz, 1999); French, Spanish and Swedish learners' heavy reliance on 'I think' to express their personal opinion (Granger, 1998, Neff et al., 2007; Aijmer, 2002); Japanese, French and Swedish learners' overuse of 'of course' is highlighted by Narita and Sugiura (2006), Granger and Tyson (1996), and Altenberg and Tapper (1998).

These features are commonly shared by a large proportion of the learners regardless of their L1 and are likely to be developed among the years of EFL learning or even induced by

the type of teaching received, being the lack of register awareness an often-found feature of EFL learner writings as well as the lack of writing practice (Paquot, 2010).

In a study undertaken (Zhu, 2004), it was mentioned that in order to be successful with academic writing, this would depend on a set of well-developed general skills which could be easily transferred to different contexts depending on the need. In fact, the general point of view from faculty members in this study showed during their interviews a series of general skills such as audience awareness, logical organization, paragraph development (e.g., a paragraph should have one main idea only), clarity, sentence structure, grammar and mechanics.

2.6.1 Academic discipline characteristics

As it was mentioned earlier, when accessing HE for the first time, learners are presented with new challenges that will shape them into professionals of their specific fields. One of these challenges is to be familiarized with the different discourses used and required in this context, and therefore, produce academic texts following a series of specific norms, languages and genres that are common in academia and represent the different disciplines (Dafouz & Smit, 2020). By giving importance to both language and content in EME, learners would benefit from acquiring the academic and disciplinary literacy necessary in their disciplines and teachers, therefore, should facilitate the process of acquiring academic literacy when accessing HE (Sánchez-García, 2020).

Shanahan and Shanahan (2012) define disciplinary literacy as "an emphasis on the knowledge and abilities possessed by those who create, communicate, and use knowledge within the disciplines. […] disciplinary literacy emphasizes the unique tools that the experts in a discipline use to engage in the work of that discipline" (Shanahan & Shanahan, 2012: 8). Even though this approach may not be very popular, the use of reading and writing as tools to learn content in various disciplines is gaining more and more importance. It is known that

disciplines differ depending on the use of genres, communication, purpose, evaluation and language. In the area of language there are other differences regarding discipline vocabulary, grammar choices and structure of their discourse (Shanahan & Shanahan, 2012). On this note, when it comes to academic literacy, it is important to distinguish between general English and academic literacy in English, since the first one refers to the use of the four skills of a language (reading, listening, speaking and writing) and the latest refers to more formal and impersonal style of the language, with a range of vocabulary appropriate for the context, a specific and clear structure depending on the requirements and often references to writers and publications (Jordan, 1999; Shanahan & Shanahan, 2012).

In order to understand the academic world, along with the categories and concepts found within, as well as identifying differences in knowledge construction, Biglan (1973) and Becher (1989) provided a way to understand the differences among the disciplines by creating a division between 'hard' and 'soft' sciences and 'applied' and 'pure' disciplines (see Table 6).

Category	Discipline
Hard pure	Natural sciences
Soft pure	Humanities and social sciences
Hard applied	Science-based professions
Soft applied	Social professions

Table 6. Disciplinary grouping depending on categories (Becher, 1989).

This scheme indicates that disciplines within the same category show a tendency to share roots regarding values, culture or norms of practice in comparison with those belonging

to other categories (Swarat et al., 2017). Furthermore, Bernstein's (1999) model of horizontal coexisting principles axis and vertical cumulative knowledge construction axis, makes it possible to locate social sciences and humanities on the horizontal and experimental sciences on the vertical. This established differentiation led to teaching and pedagogical differences regarding factual and numerical content where skills to reason and apply ideas are commonly found in hard pure subjects, whereas in soft pure subjects critical thinking through the development of skills in a more qualitative manner is the norm (Neumann et al., 2002). The disciplinary classification schemes of Biglan (1973) and Becher (1989) tend to be predominant and cognitively oriented (Swarat et al., 2017). Humanities tend to promote brainstorming activities and group or whole class discussions, Sciences focus more on group work, projects or experiments (Fortanet-Gómez, 2013). According to Neuman et al. (2002) the different dimensions could be divided and classified in four categories 'hard pure', 'soft pure', 'hard applied' and 'soft applied'. 'Hard pure' disciplines, such as physics, seem to have a "cumulative, atomistic structure, concerned with universals, simplification and a quantitative emphasis" whereas 'soft pure' disciplines, such as history, are typically "reiterative, holistic, concerned with particulars and having a qualitative bias" (Neumann et al., 2002: 406). 'Hard applied' disciplines, such as engineering, are "concerned with mastery of the physical environment and geared towards products and techniques" and 'soft applied' disciplines, such as education, focus on "the enhancement of professional practice and aiming to yield protocols and procedures" (Neumann et al., 2002: 406). Therefore, when it comes to the assessment process, hard pure disciplines show a preference tendency towards the use of objective, focused exam questions used to show an acquisition of specific knowledge. This is similar to hard applied disciplines that use exam questions that cover both factual knowledge and problem-solving skills. However, assessment used for soft pure disciplines takes advantage of essays or papers that are able to demonstrate the learners' understanding of the subject matter as a whole, being this the subject of this study. Similarly, soft applied

make use of project-based assessment, peer assessment and self-reflection assignments (Swarta et al., 2002) (see Table 7).

	Hard	**Soft**
Pure	Prefer objective, focused exam questions that reveal specific knowledge acquisiton	Prefer essays or papers that reveal the learners' grasp of the complexity and totality of the subject matter.
Applied	Prefer exam question that cover both factual knowledge and problem-solving skills.	Prefer project-based assessment, peer assessment, and even self-reflection.

Table 7. Assessment approaches used by Biglan (1973) and Neumann et al., (2002). Taken from Swarta et al., (2017).

According to Swarta et al., (2017) soft applied disciplines focus is on preparing students for ethical, professional and reflective evidence-based practice and are very likely to use rubrics as a tool for assessment and measurement usually for senior papers and short essays among other methods.

Hard disciplines place a great emphasis on students learning facts, concepts and principles, whereas soft areas focus on developing critical thinking and acquiring general knowledge. Hard applied and pure fields focused on the use of abilities to apply principles and methods; while soft pure fields emphasized the importance of oral and written expression and creativity thinking (Neumann, 2001). According to Kuteeva and Airey (2014), pure soft disciplines do not seem to have a sense of superseded knowledge or community knowledge unlike pure hard disciplines leading to value expression fluency and creativity in an

interpretative individual manner. However, in applied sciences, knowledge has a tendency to be pragmatic and purposive based on a practical application. Then, soft applied disciplines involve functional knowledge through the influence of soft pure disciplines and focuses on personal growth as learners and professional practice. The differences among disciplines empower teaching by providing a specific way to present their work and the requirements teachers use (Swarat et al., 2017).

2.6.2 Genres in academic disciplines

Based on Trosborg (1997) research, there have been two traditions of classifying texts for 2,400 years. The first classification is according to *purpose*, in terms of communicative functions, is the discourse intended to inform, express an attitude, persuade or create a debate. Whereas genre refers to completed texts, communicative functions and genres, being properties of a text, cut across genres. The second classification is according to *type* or mode (descriptive, narrative, expository, argumentative, instrumental, etc) (Kinneavy, 1980; Faigley & Meyer, 1983). The focus in this case is on functional categories or rhetorical strategies, this is not normative but abstract knowledge. While Biber (1988) refers to genres as "underlying shared communicative functions", Trosborg (1997) reserves these functions to a classification of speech acts according to a typology by Kinneavy (1980), restricting genres to modes of discourse.

As it can be seen, the relationship between text types and genres is existing, although some differences may be noticed between them. On the one hand, genres reflect differences in external format and situations of use and are defined on the basis of systematic non-linguistic criteria (Trosborg, 1997). Whereas text types may be defined on the basis of cognitive categories or linguistic criteria, they are a conceptual framework which enables us

to classify texts in terms of communicative intentions serving an overall rhetorical purpose (Hatim & Mason 1990: 140).

According to Hyland (2008), genre is a term for grouping texts together, representing how writers typically use language to respond to recurring situations. For some scholars, genres are defined on the basis of external criteria for instance newspaper articles found in newspapers (Biber, 1988), but for others, they are defined on the basis of communicative purpose or linguistic content and form (Swales, 1990; Berkenkotter & Huckin, 1995). Swales (1990) emphasizes the socio-rhetorical context of genre by using categories as the defining criterion such as the community, and communicative purpose. Furthermore, according to his research that takes genre analysis

to try to explain why members of a specialist community write the way they do, communicative purpose drives language activities of a discourse community. It is the prototypical criterion for genre identity and operates as the primary determinant of tasks. Nevertheless, a specific genre may cut across a number of registers, for instance, a research article in chemistry may be similar to a research article in sociology (Swales, 1990). Moreover, Trosborg (1997) infers that communicative success of a text may require appropriate combinations of genre and register. From the point of view of a common writer, the knowledge about genres may often be schematic and vague. However, this study is based on the definition that genre knowledge refers to a shared sense of the conventions of grammar, vocabulary, content, and many other features that contribute to the process of expressing values and identities related to a particular discipline.

> English has developed nativized literacy traditions in different genres, such as the novel, short story, poetry, and essay. In other words, English has an extended functional range in a variety of social, educational, administrative, and literary domains. It also has acquired great depth in terms of users at different levels of society. As a result, there is significant variation within such institutionalized varieties. (Kachru, 1985: 13).

Therefore, it is key to keep in mind that genres must not be seen as fixed, static forms but rather as dynamic and complex varieties of writing, although a certain number of features need to be included. Genres are not simply assemblies of similar textual objects, but coded and keyed events set within social communicative process (Swales, 1990). Genre contributes to clearly define the types of existing texts students are required to write and complete for their classes. It also helps professors to organise their courses more efficiently in order to be able to meet the student's needs (Hyland, 2008). This may all successfully be done with previously and carefully selected curriculum materials and activities focused on the different genres to support the process of writing constantly in their corresponding disciplines within tertiary institutions. Furthermore, there are some genres more commonly found in some academic disciplines than others. Based on Hale et al., (1996), Llinares et al., (2012) and Dreyfus et al., (2016), the most common types of academic writings found both in in-class and out-of-class assignments are classified in the following categories (in declining order of frequency):

To begin with **exposition** rhetorical tasks, they tend to deal with writers attempting to explain or clarify the subject or topic chosen. In general terms, the purpose of exposition is to express opinions, explanations or ideas obtained from a specific piece of knowledge or fact. Thus, these are component of all assignment types. Some examples of this category are:

1. *What is the origin of our rational as human beings?* (soft pure) [4]
2. *Mention the various types of accounting information commonly found in most companies.* (soft applied)
3. *Explain the main characteristics of the four types of biology*. (hard pure)
4. *What is the history of agricultural exhibitions?* (hard applied)

[4] Examples created by the researcher

Continuing with **cause-effect interpretation** tasks, these require establishing causal relationships and are based on causal reasoning. Most assignments of this type tend to mention an explanation or a discussion of a cause-effect relationship among events or problems, identification of causes or effects, and a presentation of problem solutions when it comes to problem-solution tasks. It is the most prevalent writing task, found in over half of all writing assignments. A few examples of cause-effect interpretation assignments could be:

1. *What was the most popular sport brand in the 90s among young population and what happened to it that changed?* (soft applied)
2. *What circumstances occurred in the Middle Ages that gave place to the Renaissance?* (soft pure)
3. *What is the origin of chemistry and biology and their connection to the world nowadays?* (hard pure)
4. *What circumstances are the most likely to develop a virus among infants?* (hard applied)

Moving on to **classification of events, facts, and developments** assignments, their focus lies on cognitive tasks in which writers are expected to determine what types of group members share characteristics or features. Thus, students are required to classify clusters or groups of events, situations or objects depending on their common attributes, create a system to classify events or objects, and list them based on these findings. For instance:

1. *What was the organised classification of people during the Middle Ages? What duties were assigned to each group?* (soft pure)
2. *Explain the basic and other extra benefits employees may have when starting to work in a company.* (soft applied)
3. *What are the five basic modes of inheritance for single-gene diseases?* (hard pure)
4. *Name and explain the different branches in psychiatry* (hard applied)

The **comparison/contrast** tasks involve writers examining or discussing domains or objects of knowledge by identifying their characteristics or properties that make them similar or different. In general, the purpose of such assignments is to identify the specific points that make objects, events, or situations similar and/or different as well as explain one in terms of the other. They are often found in short assignments. Examples of these assignments can be:

1. *Compare the differences and reasons behind World War I and World War II.* (soft pure)
2. *What are the main similarities and differences between the current educational model and the previous one?* (soft applied)
3. *What are the differences between anatomy and physiology?* (hard pure)
4. *Compare the role of a pharmacist nowadays and in the XVI century* (hard applied)

Regarding **analysis** of data, facts or information (in this length-type assignments), writers are expected to separate a whole into elements or component parts and identify relationships among these previously mentioned parts for informative purposes. These are one example, but other types of analysis assignments involve applying theories or interpretive methods to the object of analysis or a particular school of thought, distinguishing facts from theories, evaluating the validity of stated or unstated assumptions and/or various types of relationships among events, identifying logical fallacies in arguments, or specifying the author's purpose, bias, or point of view. They are often found in medium-length assignments. To mention some examples of such:

1. *Describe the differences in terms of economic income, privileges and gender roles among Latin-American countries.* (soft pure)
2. *Explain the tendencies among nurses toward their view on the effectiveness of alternative medicine.* (soft applied)

3. *Expose the application of mathematical analysis to the theories of electricity* (hard pure)
4. *Analyse the fluid flow system in a car piston of a combustion engine. Why does it have this effect?* (hard applied)

And lastly, **argumentation** assignments require a representation of exposition that includes an element of persuasion. Hence, the rhetorical purpose of these writing tasks extends beyond the presentation, explanation, or discussion to convince the reader of a particular point of view. In these types of tasks, the writers are required to recognize that issues have at least two sides and present the facts or information to develop a reasoned and logical conclusion based on the presented evidence. In practically all assignments, presentations of unsupported assertions are not considered to be argumentation, they are often found in medium-length assignments. These are some examples of personal creation:

1. *To what extent do you think human beings are social? What do you think is the origin of their organisation?* (soft pure Sociology)
2. *How would you accept something as a piece of art? removing trade restrictions, such as a tariff, lead to more rapid economic growth?* (soft applied)
3. *What are different ways to recycle and which one is the best one in a long-term?* (hard pure)
4. *To what extent is the use of computing science beneficial from a young age?* (hard applied)

By considering all those academic writing genres, in general terms there are two main genres found at higher levels in Humanities, these are reports and essays (Blanpain, 2008; Bailey, 2011; Hayot, 2014; Arnbjörnsdóttir & Prinz, 2017). Even though, they might look similar at first, both of these share some characteristics but are also clearly differentiated by others. In comparison with essays, reports are likely to be based on primary as well as secondary research, use numbering (1.1, 1.2) and sub-headings for different sections and be

more specific and detailed (Bailey, 2011; Hayot, 2014). However, in most other respects, reports and essays are similar since both have a clear and logical format, use objective and accurate academic style, include citations and references, make use of visual information in the form of graphs and tables, include appendices where necessary and use of impersonal style (Bailey, 2011; Arnbjörnsdóttir & Prinz, 2017). Therefore, it has been established that the assignments collected and analysed in this research will fall mainly under the category of essays. It is important to note that these essays were written for subjects found in the Humanities branch (see *Chapter 3 Methodology*). That being said, these essays typically have a specified length of 5 to 10 or more than 10 pages, they tend to be completed outside of the class and are found more frequently in courses of the humanities branch such as psychology, economics, history, and English (as it is the case) among others, than in the sciences, engineering, or computer science for example (Hinkel, 2004). According to the findings of Hale et al. (1996), undergraduate courses in the sciences and engineering rarely expect students to write papers as long as 5 to 10 pages, instead they are commonly found in English department courses as it was mentioned earlier. Furthermore, these assignments require some knowledge telling, this being an approach in learning and teaching that requires no engagement with the study material but simply involves memorizing it (Hayes, 2011). This is obtained in writing by reading the literature, conducting library research and finding of relevant, as well as useful, information to be included from a variety of adequate sources all gathered together into an academic written discourse.

2.7 Writing in EME

The number of studies regarding learners' written production in bilingual programmes have been mainly undertaken at CLIL secondary levels (Coyle et al., 2010; Jexenflicker & Dalton-Puffer, 2010; Lasagabater & Ruiz, 2010). For instance, Lasagabaster's (2008) study focused on Spanish secondary CLIL students' abilities regarding grammar, speaking,

listening and writing, assessed through a scale that measured content, organisation, vocabulary, language use and mechanics. In this study it was concluded that all those language aspects measured were significantly improved through this approach as well as pronunciation in comparison with those students who were not in the CLIL group. This was interesting to see considering that Dalton-Puffer (2009) pointed out writing and pronunciation were not highly affected because of CLIL as not all aspects of language competence are improved equally during the process, although it is important to mention that this study mainly focused on oral fluency.

In another study (Jexenflicker & Dalton-Puffer, 2010), written assignments of Austrian CLIL and non-CLIL students were analysed in order to find out what area of writing was benefitted the most and the least. Those writings were assessed through the use of a scale that included task fulfilment, organisation, grammar and vocabulary, showing better results from the CLIL students than the non-CLIL ones in terms of grammar and vocabulary as well as task fulfilment, although in terms of organisation there were no significant differences in both groups as they did not seem well developed by either group. Similarly, Ruiz de Zarobe's (2010) research analysed written production of three groups, two CLIL programmes and one EFL group. Through this study it was concluded that there was a positive correlation between the exposure of teaching through English and written proficiency via the results obtained in analysis of content, organisation, language use, vocabulary and mechanics.

Moving on to studies in EME, Salaberri-Ramiro and Sánchez-Pérez (2015a, 2015b) focused on written development in the context of EME. In the first study (Salaberri-Ramiro & Sánchez-Pérez, 2015a), written reports from Spanish students involved in an EME Chemistry course were analysed to find differences among students' writing skills. In order to analyse the writings, a rating scale assessing the parameters of task fulfilment, organisation, grammar and vocabulary was used. In addition to this rating scale, the results obtained were contrasted with students' academic marks to find any correlations. Results showed an average command of grammar and vocabulary and significant weaknesses in

format, register and text organisation as the leading difficulty in agreement with Jexenflicker and Dalton-Puffer (2010). Furthermore, results showed that there was a relationship between students' academic performance and genre awareness, thus, the higher marked texts showed better writing performance specially at textual and discourse level. Therefore, researchers concluded there was a need to incorporate new methodologies in EME to incorporate writing features in content courses apart from the traditional grammar and vocabulary teaching approaches, "language at university level should be understood as text and discourse, that is, the use of language beyond the sentence" (Salaberri-Ramiro & Sánchez-Pérez, 2015a: 54).

Through a similar procedure, in Salaberri-Ramiro and Sánchez-Pérez (2015b), researchers concluded that the introduction of genre awareness in an English-taught programme, contributed to improve the learners' writing skills. Their results revealed the need to focus on textual genres at HE to obtain better results in written competence among students in different academic contexts. Finally, as there are very few studies regarding writing in EME, the need for wider research is required, therefore, another paradigm that contributes to the advancement from the previous studies is FA.

2.7.1 The use of Functional adequacy (FA) to assess written performance

FA is another term used to refer to L2 proficiency and EME settings seem to offer an optimal environment for its development (Herraiz-Martinez & Alcón-Soler, 2019; Herraiz-Martinez & Alcón-Soler, 2018). The reason to support this is the fact that EMPs offer the possibility to use English in social and academic settings while also English is used in tasks that involve learners' ability to convey meaning effectively, hence, FA (Herraiz-Martinez & Alcón-Soler, 2019). Furthermore, FA contributes to acquiring a social approach in writing as it helps in the analysis process regarding content, process, choices and strategy of writing (Ivanic, 1999).

To begin with, there is no unanimity in literature that clearly defined FA or specified the assessment criteria and its features. The assessment of FA is a concern of both learning and teaching of L2 pragmatics since, as it has been mentioned before, writings in Humanities must follow certain specific characteristics and it depends on the genre required. The origin of FA comes from the need to find a way to assess writing competence. In order to assess proficiency in L2 writing within the context of academic disciplines, there have been different constructs used such as *communicative adequacy* (Kuiken et al., 2010; Palloti, 2009). Communicative adequacy is a task-related, dynamic and interpersonal construct which focuses on both the specific task being carried out by the speaker, and the way the message is received by the interlocutor. De Jong et al., (2012) used the term *successful task performance* or *functional adequacy* to refer to the conveyance of messages through speaking or writing, whereas Bridgeman, Powers, Stone and Mollaun (2012), along with Sato (2012), endorsed the term *communicate effectiveness*, referring to the success of information transfer. However, there is no agreement in literature studies on how it should exactly be defined. This variety of definitions may be an indication that this dimension is quite often overlooked in research and also why general measures to rate this aspect of L2 performance are lacking (Kuiken & Vedder, 2017: 322).

On this note, one of the first attempts to assess, not only writing but also speaking competencies, was to have an analysis of complexity, accuracy and fluency (CAF) (Housen et al., 2012; Pallotti, 2009). In this case, complexity depends on the variety, the existence of multiple alternatives, or level of difficulty chosen. Accuracy refers to the degree of conformity or used of certain norms in the target language. Fluency is linked to the ability to produce speech at a normal rate and without hesitation (Palloti, 2009). However, a high score obtained on CAF can be inadequate due to many factors such as the use of inappropriate register, irrelevant topics, or the use of ideas ineffectively (Nuzzo & Bove, 2020). Nevertheless, even though the results obtained using CAF parameters may be positive, tasks may still be inadequate regarding their performance (Herraiz-Martinez & Alcón-Soler, 2018;

Kuiken & Vedder, 2017; Nuzzo & Bove, 2020). Therefore, in order to assess the degree to which written linguistic performance is more or less successful in achieving the goals of a task, it is important to take into account its adequacy, and not only its quality in terms of CAF, and this is how FA was introduced.

Even though there is not an agreed definition, Kuiken and Vedder (2017) moved a step further from previous definitions by outlining a systematic proposal for defining and measuring the functional aspects of language proficiency labelling it FA. The way it is viewed by them is that of a task-related, interpersonal construct, an argumentative essay for instance, that involves two participants being writer (A) and reader (B). Thus, it is considered in terms of successful task fulfilment (Kuiken & Vedder, 2014; Nuzzo & Bove, 2020). It is also viewed as how the adequacy of the message in the text transmitted by the writer is judged by the receiver with respect to the relevance of the information provided, the quantity of ideas included, the quality of those ideas, and the organization of those ideas in the text (Kuiken & Vedder, 2018). Moreover, FA is a context-dependent construct due to the fact that tasks are performed in specific institutional settings where language learning takes place, for instance EME or CLIL contexts (Herraiz-Martinez & Alcón-Soler, 2019). Through this definition, the focus lies on the task completed and transmitted by writer A and its reception and interpretation done by reader B. Therefore, the adequacy of the message depends on its quantity, relation, manner and quality (Kuiker & Vedder, 2017).

Even though there are few studies available on FA in L2 writing, these demonstrate its efficiency when it comes to assessing writing proficiency. One of them (Kuiken et al., 2010) investigated the relationship in L2 writing between FA and linguistic complexity for Italian, Dutch and Spanish learners of those language as well as native speakers of them. The findings of this study showed that FA and linguistic complexity in L2 appeared to develop at the same pace, although the correlation seemed to be higher in high-level learners in comparison with low-level learners. Therefore, it seemed that more advanced L2 learners dealt with the

functional aspects of the text rather than the linguistic form. Furthermore, based on this study, it was concluded that FA needed to be assessed not only by experts but also by native speakers (Kuiken & Vedder, 2014).

Therefore, it can be seen that the relationship between the development of FA and CAF in L2 production may have some difficulties since results may vary depending on the previously established FA in relation to a specific language task. Therefore, adaptation to the demands and constant growth is always needed. Thus, a new rating scale of FA in written L2 performance was created by Kuiken and Vedder (2017) as an adaptation of the previously used in the communicative adequacy and linguistic complexity (CALC) study (Kuiken et al., 2010; Kuiken & Vedder, 2014) which aimed to investigate the development of writing proficiency in L2 performance. These above mentioned studies focused on the existing relationship between the communicative functional dimension of writing and the linguistic dimension, where raters were requested to judge communicative adequacy and linguistic complexity in a series of texts written by L2 learners. However, this new scale comprised four different subscale and six scale levels in order to be used by both expert and non-expert raters (Kuiken & Vedder, 2017).

This new rating scale (see *Chapter 3 Methodology* for further details) was successfully tested in terms of its reliability by a group of non-expert raters (Kuiken & Vedder, 2017), in another study by another group of non-expert raters (teachers) (Kuiken & Vedder, 2018) when asked to judge FA in two writings of argumentative texts completed by L2 learners and L1 students, and, more recently, in another study (Nuzzo & Bove, 2020) with L1 and L2 output on a variety of different written texts with the same group of non-expert raters. Although it was also tested regarding oral tasks, this information is not relevant for this particular research and therefore will be omitted.

In the first two studies, the task requirements were added as a separate scale dimension, so the functionality of language use was also taken into consideration. The choice of using

non-expert raters was preferred since experienced raters or L2 teachers may have a tendency to be stricter compared to those who are native speakers and might therefore be more biased in their judgements (Kuiken & Vedder, 2014). However, it is worth mentioning that all raters were trained in order to be able to use the scale appropriately before any rating session. The study demonstrated that FA could be reliably assessed by means of a rating scale comprising four dimensions easily applicable for non-expert raters. Therefore, the rating scale of FA was considered a reliable and efficient tool for assessing written learner production (Kuiken & Vedder, 2017: 332) that would be beneficial for students regarding receiving feedback and specific comments on their writing skills. The results of the study showed that interrater reliability scores were high in general for both type of students indicating that raters judged the texts in a similar manner within the four subscales. Furthermore, raters did not report having difficulties when using the scale indicating that it may be easily used by both expert and non-expert raters. A high correlation was noticed between content and the rest of the dimensions, as well as comprehensibility and coherence and cohesion; although task requirements and comprehensibility showed a lower correlation. Therefore, this tool contributes to the assessment of task-based language assessment of L2 pragmatics. Furthermore, using a rating scale that includes different components of FA contributes to the better understanding of this type of assessments. Finally, after the studies the scale was concluded to be suitable for rating the texts of both L2 and L1 writers (Kuiken & Vedder, 2017: 331)

After these two studies, the new rating scale was applied in a series of different studies (Del Bono, 2017; Faone & Pagliara, 2017; Orrù, 2019; Pagliara, 2017) containing similar characteristics although using different types of learners working on a variety of L2 written texts with the employment of non-expert raters as a common feature among all of these studies. However, the results obtained were not always consistent across studies.

On the other hand, the more recent study of Nuzzo and Bove (2020), addresses specifically the applicability of the rating scale proposed by Kuiken and Vedder (2017) to both L2 and L1 performers of Italian performing three different written texts. This study also used non-expert raters in order to allow for better comparability with previous studies on the scale. The results showed that the raters assigned higher scores to L1 informants on all dimensions across the three tasks, which is in line with the results of Kuiken and Vedder's (2017) study, although lower upper and lower range limits were found, as well as less dispersion. Native speakers written texts were rated significantly higher than those produced by the non-native speakers with the exception of the content dimension in task 2 where there is no significant difference between the mean scores of both groups of writers. Therefore, results obtained indicated that the scale was not equally applicable to L1 and L2 written texts judged by non-expert raters due to low levels of inter-rater agreement and consistency (Nuzzo & Bove, 2020) which is in agreement with those findings of Kuiken and Vedder (2014) regarding expert raters' difficulties to judge L1 and L2 production simultaneously using a previous version of the FA scale. Despite the fact that the new FA scale revealed that it was suitable to use it for rating the texts of both L2 and L1 writers (Kuiken & Vedder, 2017: 331), Nuzzo and Bove's (2020) study did not confirm its applicability for both groups even though this could be explained due to the low degree of consistency found between raters' judgements. Nevertheless, good results were obtained in regard to the reliability of the scale, with positive correlation levels between the four dimensions across the three tasks. This confirmed that the sub-scales are undoubtably part of the FA construction, especially in the L2 group. Finally, results as well as raters confirmed that the scale had good potential for assessing the FA of different types of written texts. Further explanation regarding the rating scale and how it was applied in this study is explained in *Chapter 3. Methodology*.

As a result, FA is the framework chosen for the written analysis of this research as it would be interesting to see how this tool works when it is applied to different genres of

academic writing (Nuzzo & Bove, 2020: 22) in EME in HE. Thus, the focus on this research is on approaching FA of L2 academic writing through the rating scale in order to assess L2 written performance in EME.

2.8 Chapter summary

The purpose of this chapter was to present the theoretical framework upon which this research is based and to review the literature regarding academic writing in the context of EME that informed this study. The literature revision began with a presentation of the context of EME, emphasizing its lack of language focus and introducing a variety of relevant considerations to take into account for the implementation of the correct and successful design of EME content subject at tertiary education in order to obtain the best possible results from learners. This context also presented various studies regarding the perspective of content and language teachers. By considering the different challenges that professors, students and policy makers undertake through the implementation of EME, it is shown that a clear and critical stance towards its promotion is required. The implementation of EME in various countries leads the reader to the context of Mexico and the institution of this research. It was then relevant to establish the need for a cross-disciplinary relation between ESP and EME as well as an overview of what has been written regarding the topic of writing as a social practice, which has opened the discussion of writing in a different perspective from that of a set of skills. In order to introduce the topic of writing in the context of EME, it was important to first mention the disciplinary literacies found in writing as well as the characteristics of academic disciplines and the genres found in them. This led to the discussion of the context of academic witing, its characteristics and the different stages during the writing process. Finally, and more specifically, genres in HE and particularly writings in EME were discussed in order to conclude with the discussion of an important key

element of this research, FA, and a discussion of various studies assessing it that is relevant for the analysis of the second corpus.

The methodology for such investigation will be discussed in the next chapter referring to the first corpus: surveys, and the second corpus too: written assignments, with reference to the quantitative and qualitative data obtained.

Chapter 3: Methodology

3.1 Introduction

Previous chapters have presented the necessary information for the understanding of this research. Chapter 2 introduced the worldwide and specific context of EME with an overview of where content teachers and language teachers stand and the intrinsic relation between them in ESP and EME, to then introduced the social practice of writing in EME by having a closer look at academic written literacies and where FA could be beneficial to address academic language needs. The purpose of this chapter is to give an account of the research methods, the research design and the data-analyses used in the present study by addressing the research questions in more depth.

The chapter is divided into several sections necessary for the correct description and explanation of each step. By referring back to the introduction chapter, the research questions, originated from the relevance of this study and the reasons established there, are presented again in order to see the methodological relation with them. The description of the participants, professors and students opens this chapter. The corresponding discussion of these participants is accompanied by graphs and tables to ease readers' comprehension. The chapter continues with triangulation as a research method and a mixed-method design to understand how this research was approached. Once this is explained, surveys (professors' and students') as a research tool and writings as a source of data are described separately with their corresponding sections for content, collection procedures, pilot study and analysis process. Special attention is given to the rating scale based on FA employed for the analysis of writings. To finish, an ethical considerations discussion section is included for a complete methodology chapter.

As it was mentioned before (see *Chapter 1*), this study attempts to examine the academic literacy needs of undergraduate student learning disciplinary content through EME.

Due to the deficiencies reported in Chapter 2 in terms of EME, academic literacies and importance of genres, as well as the current need for research on this topic in the country of Mexico as there is none existent, there was a need to set research questions to make an effort on trying to contribute to those areas by creating an interrelation between professors, students and writings in EME within the context of Mexico. Therefore, the resulting RQs to guide this study and to be answered are the following:

RQ1: What are the students' academic written language needs in EME?

> **RQ1.1:** What are the students' academic written language needs in EME Humanities subjects as seen by professors?
>
> **RQ1.2:** What are the students' academic written language needs in EME Humanities subjects as seen by students?
>
> **RQ1.3:** What are the academic written language needs as reflected in these particular students' own writings?

Therefore, RQ1.1 intends to present the professors' perspectives on students' written academic language needs and is answered through the implementation of a survey (see section *3.5.1 Professors' survey*) and is further explained in *Chapter 4 Analysis and discussion of surveys*. Subsequently, RQ1.2 intends to show the students' perspectives on their written academic language needs and is answered through the implementation of a survey (see section 3*.5.2 Students' survey*) and is further explained in *Chapter 4 Analysis and discussion of surveys*. Finally, RQ1.3 is related to see the reality found in students' written assignments and is answered through the analysis of written assignments (see section *4.6 Data source: Writings*) and is further explained in *Chapter 6 Analysis and discussion of*

writings. Throughout this chapter all the methodological steps taken along the research to answer those questions are explained.

3.2 Participants

In this section the presentation of both participants, professors and students, involved in the surveys is included as well as the criteria for selecting the participants. This is done so that the reader is provided with an overview of the intricate social network that was developed during the whole process of selecting the participants.

In terms of the professor participants, the complete sample consisted of 113 professors. They were EME content professors of different disciplines teaching in different faculties of the Humanities brunch, not necessarily aware of language teaching techniques or academic genres. There were various reasons to select the content professors in this study. To begin with, they are the closest people involved with the assignments of the students. Second of all, they are also involved in the whole process of planning and designing assignments with specific learning objectives in mind. Furthermore, these professors were aware of the students' difficulties, needs and demands for writing and therefore could provide relevant data regarding the academic demands their students had found themselves in and possibly some tools or feedback to contribute to the students' writing improvement in their academic assignments.

Regarding the student participants, the complete sample consisted of 117 students divided among the three subjects of M&S, M&A and EP&S during the academic year of 2019/2020. The connection to students was done through the first three contacted EME content professors who agreed to participate in this research and therefore were able to provide access to their students. The reasons to select them were based on the need for learners studying Humanities content subjects through EME who were asked to complete

written assignments as part of their subject assessment. Furthermore, their point of view was relevant for this research since they are the ones facing the professor requirements in this kind of subjects and therefore are one of the most pertinent subjects to be taken into consideration in this type of research. In terms of the awareness of the different types of existing genres, if students were aware of them, they had been so through practice in their Spanish or English courses, not necessarily in their EME content subjects.

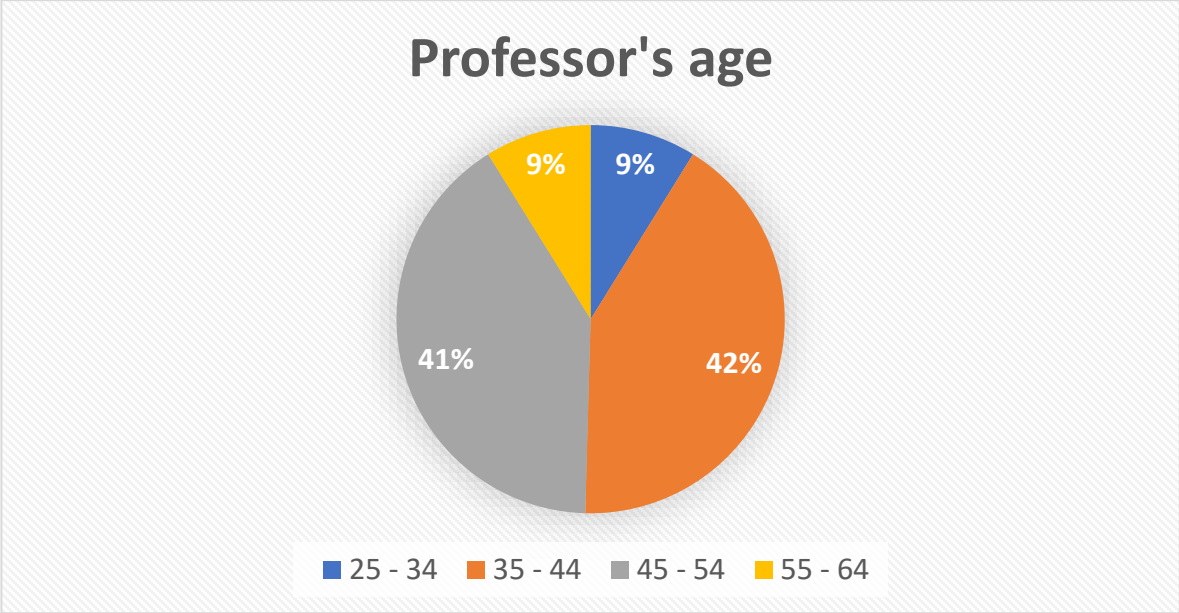
Along the coming subsections the demographic information of each group of participants is presented in detail, first the professors and then the students.

3.2.1 Professor participants

The first group of participants in the study involved the content professors for subjects taught through EME in the Humanities branch of the ITESM. They were considered relevant for this research due to the reasons mentioned earlier but also because of the triangulation process in order to have their own perspective regarding the writing needs of their own students. Therefore, the following section focuses on these professors and how they participated in the study through the sampling process.

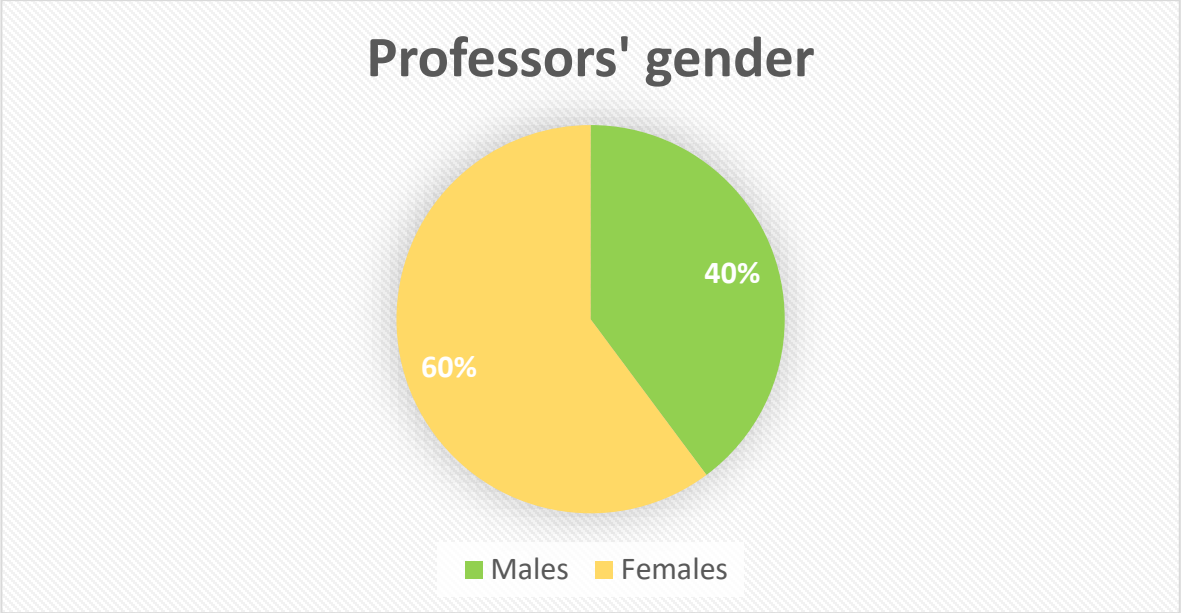
The demographic information of the 113 answers extracted from the completion of the professor survey (see section *4.6.2 Research tool 2: Surveys* for more information detailed on the survey) allowed for the description of the professors whose characteristics are presented next.

In terms of the ages, professors ranged from 25 to 64. Nevertheless, the majority of them fell under the category of 35 to 44 with 42%. This was very close to the 41% of 45 to 54 and the two final categories of 25 to 34 and 55 to 64 with the same percentage of 9% (see Graph 1).



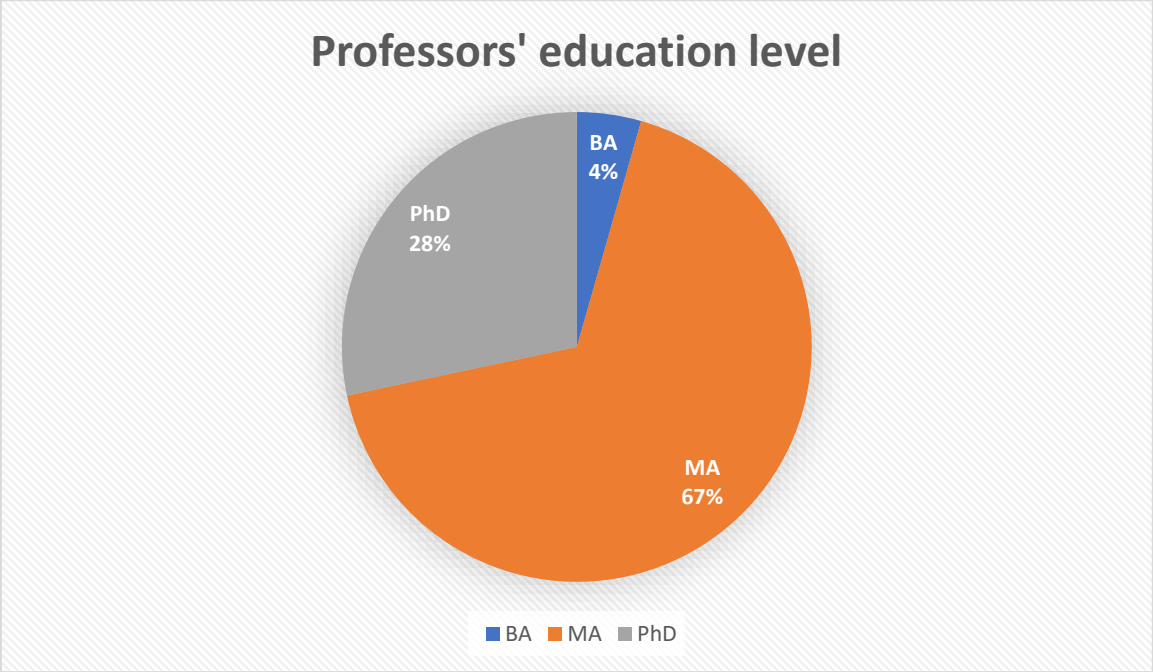
Graph 1. Professor demographics – age.

The majority of professors were females (60%) in comparison with 40% of males (see Graph 2), most of them of Mexican background with Spanish as their L1 except for 7 participants whose first language was English and were originally from the USA.



Graph 2. Professor demographics – gender.

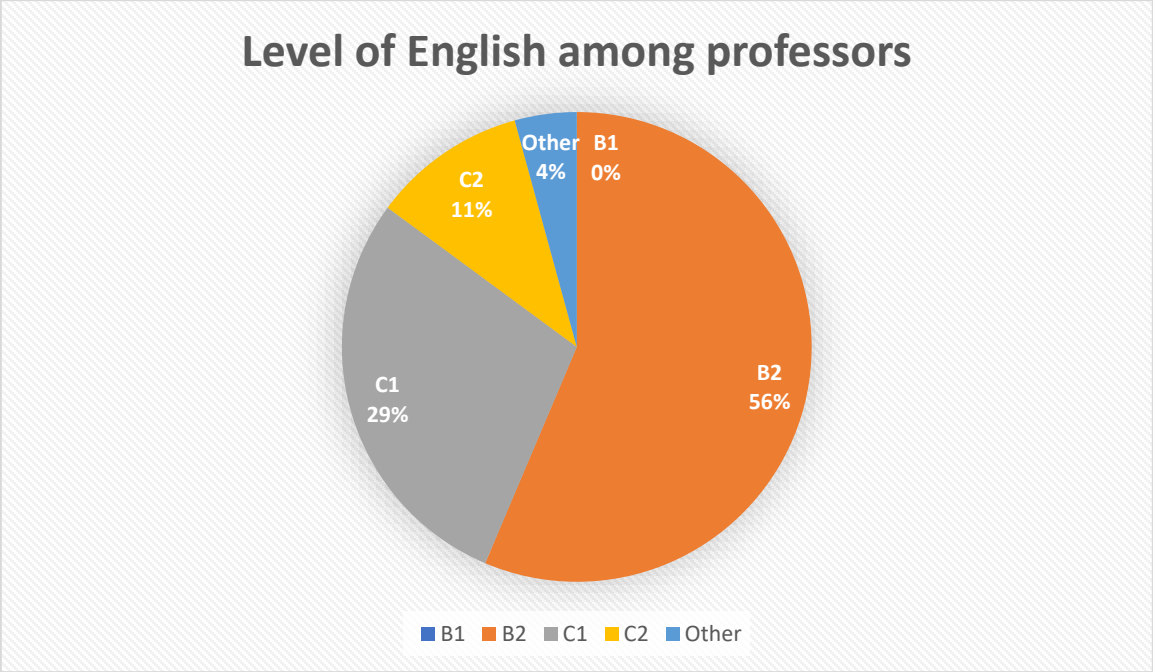
In terms of the educational level of these participants, it is worth mentioning that even though universities in Mexico try to push their efficiency standards of education by hiring professors with the highest degree of studies (PhD), among many other factors; possessing this diploma is not necessarily a mandatory requirement to be able to teach at HE levels (Gacel-Ávila, 2012). Thus, it is not surprising that most of the professors involved in this study did not possess a PhD (28%) but other degrees, such as MA (67%) or BA (4%) (see Graph 3).



Graph 3. Professors' demographics - educational level

Additionally, when it comes to the English competence of professors, 81% attest their level of the language with 56% having a B2, 28.72% having a C1, and 11% having a C2. For other professors (4%) English was their L1 or had taken either the TOEFL or the IELTS exams (see Graph 4). This information comes in contrast with other higher education institutions, for instance at the Universidad Complutense de Madrid in Spain, where it is a mandatory requirement for university professors to have a minimum of C1 in order to be able to teach[5].

[5] Plan para la internacionalización de la docencia https://www.ucm.es/pid/calidad

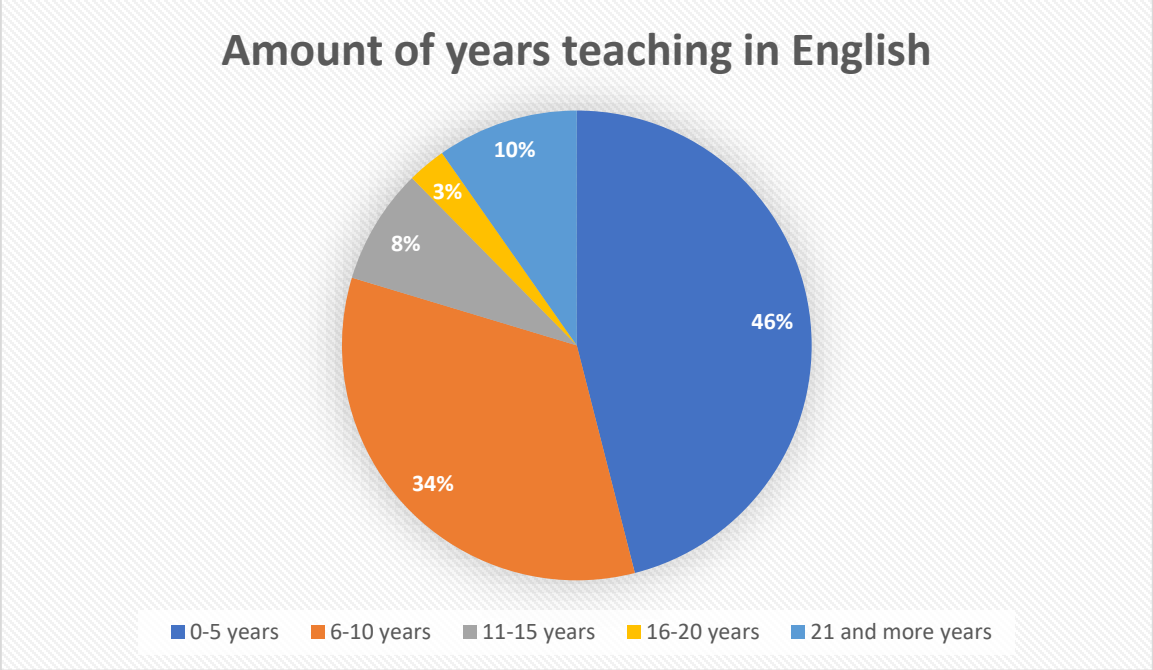


Graph 4. Professors' demographics - Level of English

Also important is noting that, only 15% of the professors had a pedagogical certification to teach English, such as TESOL, TKT, CELTA, etc. This may be due to the fact that these EME teachers are content experts but not language ones and therefore had no need to get any of those certifications. What is more, most of them did not teach all their subjects through the medium of the English language but in Spanish depending on the institution requirements.

These teaching staff were highly qualified and dedicated professionals, who had years of experience in teaching their content at different institutions around Mexico and abroad through the Spanish language. These professionals were recently asked to teach these subjects in English as part of innovations in the educational model of the ITESM, whereas previously these subjects were being taught in Spanish. It is important to mention that the

decision of changing the language of instruction implies taking into considerations other challenges such as a change of materials, content or culture, and not simply having a good command of English (Sánchez-García, 2020). Therefore, most of the professors had only been teaching their content subjects in English from 0 to 5 years (46%). Other ranges were from 6 to 10 years (34%), 11 to 15 years (8%), 16 to 20 years (only 3%) and 21 years or more (10%) (see Graph 5). This variation may be due to the fact that most of these professors were working in different higher education institutions or secondary schools that had EME or CLIL subjects, subjects taught in Spanish or even bilingual institutions.



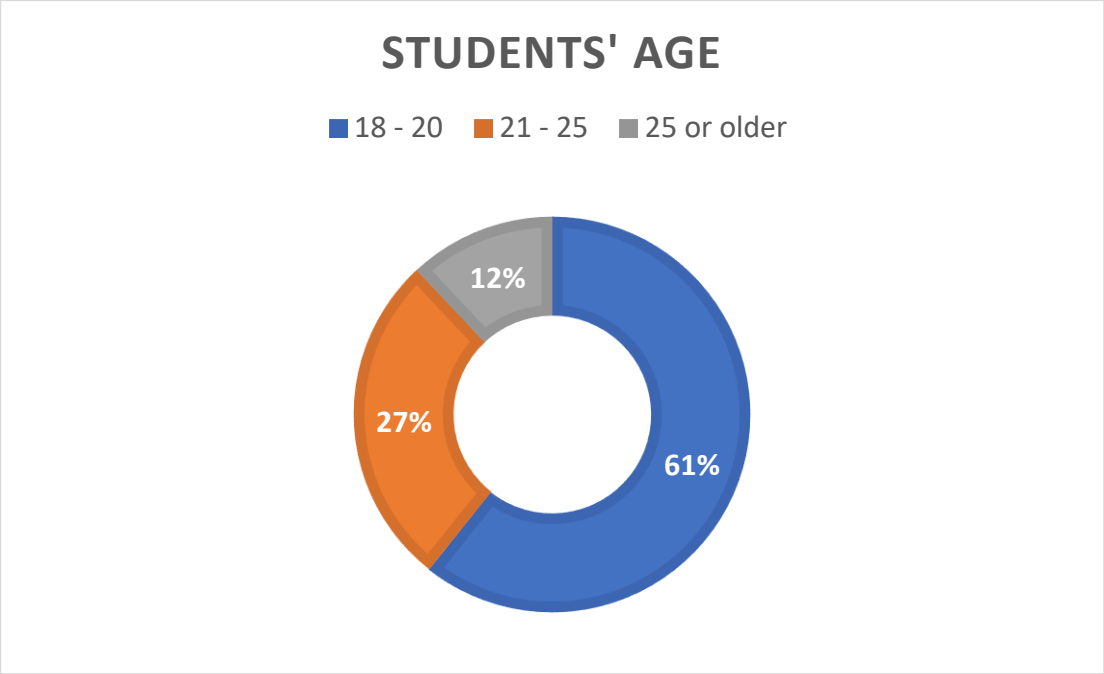
Graph 5. Professors' demographics - Amount of years teaching in English

This concludes the presentation of the demographic results obtained from the professor participants involved in this research. The next subsection focuses on student participants in a similar organizational structure.

3.2.2 Student participants

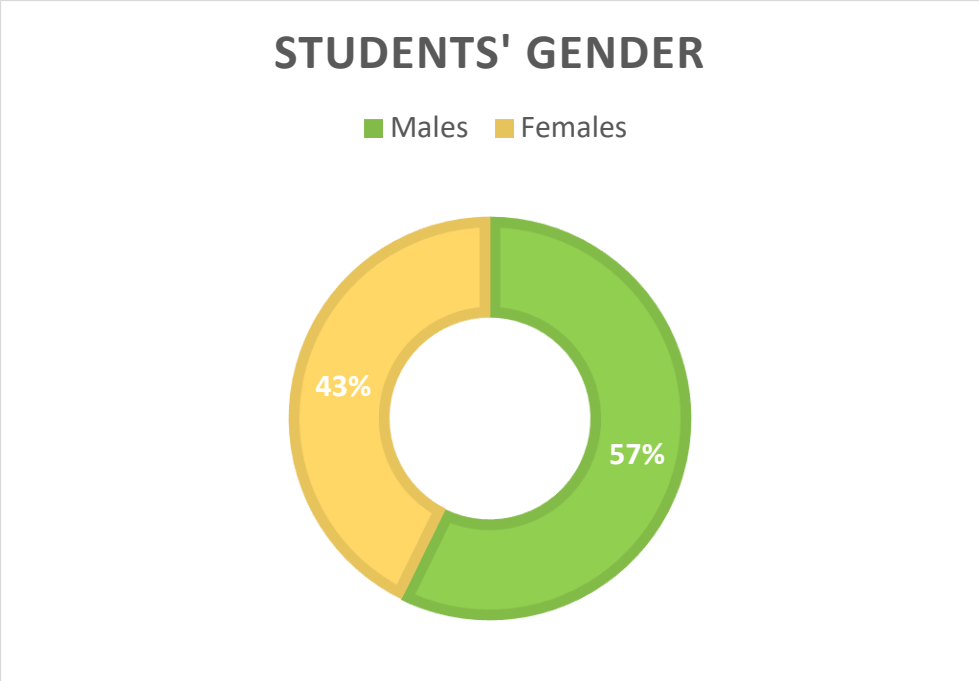
Next, the profile of the students in the study will be presented, which was obtained from the demographic questions in the student survey (see section *4.6.2 Research tool 2: Surveys* for more information on the survey). These questions were relevant for this research in order to be able to offer a detailed background description of the participants involved in the study which will be explained next.

Age-wise, from all of the student participants, 61% were identified between the ages of 18 and 20, 27% were located between 21 to 25, and finally 12% from 25 or older age period (see Graph 6).



Graph 6. Students' demographics - age

The majority of learner participants when considering all of the three groups were males with a percentage of 57%, whereas females corresponded to the 43% of learner participants (see Graph 7).



Graph 7. Students' demographics - gender

The vast majority of them were of Mexican background with the exception of three students with Spanish as their L1 and, as mentioned in the context section of Chapter 2, they all belonged to the B.A. in Digital Music Production Engineering.

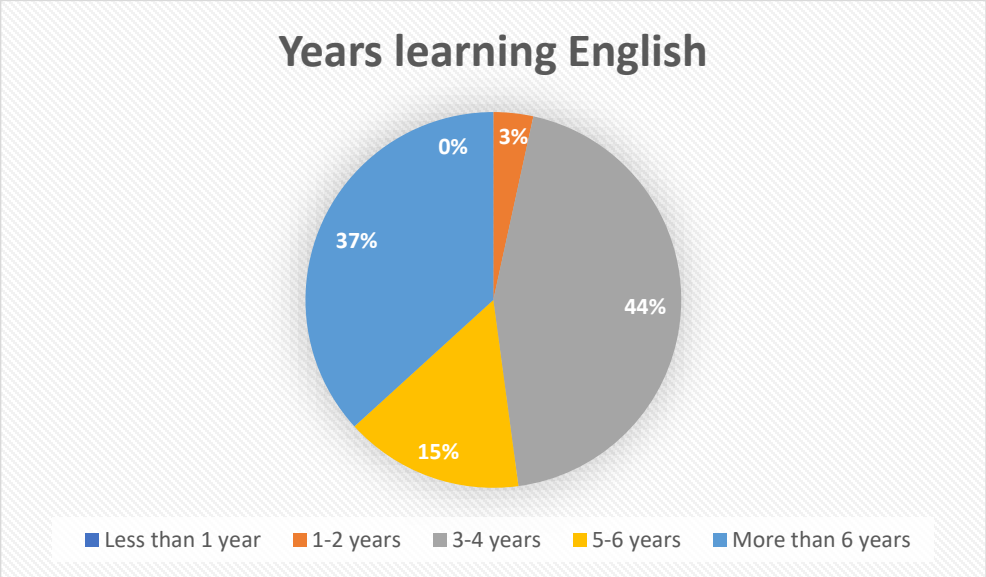
The English language proficiency of the groups was a minimum of B2 (see Table 8) as students had to provide evidence of this level with a certificate from an official English exam or by taking previous remedial courses before enrolling in these courses. Furthermore, these subjects are targeted at students with a B2 level of English according to the CEFR. Table 8 presents the levels of the student participants at the beginning of this research. The demographic data seems to fall mainly under the Professional working proficiency (B2) category even though there are small percentages in lower and higher levels. Furthermore, based on their answers, the skill with the highest weighted average was Reading (3.06),

followed by Speaking (2.98), then Listening (2.97) and finally Writing (2.95). It is worth noting that, even though this data was very similar among skills, the lowest weighted average was the writing skill. As it was mentioned in Chapter 2, writing in an L2 is noticed as a common source of difficulty for undergraduate and postgraduate students (Zhu, 2004; Petri, 2007).

#8	Speaking	Reading	Writing	Listening
Below elementary (A1)	0%	0%	0%	0%
Elementary proficiency (A2)	0%	0,85%	2,56%	0%
Limited working proficiency (B1)	19,66%	13,68%	17.09%	18,80%
Professional working proficiency (B2)	64,96%	68,38%	67,52%	66,67%
Full professional proficiency (C1)	12,82%	67,52%	11,11%	12,82%
Native or bilingual proficiency (C2)	2,56%	66,67%	12,82%	1,71%
Total	117	117	117	117
Weighted average	2.98	3.06	2.95	2.97

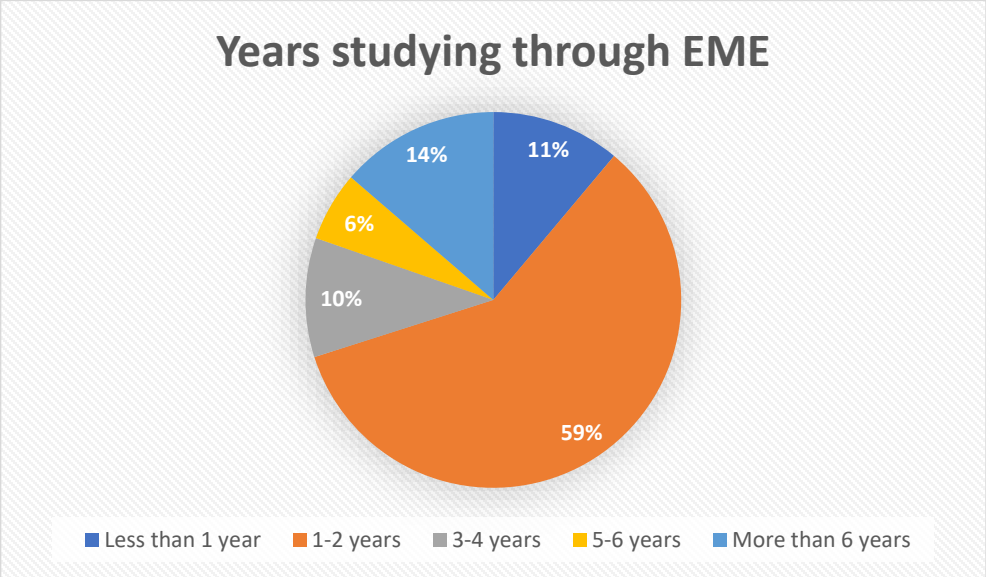
Table 8. Students' demographics - Student participants' level of English competence following the CEFR

Hence, it was noticed that 44% of students had been learning English for 3 to 4 years, 37% for more than 6 years, 15% between 5 to 6 years and only 3% between 1 to 2 years (see Graph 8).



Graph 8. Students' demographics - Student participants' years learning English

It is worth mentioning that prior to taking these subjects, learners enrolled in this B.A. are obliged to take some subjects for an entire semester of writing in Spanish, mathematics, computer studies and EFL as part of their remedial courses as it explained in Chapter 2 (Tecnológico de Monterrey, 2020a, 2020c). Finally, 59% of students had been studying through EME for 1 or 2 years, 14% for more than 6 years, 11% for less than a year, 10% for 3 or 4 years and 6% for 5 to 6 years (see Graph 9).



Graph 9. Students' demographics - Student participants' years studying through EME

The ITESM institution decided to teach subjects in English with the purpose of strengthening the command of students' EFL, since one of the requirements for students to graduate is to provide evidence of a minimum level of B2 in the English language (see Table 9). It is worth mentioning that the access to HE studies in Mexico is not available for everyone, so the competition to enter the ITESM is considerably high as well as the graduate requirements. Therefore, students tend to have a highly qualified learner profile before entering while at the same time maintaining it and increasing it during their studies at the institution.

Graduate Requirements	
To obtain a bachelor degree at Tecnológico de Monterrey students are required to:	
1	Have completely finished the high school cycle prior to passing the first course in their college curriculum.
2	Have completed, under the existing standards, the prior academic requirements corresponding to the curriculum either through placement exams or the corresponding remedial courses.
3	Have covered all the courses in their curriculum either by passing all the courses at Tecnológico de Monterrey or by obtaining revalidation or equivalence agreements—in compliance with the corresponding standards--of some of the courses taken at other institutions, and passing the remaining courses at Tecnológico de Monterrey. Courses taken at foreign universities with which Tecnológico de Monterrey has agreements will be considered, for the effects of this article, as courses taken at Tecnológico de Monterrey, as long as they do not exceed the equivalent of two semesters of the curriculum.
4	Have taken at Tecnológico de Monterrey at least the equivalent of the last four semesters of the corresponding curriculum in the case of students who have course revalidation or equivalence at this level. Flexibility may be exercised in programs that may be established by agreement with other universities.
5	Have completed social service in compliance with the legal precepts in force and the standards approved by the president of Tecnológico de Monterrey.
6	Have taken the General Undergraduate Exit Exam of the National Center for the Evaluation of Education (Centro Nacional de Evaluación para la Educación, A. C.), which assesses the knowledge and skills acquired by the student during the degree program. This requirement applies only to students who are graduating from a degree program for which these exams exist. The result of this exam will be recorded in the student's transcript. Students from the undergraduate programs that do not have a CENEVAL exit exam must take the capstone exams designed for this purpose. This requirement applies only to students who are graduating from a degree program for which these exams exist.
7	Have a proven command of the English language, achieving the level established by Tecnológico de Monterrey on one of the exams authorized by the institution.

Table 9. Requirements to obtain a B.A. at ITESM (Tecnológico de Monterrey, 2020a)

At the same time, EME subjects were also addressed to foreign exchange students whose L1 was not Spanish as it was advertised in the ITESM website (Tecnológico de Monterrey, 2022). However, it is worth mentioning that what characterizes EME, among other things, is its focus on the content subject and not the language in which it is taught explicitly (further detail in *Chapter 2 Theoretical framework*).

This concludes the presentation of the demographic results obtained from the student participants involved in this research. Along the next section the description and justification of the methods and design employed are presented and explained.

3.3 Triangulation as a research method

The term triangulation is used to refer to the combination and integration of two or more data sources, theories, methods or investigators used in one study of a single phenomenon (Creswell, 2003; Malamatidou, 2017). In the area of academic research, it goes hand in hand with combining data sources to study the same phenomenon (Dörnyei, 2007). Corpus triangulation is defined as:

> "the combination, in an integrated manner, of multiple (two or more) corpus values and/or attributes from one or more corpus variables and/or the use of (two or more) corpus analysis techniques in one study of a single phenomenon" (Malamatidou (2017: 34)

The use of this concept has been employed in a wide range of disciplines, including applied linguistics (Dörnyei, 2007; Magnan, 2006) and, as mentioned earlier, it can be performed through different options (data sources, theories, documents, interviews, observations or questionnaires), but in this research, to apply triangulation, three tools have been used:

1. two surveys:
    a) one designed for professors to find out their perceptions about students academic writing needs in EME
    b) one designed for their students to find out their perceptions about their own academic writing needs in EME
2. a corpus of written assignments completed by students enrolled in EME subjects in the Humanities

It has been pointed out that parallel and comparable corpora should not be seen as mutually exclusive, but rather as "complementary sources of cross-linguistic data" (Altenberg & Granger, 2002: 9). The purpose of corpus triangulation is to increase knowledge about the linguistic phenomenon under investigation, by approaching it from different perspectives and examining various relevant parameters. Thus, by, for instance, providing essays and assignments with a clear framework for corpus triangulation, the quality and rigour of research conducted in the field can be improved, as clarity and objectivity increase.

The corpus triangulation technique in this study was used for the investigation of the academic language needs in written assignments at HE level in EME subjects. This phenomenon was approached from different perspectives and examined various relevant parameters: (1) professors' opinions about their students' writing needs employing tool 1 a), (2) students' opinions about their own writing needs employing tool 1 b), and (3) what students' own writings show about their needs employing tool 2.

Therefore, triangulation was implemented following three different stages. The first stage consisted of the collection of answers given by EME professors in the Humanities branch at ITESM in Mexico. This was done through the completion of an online survey (see Appendix C and section *4.5.2 Research tool 2: surveys* below for more details) regarding their students' academic written needs. Then, a similar procedure was undertaken but this time from the view of the students of EME subjects. Once again, an online survey (see Appendix D and section *4.5.2 Research tool 2: surveys* below for more details) was used to collect the students' perspective. This included similar questions and answers to the professors' survey, and others more specific to students. The third stage involved the analysis of 100 written assignments (see section *4.5.1 Writings* below for more details). Each state of the analysis provided an answer to one of the three research questions (see Table 10), and

results from each stage were compared to find similarities and differences in what professors and students think and experience. These results led to pedagogical implications on how to teach and perform writing skills in EME Humanities.

RQ		Tool
RQ1: What are the students' academic written language needs in EME?	**RQ1.1:** What are students' academic written language needs in EME Humanities subjects as seen by professors?	Professors survey
	RQ1.2: What are students' academic written language needs in EME Humanities subjects as seen by the students?	Students survey
	RQ1.3: What are the academic written language needs as reflected in these particular students' own writings?	Corpus of written assignments

Table 10. Data collection tools and relation with RQs

Furthermore, the use of triangulation was a way of assuring the validity of this research. The corpus triangulation techniques employed in this case study allowed for meaningful comparisons to be made across different perspectives and realities (Creswell et al, 2003; Dörnyei, 2007), in an effort to acquire a comprehensive understanding of the written academic language needs in EME subjects. This was also achieved by considering a social

approach to writing (Clark & Ivanic, 1997) through the surveys when trying to discover participants' experiences and attitudes towards EME and academic writing, and through the FA analysis of assignments with content, process, choices and strategy taken towards writing. Had corpus triangulation techniques not been employed, it would not have been possible to examine the way in which these different factors interact and, ultimately affect the positive or negative results in written assignments of EME subjects.

3.3.1 Mixed-method design

Complementing the previously explained research method, this study proceeded with a mixed-method approach which consisted of combining or integrating qualitative and quantitative data and research (Creswell, 2009; Creswell, et. al., 2003; Dörnyei, 2007). The value of using this approach resides in the idea that all methods have some bias and weaknesses, and the collection of both quantitative and qualitative data can neutralize the weaknesses of each form of data (Creswell, 2009). In this study, this approach provided the researcher with the opportunity to combine "multiple methods, different world views, and different assumptions, as well as different forms of data collection and analysis" (Creswell, 2009: 11). Moreover, Creswell et al. (2003) mention that the use of a mixed-method approach in triangulation for gathering data allows the researcher to seek and compare all those forms of data in order to obtain congruent findings.

Corpus-based research focuses its attention on the analysis of a number of discourse and lexicogrammatical phenomena in the English language (Cortes & Csomay, 2015). This analysis is of a corpus that refers to "a large body of linguistic data used for research purposes" (Loewen & Plonsky, 2016: 36). The importance of using corpus-based research lies on the fact that it may highlight important aspects of a text or texts collection that may otherwise go unnoticed (Römer & Wulff, 2010); reveal that language descriptions in some

textbooks are misleading (Hyland, 2008) or underrepresent aspects of the use of academic language (Chen, 2006). Therefore, this helped to identify or suggest potential areas on inquiry, particularly those that reflect professors' personal concerns about their students' language development and usage.

Throughout this research, qualitative data was heavily relied on to provide answers to the research questions, leaning also on the use of quantitative data to support the results obtained. In order to collect the evidence needed to answer the research questions with a strong basis, information from three different groups was needed for the final purpose of finding the answer to students' language needs in written assignments in EME (see Figure 4).

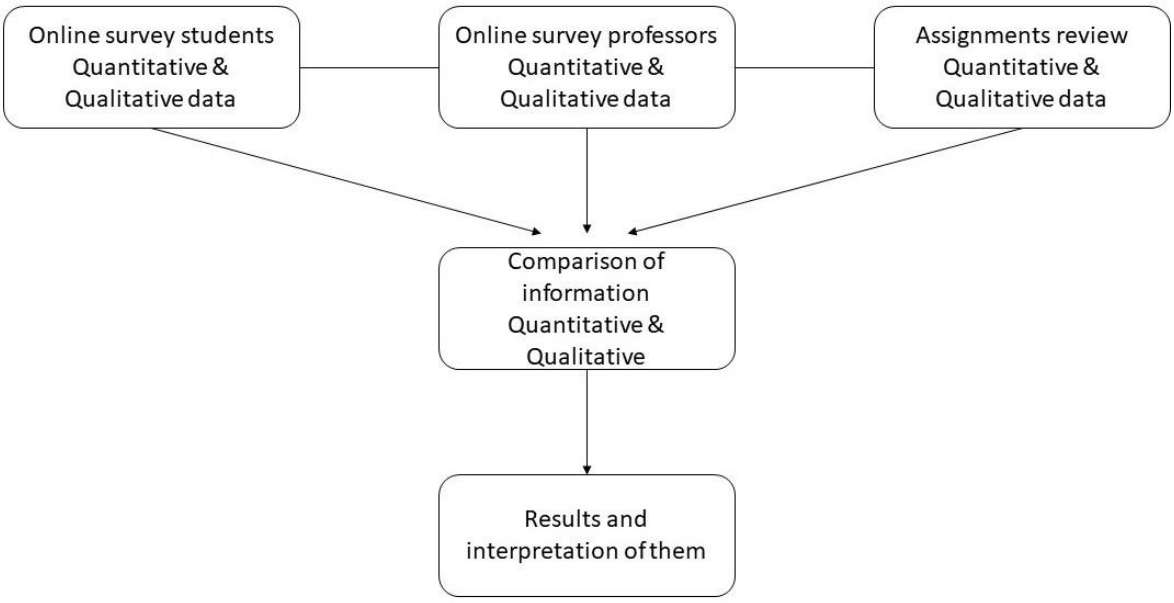


Figure 4. Quantitative and qualitative data in the study (created by the researcher)

As seen in Figure 4, online surveys were useful to obtain quantitative data regarding percentages and number of responses through close-ended questions, which was easier to analyse and manage for this research (Creswell, 2009). At the same time, within those surveys, qualitative data was obtained through the open-ended questions without a way to predetermine responses. In terms of the assignments, quantitative data was gathered by employing a rating scale that provided an FA performance while qualitative data was a crucial part of it in terms of specific sections of the written assignments. In order to analyse the qualitative data, it was necessary some content analysis in which certain words or themes were identified in this research (Dörnyei, 2003).

Furthermore, and by considering Creswell (2009) perspective of qualitative and quantitative research, this study considered surveys as mainly a deductive data analysis by providing participants with categories arranged prior to examining the assignments. Meanwhile, the analysis of writings took a more inductive approach by creating categories from the data after analysing them. Thus, this research is complemented by both not just limited to only one in order to have a wider perspective and contribute to this research from both perspectives.

To this point, this research's methods and design were explained and along the next section the description and justification of the tools and data source employed during this research are presented, as well as their collection procedures and corresponding data analysis process.

3.4 Surveys as a research tool, data collection procedures and analysis

The objective of the study is to explore the writing needs of students in EME. To do so, apart from analysing their writings, it is deemed important to delve into the own perceptions of both professors and students regarding what they consider to be these writing

needs. To obtain these data, that is, teachers' and students' perceptions, as an attempt to provide answers to RQs 1.1 and RQs 1.2, two independent surveys were employed as the main tools from a deductive approach as categories were given to the participants instead of having them write their own.

The use of surveys was chosen as its intention is that of describing the reasons for certain conditions given in a specific event, or identifying standards to compare certain conditions with, or establishing the relations between certain events as it will be further seen in Chapter 4 and Chapter 5 (Cohen et al., 2007; Creswell et al., 2003). Moreover, in those research that include the use of surveys:

> "the individual instance is sacrificed to the aggregate response (which has the attraction of anonymity, non-traceability and confidentiality for respondents)" (Cohen et al., 2007: 207).

Thus, in this section the presentation of the surveys as tools is included with a general overview of their content, the administration and procedure and the response rate respectively, first with the professor survey and then with the student survey. This finally leads to their analysis process.

3.4.1 Professors' survey content

The professor's survey was created by the researcher ad hoc for this study. Moreover, the questions included in each survey were based on previous research questionnaires about English language abilities in students and the perceptions of professors (Ammon & McConnell, 2002; Cohen et al., 2007; Creswell, 2009; Creswell et al., 2003; Evans & Green, 2007; Petric & Czarl, 2003). This previous literature contributed to develop and frame both of the survey questions. The professors' survey was mainly addressed to answer RQ1.1 What

are students' academic written language needs in EME Humanities subjects as seen by professors?. The questions in this survey focused on the following aspects: (1) demographic information about the professors to get a wider picture of them regarding age, gender, level of education, certificates of English, experience teaching with the English language and certificates to teach through English, (2) academic English knowledge from professor's perspective and students' and ability to perform academic written tasks in English, (3) practice of genres in class (4) reported students' strengths and weaknesses in writing, and (5) the support professors receive to be successful when teaching EME subjects (see Appendix C).

The survey included a combination of 30 close and open questions in total. From those 30 questions, there were 13 close questions, 7 open questions and 10 mixed ones with close and open questions integrated. The questions also offered a section for further details or comments to fill in if clarification or more comments were needed. According to Dörnyei (2007), the majority of professional surveys include mainly closed-ended items as this technique does not require much effort from the participants but simply choose from one of the options provided rather than producing any free writing. However, the use of open questions in surveys provide the opportunity to clarify otherwise limited answers and give detailed explanations of their choices if needed in both cases, professors and students, even though the answers might be difficult to categorise, group or compare this way. According to Dörnyei (2003), open-ended questions may provide research with graphic and specific examples, illustrative quotes and lead to issues that had not been considered beforehand. They may sometimes provide greater information than fully quantitative data.

Within the close and open questions, in order to completement them, there were two-tailed questions and Likert scale questions. The two-tailed questions (Brown, 1988) provided three options ranging between *yes, no* or *I don't know/Others* so a certain tendency can be seen in the answers. The questions asked using these included mainly information regarding the participant's background such as gender, having an English certificate, teaching or

learning all subjects in English, the medium of instruction in subjects, study and practice of genres in class, reasons to do that, improvement in assignment and sufficient support on academic literacy.

Those questions that involved the Likert scales (Dörnyei, 2003, 2007) ranging either from a five-category scale from one to five, from strongly agree to strongly disagree, and from always to never so that participants could choose from a variety of options and decide to which way direct their final choice. The questions asked in those scales dealt with collaboration with other professors, support from the English department or the university, students' rate of enjoying learning in English, professors' enjoying teaching in English and their ability to do so academically, students' confidence to write in academic English, importance of writing in EME content subjects, importance of English and academic literacy in English, difficulties or needs in written assignments, solutions for those needs or types of genres required. In addition, each category contained a number of items, these being, Participants' background (n=10), Importance of English and confidence in the area[6] (n=7), Disciplinary genres (n=5), Self-perceived difficulties and needs in academic writing (n=2) and Possible help and support for academic writing (n=6) (see Table 11). Furthermore, it has been previously mentioned in this research the importance given to the English language, therefore, it was decided to include a question related to the role it played in students' learning and future employment. Finally, the survey included parallel questions to those in the learners' survey regarding their perceptions of their students' written abilities.

The online surveys started with an instruction page with relevant information for participants' understanding and procedure to answer the questions. By applying this measure, it was intended to avoid the observer effect (Dörnyei, 2007) also known as the Hawthorne effect. This phenomenon refers to participants involved in a study who perform differently during a task, in this case, completing a survey due to the presence of the researcher. The

[6] The terms "importance" and "confidence" are included within the same category despite the fact they are not synonyms but in future lines of research the corresponding distinction will be made.

information presented in the first page included a kind greeting, an explanation of the research, its purpose, confidentiality, anonymity and use of the data collected. Then, it requested that the participant indicated agreement to be part of the study and finally it displayed contact information of the researcher in case participants wanted to contact her for further details or questions (see Appendix A for complete explanation). After this, participants were automatically directed to the questions that composed the survey.

Based on previous research done for the successful design of the surveys (Dörnyei, 2003, 2007) and along with the research questions of this study, a framework for grouping the questions by categories from the most general to the most specific for both surveys was set as following:

#	Category	Description	Type of question
1	Participants' background	Age, gender, native language, assessment of level prior entering the EME course, levels and certificate of English proficiency and certificate to teach English.	Open questions and close questions, two-tailed questions and Likert scale questions
2	Importance of English and confidence in the area	Enjoying learning or teaching English, confidence to write or teach academic writing, importance of English writing in the subject, importance of academic English in students' future and importance of English in students' future.	Open and close questions, and Likert scale questions

3	Disciplinary genres	Frequency and way of studying and practicing genres in the subject, reasons to study and practice genres in the subject and details of any improvement because of it.	Open questions and close questions, two-tailed questions and Likert scale questions
4	Self-perceived difficulties and needs in academic writing	Areas for improvement in students' written assignments, frequency and level of importance of needs in assignments and possible solutions for those needs.	Open questions and close questions, two-tailed questions and Likert scale questions
5	Possible help and support for academic writing	Possible collaboration of the English department in the subject and details about it, amount of support from the university and general comments on EME.	Open questions and close questions, two-tailed questions and Likert scale questions

Table 11. Framework of categories and description for grouping the survey questions.

Because of the use of different items along the survey, the results obtained allowed to take advantage of various analysis techniques for all the collected data. For instance, by using some closed questions, the responses were easily compared between groups and quicker to code. An example of this was the use of rating scales which facilitated the process more than when using open questions for measurements, although they limited the respondents to certain options only (Cohen et al., 2007; Creswell et al., 2007).

3.4.1.1 Survey administration and procedure

Along this section, the administration and procedure of professors' survey is discussed. This is done so that the reader is provided with an overview of the intricate process that was developed during the whole procedure of administrating them in different stages and also involving more than one country in the study.

The collection of the professors' data obtained through the online surveys took place in March 2020 following the sampling technique (Dörnyei, 2007; Silverman, 2000). This was completed by contacting the same EME professors during the collection of the written assignments, as well as the rest of professors with whom the researcher had been put in contact within the Humanities department at the ITESM. This had been done by using the connections and personal relations created during the researcher employment time at the institution. All professor participants were given access to the online survey through their institutional emails or phones. The choice of software for the elaboration and administratifggon of the surveys in this research was the software and survey application of Survey Monkey (Gozálvez-Catalán, 2020). This tool enabled the user to choose among a series of different options for the creation of diverse items of questions and possible answers.

After their completion, the survey remained secure on the website without access to anyone except for those with whom the researcher had shared the link. The use of an online survey was the right option due to the geographical circumstances and the difficulties for the researcher to apply a paper version in person in Mexico whilst being in Spain. Furthermore, this option also contributed to an easier and friendlier way to distribute the survey and collect data, to handle it for analysis and to be answered by the participants at their convenience (Ammon & McConnell, 2002; Cohen et al., 2007; Evans & Green, 2007). It was also found

extremely useful during the worldwide lockdowns of COVID-19[7] that hindered intercontinental flights and in-person classes at all educational levels.

3.4.1.2 Teacher survey response rate

When sharing an online survey with prospect participants there are a series of circumstances that need to be taken into consideration to get the best possible response rate from them. These are timing, design, presentation of request and follow up (Cohen et al., 2007; Evans & Green, 2007). All of these steps were carefully thought and applied one by one, starting with the timing which was during the beginning of the COVID-19 lockdown in Spain, March 14th, 2020. The idea had always been to create an online survey but, because of the pandemic, HE institutions in Spain and Mexico anticipated the measures taken during this crisis and decided to switch to online learning entirely, increasing this way the completion of education requirements online. This benefited the online availability of the professors at ITESM and the response rate of the surveys.

Emails and messages to complete these professor surveys were sent in March, a time not overwhelmingly busy of the academic year with final exams. These messages included a short presentation of the survey that highlighted the institution for which the researcher was doing the study, Universidad Complutense de Madrid (UCM), and her identity as an ex-professor at ITESM.

The response rate was positive, and only one reminder was needed in very few cases to complete the survey. By the end of March 2020, a total of 113 out of 150 from professors were collected.

[7] The COVID-19 is the infectious disease caused by the most recently discovered coronavirus. This new virus and disease were unknown before the outbreak began in Wuhan, China, in December 2019. COVID-19 is now a pandemic affecting many countries globally (WHO, 2020).

3.4.2 Students' survey content

The students' survey followed the same procedure in terms of structure, content, administration and analysis procedure as the professor's survey with some changes that will be described in this section. First of all, the students' survey was directed to answer the RQ1.2 *What are students' academic written language needs in EME Humanities subjects as seen by the students?* The questions in this survey focused on the following aspects: (1) demographic information about the students to get a wider picture of them regarding age, gender, level of English, reasons to study in English, etc. (2) self-perceived English written language academic English knowledge from professor's perspective and students' and ability to perform academic written tasks in English, (3) importance and practice of genres in class, (4) strengths and weaknesses in writing, and (5) the support students receive to be successful in the completion of their EME assignments. This survey had similar parallel items to the professors' survey focusing on their own perspectives and their reported view on the matter at hand (see Appendix D).

The survey included a combination of 30 close and open questions in total. From those 30 questions, there were 17 close questions, 6 open questions and 7 mixed ones with close and open questions integrated. The questions also offered a section for further details or comments to fill in if clarification or more comments were needed. Within the close and open questions, in order to completement them, there were two-tailed questions and Likert scale questions. The two-tailed questions (Brown, 1988) provided three options ranging between *yes, no* or *I don't know/Others* so a certain tendency can be seen in the answers. The questions asked using these included mainly information regarding the participant's background such as gender, having an English certificate, whether they were learning all subjects in English, study and practice of genres in class, improvement in assignment because of it and sufficient support on academic literacy.

Those questions that involved the Likert scales (Dörnyei, 2003, 2007) ranging either from a five-category scale from one to five, from strongly agree to strongly disagree, and from always to never so that participants could choose from a variety of options and decide to which way direct their final choice. The questions asked in those scales dealt with support from the English department or the university, students' rate of enjoying learning in English, professors' enjoying teaching in English and their ability to do so academically, students' confidence to write in academic English, importance of writing in EME content subjects, importance of English and academic literacy in English, difficulties or needs in written assignments, solutions for those needs or types of genres required (see Table 11). Participants' background (n=9), Importance of English and confidence in the area (n=10), Disciplinary genres (n=3), Self-perceived difficulties and needs in academic writing (n=2) and Possible help and support for academic writing (n=6). Furthermore, it has been previously mentioned in this research the importance given to the English language, therefore, it was decided to include a question related to the role it played in students' learning and future employment. This question was divided between, first academic literacy in English and then English in general. Finally, the survey included parallel questions to those in the professors' survey regarding their written abilities.

The online surveys started with an instruction page with relevant information for participants' understanding and procedure to answer the questions. The information presented in the first page included a kind greeting, an explanation of the research in collaboration with their teachers, its purpose, confidentiality, anonymity and use of the data collected. Then, it requested that the participant indicated agreement to be part of the study and finally it displayed contact information of the researcher in case participants wanted to contact her for further details or questions (see Appendix B for complete explanation). After this, participants were automatically directed to the questions that composed the survey.

The framework for grouping the questions by categories followed the same procedure as the one employed for the professors' survey (see Table 11 above).

3.4.2.1 Survey administration and procedure

Along this section, the administration and procedure of students' survey is discussed. This is done so that the reader is provided with an overview of the intricate process that was developed during the whole procedure of administrating them in different stages and also involving more than one country in the study.

The collection of the students' data through the online surveys took place in April 2020. This was completed by contacting the same EME professors during the collection of the written assignments, as well as the rest of professors with whom the researcher had been put in contact within the Humanities department at the ITESM. This had been done by using the connections and personal relations created during the researcher employment time at the institution. All student participants were given access to the online survey through their institutional online academic platform (Blackboard) via their professors. The choice of software for the elaboration and administration of the surveys in this research was the software and survey application of Survey Monkey (Gozálvez-Catalán, 2020). This tool enabled the user to choose among a series of different options for the creation of diverse items of questions and possible answers. After their completion, the survey remained secure on the website without access to anyone except for those with whom the researcher had shared the link via.

3.4.2.2 Student survey response rate

The same steps as for the professors' survey were followed when sharing the students' online survey. Students were learning continuing with their lessons through online platforms and therefore were used to completing the professors' requirements this way. In addition,

since they were already in direct online contact with their professors, these included the link to the students' surveys in their institutional platform setting a specific date and time to complete it. After completion, students were requested to share a screenshot of its completion with their professors to get a few points in the participation percentage of their subject final grade. This increased and benefited the response rate of this study.

Students received emails and messages from their professors to complete these surveys during the month of April, a time not overwhelmingly busy of the academic year with final exams. These messages included a short presentation of the survey that highlighted the institution for which the researcher was doing the study, Universidad Complutense de Madrid (UCM), and her identity as an ex-professor at ITESM.

The response rate was positive, and only one reminder was needed in very few cases to complete the survey. By the end of April 2020, a total of 117 out of 130 answers from students.

3.4.3 The analysis process of surveys

Regarding the process of obtaining the quantitative data in the surveys, when answers for each question and option provided in both surveys was generated through the software employed, these were used to compare results between students and professors through cross-tabulation (Norris & Ortega, 2000) in order to get a better idea of each group's perceptions. After collecting all this information, the data from the online survey application was exported and then all the data from the participants was put in one data file. Those survey questions which were similar for both students and professors, although adjusted from their own perspective, were highlighted to be able to make easier comparisons in further steps.

In terms of the qualitative data obtained through the open questions in the surveys, once these were analysed, a series of ideas, topics and themes were identified and noted through content analysis (Dörnyei, 2003) to support the quantitative results of the surveys and of the analysis of assignments (see Table 12). It is worth mentioning that comments or transcriptions from participants were not edited in any way in order to be as entirely faithful to their views as possible, and they were used to support the quantitative data and add emphasis. The purpose of collecting responses to open questions was to have a better and wider understanding of students and professors' perspectives.

Data analysis	Data collection instrument
Quantitative	Surveys and close-ended questions in the surveys.
Qualitative	Open-ended questions in the surveys

Table 12. Data collection instruments and data analysis

Once the transcription of the answers was associated to their corresponding category and the comments from the open-ended questions included in the Excel, spreadsheets were created and formatted in tables to visualise any relevant information. By creating those tables for the display of the data analysed, a general overview of the results was presented in order to use them to support or explain in further detail the quantitative data. The use of actual quotes from the participants as well as excerpts from the assignments was also considered relevant for this part of the analysis and will be included later on in the interpretation of the results (see Chapter 4). A variety of perspectives were expressed by the respondents during the open-ended questions or further details section and in the assignments. This way, all the concentrated data was used to compare the participants' responses and comments with those

of the written assignments, establish comparisons between the answers, make interpretations of the results and fill in gaps in this study.

This concludes the explanation of the research tools of surveys. Along the next section a similar process is presented with the description of the writings as a data source for this study.

3.5 Data source: Writings

The main data corpus for the current study was students' written assignments as part of the requirements of their EME courses. These assignments were key to explore students' writing in depth, better understand their responses to the questions in the surveys, and find particular examples of their writing needs in academic language. The aim of doing this was to provide an answer to RQ1.3. The analytical framework employed in this research (see section 4.5.3 for further details) allowed for an analysis of the each of the different genres in terms of content, task requirements, comprehensibility, coherence and cohesion which is the objective of this research. As a result, the analytical framework requires to employ various steps: To begin with, this section presents the writings content and their collection procedure for a general understanding. Then, a first individual analysis of each text employing the rating scale is explained and next by other raters. After this, a compilation of all the results obtained was done. Finally, extracts from the texts were taken to support the results.

3.5.1 Writings content

A total of three subjects participated in the present study with a final number of 100 written assignments. The subjects where these assignments were collected are found among the Humanities branch and are called *Music and Society (M&S), Music Appreciation (M&A)*

and *Ethics, Person and Society (EP&S)*. These assignments analysis was performed through FA, therefore, it is of extreme relevance to know the specific requirements regarding content and format students had to follow in order to complete them. As a result, more details about each subject and the writing requirements are provided next:

A. The major aims of the programme of *M&S* were to increase the aesthetic awareness and understanding of the world by studying historical contexts, studying musical works, reading texts, using diverse analysis tools, attending concerts and musical events and conducting research projects through the English language. The essays belonging to this subject consisted of argumentative essays where students were asked to write about a topic of their choice related to how music had influenced society. Students were given two months to work in pairs or groups of 3 on their writings outside of class in agreement with Hinkel (2004) and submit their final work which was collected in this research. Each essay had to follow a clearly defined format of cover, index, introduction, hypothesis, conceptual framework, methodology, justification, argumentation, conclusion and references with APA style. These essays collected made the amount of n=36 papers that ranged from 10 to 13 pages including cover page, index and references in accordance with the length of essays explained in Chapter 2 section *2.4.2 Genres in academic disciplines*. They had an average frequency of 1538,86 per 1000 words per essay.
B. Upon completion of the *M&A* course, the students were able to appreciate the influence of historical evolution on musical composition and on the comprehension of the structure of music. Through the use of the English language, students developed the capacity of criticism and analysis by studying the vocabulary, genres, forms and styles of western 17th to 21st century music in relation to post-modern musical production. They also attended events and actively participated in a concert through an activity such as playing music, visual art creation, stage management or

research work. Regarding the essays of this subject, after a careful first examination of them the amount of papers was reduced to n=9. The decision to do this was based on the fact that the rest of the essays included too many pages with images of information related to strophes of music that was not relevant for this research. This made the reader focus on the images and not the written information. Furthermore, images were not explained and therefore did not use many narrative structures that were the important information needed for this research. It seemed that those writings had not followed the instructions correctly. These essays had to present an expository design and be completed in groups of 2 to 3 members. Their topic was the same for all of them, students were asked to visit a specific art museum and then provide information of the different periods of art. Then students had to choose representative art pieces for each period and associate a piece of music of their choice to them (section where the discarded essays included whole pages of the images of strophes without explanation). This had to be done while also explaining their arguments and personal view supported with information from the authors. Students were given two months to work on their writings outside of class in agreement with Hinkel (2004) and submit their final work which was collected in this research. In terms of structure, these essays had to follow a format that included a cover, introduction, development, conclusion and references. Their pages ranged from 10 to 11 pages in accordance with the length of essays explained in Chapter 2 section *2.4.2 Genres in academic disciplines* with an average frequency of 6612,11 per 1000 words per essay.

C. Finally, in the subject *EP&S*, students comprehended the importance and foundations of ethics in today's world, allowing them to make responsible decisions in order to complete their personal life project and to learn how to interact constructively in their social environment. All of this done by using English as the main language. In terms of its assignments, n=55 reports were collected from the

subject of EP&S. Students were given one month to work on their writings outside of class in agreement with Hinkel (2004) and submit their final work which was collected in this research. These essays had to present an analysis design and were to be completed individually by students. In terms of format, these reports had to be short (around 1000 words) and include references at the end. In order to complete their reports, students were provided with two articles to choose from and analyse one of them explaining what the author was trying to explain, its purpose and point of view, the articles were called *The Young Karl Marx* and *Censorship Today: Violence, or Ecology as a New Opium for the Masses.* The writings were from 1 to 3 pages long in accordance with the length explained in Chapter 2 section *2.4.2 Genres in academic disciplines*. These essays contained 5026,85 average frequency per 1000 words per essay (see Table 13).

Humanities subject	**Number of essays per subject**	**Range of pages per essay**	**Average frequency (per 1000 words) per essay [8]**	**Type of assignment**	**Individual or group assignment**
Music and Society (M&S)	n=36	10 – 13 pages	1538,86	Argumentation	Group

[8] Numbers have been normalized due to the fact that the writings vary regarding amount of words, presenting the average frequency of words per essay (Biber, 1993).

Music Appreciation (M&A)	n=9	10 – 11 pages	6612,11	Exposition	Group
Ethics, person and society *(EP&S)*	n=55	1 – 3 pages	5026,85	Analysis	Individual
Total	n=100				

Table 13. General outline of the main corpus of written assignments from undergraduate students at ITESM

Their syllabi are developed through a semester either from August to December or January to May and it is available and constantly updated on the ITESM website (Tecnológico de Monterrey, 2020b) (see Chapter 2 section *2.2.4 Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM)*). These subjects were chosen because they were part of the percentage of credit hours in EME within the degree of *Digital Music Production* (50%) and because of the researcher's closeness to the staff involved in this degree. Furthermore, the amount of EME subjects available at the ITESM CEM were limited and not all professors were willing to participate in this research. Each one of these subjects has its own aims as presented in their syllabi (Tecnológico de Monterrey, 2020c) and will be explained next. Moreover, this research could have been longitudinal by analysing the writing progress of specific students, but, since some of those writings were completed in groups, this does not allow for a longitudinal or case research.

These three subjects followed the same type of instruction of EME, as well as a continuous assessment structure, which included the completion of two main written assignments as well as other oral or written assignments not relevant for this research. During these courses, students were offered 3 hours of in-class teaching per week and 5 hours a week

of independent work that included, but was not limited to, reading academic papers, researching and answering activities, and completing their written assignments. It is noteworthy to mention that every student in these courses was given the opportunity to attend one-to-one tutorials in person or online when necessary, during which their professors would give them constructive feedback on the syllabus seen in class, and where they had the chance to clarify aspects or ask more questions about the course or anything they might struggle with, not necessarily on language. Nevertheless, in those particular cases, if the language issue required a deeper understanding of L2, students would be redirected to the language department. As a result, students would make use of all of those available options whenever they considered necessary. Professors on occasions would also dedicate a lesson on how to express ideas in a more academic way, although no specific focus on genre was mentioned.

In regard to the process followed in those subjects, once assignments had been completed and submitted, written corrective feedback was provided by professors, which included details and comments on their studied content and source materials for future improvements, as well as a final grade for the assignment. Final grades or feedback on these assignments were not collected for this research and are beyond the scope of this study.

Finally, the essays were included in this research verbatim, that is, exactly as they were originally written by the learners without any edition whatsoever. In this way, they are kept faithful to their originals in order to explore and analyse students' academic written language needs.

3.5.2 Writings collection procedure

The assignments in this study needed to meet specific conditions in order to perform this research focused on academic needs in students' writings in EME subjects. Therefore, they were identified through professors according to specific characteristics within the

Humanities environment at ITESM: professors teaching at least one EME content subject at undergraduate level and, within these courses, professors would have to be requesting students to write assignments of academic nature as part of their course assessment in order to gather the necessary number of academic texts. Consequently, the main sampling approach (Dörnyei, 2007) employed for this research was purposive sampling (Silverman, 2000).

The Humanities branch was selected due to the researcher's proximity to it since she was an employee in the Language Department at the ITESM at that time and was in contact with this branch on a daily basis. The professors were easy to meet and contact, as well as extremely willing to participate in this research. However, a first attempt tried to find professors within the language department that taught EME subjects, unfortunately without any success. Because of this, the researcher decided to personally contact her superiors at the institution, explain to them the purpose of this research and these gladly provided her with the contact information of other deans in Humanities who were involved in these types of subjects. Through this process, it was learnt that other disciplines such as music, society or history, were adopting EME in various subjects. After contacting them and explaining the project again, the researcher was led to some of these EME professors.

When it comes to writing collection, this process spread over a period of three months, September to December during the academic year of 2019/2020. These assignments were written by students during the previous semester of the academic year 2018/2019 as part of their subject assessment. Those professors agreed to submit their students' written assignments for research purposes via flash drive. After a first revision of them, the final total number of writings to analyse amounted to 100.

3.5.3 Writings analysis: The rating scale

The analytical framework used for the present analysis of the written assignments is the rating scale proposed by Kuiken and Vedder's (2017) as part of the model of FA. This rating scale was inspired by the general descriptors provided by the CEFR (Common European Framework of References for Languages) as illustrated in Table 14.

PROFICIENT USER	C2	Can understand with ease virtually everything heard or read. Can summarise information from different spoken and written sources, reconstructing arguments and accounts in a coherent presentation. Can express him/herself spontaneously, very fluently and precisely, differentiating finer shades of meaning even in more complex situations.
	C1	Can understand a wide range of demanding, longer texts, and recognise implicit meaning. Can express him/herself fluently and spontaneously without much obvious searching for expressions. Can use language flexibly and effectively for social, academic and professional purposes. Can produce clear, well-structured, detailed text on complex subjects, showing controlled use of organisational patterns, connectors and cohesive devices.
INDEPENDENT USER	B2	Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialisation. Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.
	B1	Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. Can deal with most situations likely to arise whilst travelling in an area where the language is spoken. Can produce simple connected text on topics which are familiar or of personal interest. Can describe experiences and events, dreams, hopes & ambitions and briefly give reasons and explanations for opinions and plans.
BASIC USER	A2	Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment). Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. Can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.
	A1	Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type. Can introduce him/herself and others and can ask and answer questions about personal details such as where he/she lives, people he/she knows and things he/she has. Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help.

Table 14. Common reference levels for English (Council of Europe, 2022)

This scale is characterized by a strong relationship between being able to complete the task successfully (task fulfilment) and using the correct grammatical and lexical structures necessary for its genre (appropriateness of linguistic output) (Nuzzo & Bove, 2020). The reasons why this rating scale stands as the best analytical tool for this research include the following: (1) the focus is on adequacy and task fulfilment, thus, lexical and grammatical aspects are covered as well as content, format and comprehensibility, (2) it may help content teachers with aspects that maybe had not been considered beforehand such as genre characteristics through the dimensions of content and task requirements. (3) The number and length of assignments were significant and therefore suitable to analyse with a rating scale, (4) the use of rubrics in soft applied disciplines is a common tool to be employed (Swarta et al., 2017), (5) all writings were differently written depending on the students' style and expressing thoughts so there was not a simple correct answer to provide, (6) it was a manageable scale to be used by professors and raters, and (7) specific criteria to be graded was clearly set and subjectivity was avoided through a clear description of each dimension to be assessed.

The rating scale includes a series of requirements to measure learners' FA, which are (1) independence of FA descriptors and explanation of them; (2) deconstruction of relevant components of FA (content, task requirements, comprehensibility, coherence and cohesion); (3) objective and countable scale descriptors (from 1 to 6); and (4) applicability both for expert and non-expert raters of FA (Kuiken & Vedder, 2017) (see Chapter 2 for further details). It uses a six-point Likert scale focusing on the relevance, quality, quantity and manner of the message sent from writer A to interlocutor B (Grice, 1975; De Jong et al., 2012). By taking this into consideration, the scale includes four dimensions to be assessed, these being (1) content, (2) task requirements, (3) comprehensibility and (4) coherence and cohesion. An example of one of the dimensions along with its descriptors and measurement is seen in Table 15.

Task requirements: Have the task requirements been fulfilled successfully (e.g. genre, speech acts, register)?					
1	2	3	4	5	6
None of the questions and the requirements of the task have been answered.	Some (less than half) of the questions and requirements of the task have been answered.	Approximately half of the questions and requirements of the task have been answered.	Most (more than half) of the questions and the requirements of the task have been answered.	Almost all the questions and the requirements of the task have been answered.	All the questions and the requirements of the task have been answered.

Table 15. Task requirements dimension of the FA rating scale (Kuiken & Vedder, 2017)

To adapt this rating scale to the needs of the current research, a change (also suggested by Herraiz-Martinez & Alcón-Soler (2019) and Charolles's (1995)) was made to the original rating scale. It consists of dividing the fourth dimension of coherence and cohesion into two, grading, on the one hand coherence and, on the other hand, cohesion, for the complete original rating scale please see Appendix E. This decision was derived from a piloting process of the rating scale which help discover that texts can be coherent but not cohesive and vice versa. To be able to distinguish these two textual features, which are crucial for EME students, both were treated as separate aspects.

A further detailed explanation of each dimension is offered next. Focusing on the dimension of **content** (1), it takes into consideration the adequacy of the number and type of ideas provided in the text as well as their consistency and relevance to the general topic, regardless of the specific requirements of the task to be completed. The (2) dimension of **task requirements** focuses on the specific requirements and instructions of the task to be completed as well as the adequacy of the message transmitted by the writer A to the reader B, particularly in terms of genre, register, and speech acts. In other words, it refers to those language features that are key to establish the tone and level of formality in an assignment. Words used specifically within the discipline of study or the academic setting. Some examples of this may include the use of passive voice, subject-specific or

specialised lexicon, etc. The (3) **comprehensibility** dimension takes into account the extent to which the message of the writer A turns out to be adequate and comprehensible for a particular reader B. Then, the (4) **coherence** dimension refers to the adequacy of the message of the writer A for the interlocutor B regarding the use of coherence breaks and structure (Kuiken & Vedder, 2017, 2018). In other words, coherence refers to the elements used for the, in this case, formal appearance of a written piece of work for presenting and organizing the ideas. Some examples of this in an assignment may be a cover, an index, tables, paragraphs, references, etc. Finally, and similarly to the previous dimension, the (5) **cohesion** dimension refers to the adequacy of the message of the writer A for the interlocutor B regarding the use of conjunctions, number of repetitions and cohesive ties. (Kuiken & Vedder, 2017, 2018). In other words, cohesion refers to the way sentences and phrases are combined and used within sections and throughout the entire assignment. This is often done by including connectors in formal and academic discourses (see Figure 5).

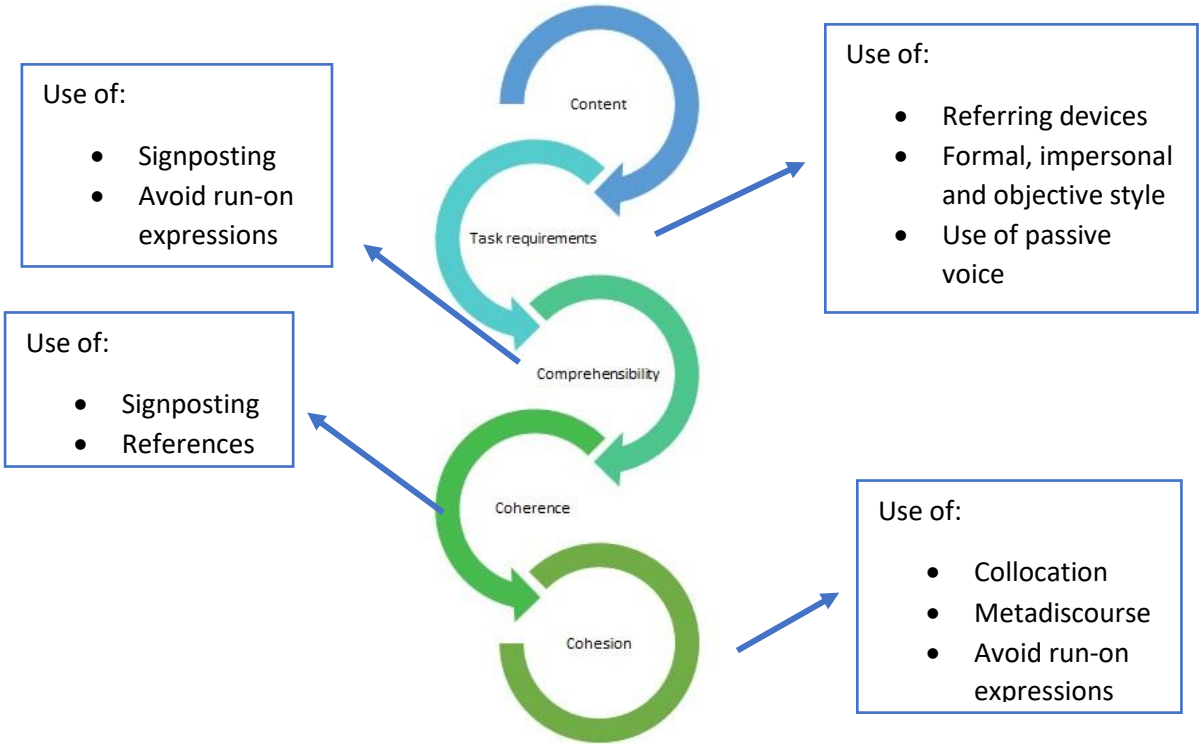


Figure 5. Adaptation and implementation of FA rating scale (Kuiken & Vedder, 2018)

Furthermore, as a brand-new contribution to the rating scale and to adjust this rating scale to the needs of this research, the five dimensions were complemented with the analytical framework of academic writing characteristics created for this research and presented in Chapter 2. Therefore, characteristics such as avoid run-on expressions and signposting were included in the comprehensibility dimension. Then the task requirement dimension was complemented by using referring devices, formal, impersonal and objective style, use of passive voice or tentative language. Signposting and use of references, were added to the coherence dimension and collocation, avoid run-on expressions and metadiscourse to the cohesion dimension, for the complete adapted rating scale please see Appendix F. This adaptation contributed to a more effective analysis of the written assignments and an easier understanding of what to look for in them by the raters. Hence, the following images present the original rubric from Kuiken and Vedder (2017) and the adapted rubric employed in this research.

Content: Is the number of information units provided in the text adequate and relevant?

1	2	3	4	5	6
The number of ideas is *not at all adequate* and insufficient and the ideas are unrelated to each other.	The number of ideas is *scarcely adequate* and the ideas lack consistency.	The number of ideas is *somewhat adequate*, even though they are not very consistent.	The number of ideas is *adequate* and they are sufficiently consistent.	The number of ideas is *very adequate* and they are very consistent to each other.	The number of ideas is *extremely adequate* and they are very consistent to each other.

Task requirements: Have the task requirements been fulfilled successfully (e.g. genre, speech acts, register)?

1	2	3	4	5	6
None of the questions and the requirements of the task have been answered.	*Some (less than half)* of the questions and the requirements of the task have been answered.	*Approximately half* of the questions and requirements of the task have been answered.	*Most (more than half)* of the questions and the requirements of the task have been answered.	*Almost all* the questions and the requirements of the task have been answered.	*All* the questions and the requirements of the task have been answered.

Comprehensibility: How much effort is required to understand text purpose and ideas?

1	2	3	4	5	6
The text is *not at all comprehensible* Ideas and purposes are unclearly stated and the efforts of the reader to understand the text are ineffective.	The text is *scarcely comprehensible*. Its purposes are not clearly stated and the reader struggles to understand the ideas of the writer. The reader has to guess most of the ideas and purposes.	The text is *somewhat comprehensible*. Some sentences are hard to understand at a first reading. A second reading helps to clarify the purposes of the text and the ideas conveyed, but some doubts persist.	The text is *comprehensible*. Only a few sentences are unclear but are understood, without too much effort, after a second reading.	The text is *easily comprehensible* and reads smoothly. Comprehensibility is not an issue.	The text is *very easily comprehensible* and highly readable. The ideas and the purpose are clearly stated.

Coherence: Is the text coherent (e.g. organization, structure, topics)?

1	2	3	4	5	6
The text is *not at all coherent*. Unrelated progressions and coherence breaks are very common. The writer does not use any anaphoric device.	The text is *scarcely coherent*. The writer often uses unrelated progressions; when coherence is achieved, it is often done through repetitions. Only a few anaphoric devices are used. There are some coherence breaks.	The text is *somewhat coherent*. Unrelated progressions and/or repetitions are frequent. More than two sentences in a row can have the same subject (even when the subject is understood). Some anaphoric devices are used. There can be a few coherence breaks.	The text is *coherent*. Unrelated progressions are somewhat rare, but the writer sometimes relies on repetitions to achieve coherence. A sufficient number of anaphoric devices is used. There may be some coherence breaks.	The text is *very coherent*: when the writer introduces a new topic, it is usually done by using connectives or connective phrases. Repetitions are very infrequent. Anaphoric devices are numerous. There are no coherence breaks.	The writer ensures *extreme coherence* by integrating new ideas in the text with connectives or connective phrases. Anaphoric devices are used regularly. There are few incidences of unrelated progressions and no coherence breaks.

Cohesion: Is the text cohesive (e.g. cohesive devices, conjunctions, linkers)?

1	2	3	4	5	6
The text is *not at all cohesive*. Connectives are hardly ever used and ideas are unrelated.	The text is *not very cohesive*. Ideas are not well linked by connectives, which are rarely used.	The text is *somewhat cohesive*. Some connectives are used, but they are mostly conjunctions. text is *somewhat cohesive*. Some connectives are used, but they are mostly conjunctions.	The text is *cohesive*. The writer makes good use of connectives, sometimes not limiting this to conjunctions. makes good use of connectives, sometimes not limiting this to conjunctions.	The text is *very cohesive* and ideas are well linked by adverbial and/or verbal connectives.	The structure of the text is *extremely cohesive*, thanks to a skillful use of connectives (especially linking chunks, verbal constructions and adverbials), often used to describe relationships between ideas.

Table 16. Kuiken and Vedder (2017) original FA rating scale

Content: Is the number of information units provided in the text adequate and relevant?

1	2	3	4	5	6
The number of ideas is *not at all adequate* and insufficient and the ideas are unrelated to each other.	The number of ideas is *scarcely adequate* and the ideas lack consistency.	The number of ideas is *somewhat adequate*, even though they are not very consistent.	The number of ideas is *adequate* and they are sufficiently consistent.	The number of ideas is *very adequate* and they are very consistent to each other.	The number of ideas is *extremely adequate* and they are very consistent to each other.

Task requirements: Have the task requirements been fulfilled successfully (e.g. genre, speech acts, register)? Use of referring devices, formal, impersonal and objective style, passive voice and tentative language.

1	2	3	4	5	6
None of the questions and the requirements of the task have been answered.	*Some (less than half)* of the questions and the requirements of the task have been answered.	*Approximately half* of the questions and requirements of the task have been answered.	*Most (more than half)* of the questions and the requirements of the task have been answered.	*Almost all* the questions and the requirements of the task have been answered.	*All* the questions and the requirements of the task have been answered.

Comprehensibility: How much effort is required to understand text purpose and ideas? Use of signposting and avoid run-on expressions.

1	2	3	4	5	6
The text is *not at all comprehensible* Ideas and purposes are unclearly stated and the efforts of the reader to understand the text are ineffective.	The text is *scarcely comprehensible*. Its purposes are not clearly stated and the reader struggles to understand the ideas of the writer. The reader has to guess most of the ideas and	The text is *somewhat comprehensible*. Some sentences are hard to understand at a first reading. A second reading helps to clarify the purposes of the text and the ideas conveyed, but some doubts	The text is *comprehensible*. Only a few sentences are unclear but are understood, without too much effort, after a second reading.	The text is *easily comprehensible* and reads smoothly. Comprehensibility is not an issue.	The text is *very easily comprehensible* and highly readable. The ideas and the purpose are clearly stated.

Coherence: Is the text coherent (e.g. organization, structure, topics)? Use of signposting and references.

1	2	3	4	5	6
The text is *not at all coherent*. Unrelated progressions and coherence breaks are very common. The writer does not use any anaphoric device.	The text is *scarcely coherent*. The writer often uses unrelated progressions; when coherence is achieved, it is often done through repetitions. Only a few anaphoric devices are used. There are some coherence breaks.	The text is *somewhat coherent*. Unrelated progressions and/or repetitions are frequent. More than two sentences in a row can have the same subject (even when the subject is understood). Some anaphoric devices are used. There can be a few coherence breaks.	The text is *coherent*. Unrelated progressions are somewhat rare, but the writer sometimes relies on repetitions to achieve coherence. A sufficient number of anaphoric devices is used. There may be some coherence breaks.	The text is *very coherent*: when the writer introduces a new topic, it is usually done by using connectives or connective phrases. Repetitions are very infrequent. Anaphoric devices are numerous. There are no coherence breaks.	The writer ensures *extreme coherence* by integrating new ideas in the text with connectives or connective phrases. Anaphoric devices are used regularly. There are few incidences of unrelated progressions and no coherence breaks.

Cohesion: Is the text cohesive (e.g. cohesive devices, conjunctions, linkers)? Use of metadiscourse, collocations and avoid run-on expressions.

1	2	3	4	5	6
The text is *not at all cohesive*. Connectives are hardly ever used and ideas are unrelated.	The text is *not very cohesive*. Ideas are not well linked by connectives, which are rarely used.	The text is *somewhat cohesive*. Some connectives are used, but they are mostly conjunctions. text is *somewhat cohesive*. Some connectives are used, but they are mostly conjunctions.	The text is *cohesive*. The writer makes good use of connectives, sometimes not limiting this to conjunctions. makes good use of connectives, sometimes not limiting this to conjunctions.	The text is *very cohesive* and ideas are well linked by adverbial and/or verbal connectives.	The structure of the text is *extremely cohesive*, thanks to a skillful use of connectives (especially linking chunks, verbal constructions and adverbials), often used to describe relationships between ideas.

Table 17. This research adapted FA rating scale (adapted from Kuiken & Vedder (2017))

By reviewing both rubrics, the contribution of this research to the FA scale can be appreciated as it now becomes more specific to analyse different types of written genres. The use of this adapted rating scale is justified in the analysis of the three different types of written assignments as the decision was based on a previous study assessing FA with this rating scale (Nuzzo & Bove,2020) in which both the results obtained and the raters confirmed that the scale was successful for assessing the FA of different types of written texts (see Chapter 2 section *2.5.2 Studies assessing FA*).

3.5.4 Writings analysis

This particular section focuses on the analysis of writings. This analysis focuses on lexical and grammatical aspects as well as format, content and comprehensibility in order to obtain data that would shade some light in the students' academic written needs specifically in argumentative, expositive and analysis assignments (see *Chapter 3* section *3.4.2 Genres in academic disciplines*).

The analysis procedure of the corpus included first an omission of the names and ID numbers of the participants in all the assignments. Then, there was a coding process of each one of the assignments depending on which subjects they were from (M&S, M&A and EP&S) and their numerical order. An acronym regarding the performance of FA dimensions using the rating scale was also provided (Content = CT, Task Requirements = TR, Comprehensibility = CY, Coherence = C1 and Cohesion = C2) as well as obtaining an average number of all the dimensions. According to this, the first text from Music & Society would be coded as "M&S1" and if it focused on Task Requirements would be coded "M&S1, TR". These were key to undertake further analysis of the data including correlations to identify strengths or weaknesses within the writings through the employment of the FA rating scale.

Once this first procedure was completed, the next step of writing analysis started. Thus, a close scrutiny of the text had to be done in order to obtain the most optimal results, this step, though, was very time-consuming but necessary for this research. Therefore, a careful revision of the corpora was conducted without the use of a software. This type of analysis is at odds with the more top-down kind of process-based analysis common to the genre approach to text analysis, where the starting point is with the macrostructure of the text with a focus on larger units of texts rather than sentence-level, lexico-grammatical patterning (Swales, 2002). Other methods for the analysis were considered such as the use of a concordancing software for displaying the key-word-in-context or the use of a tagging software. However, these were discarded because concordancing limits the analysis to an atomized, bottom-up type of investigation in the form of concordance and keyword searches of the corpus data (Flowerdew, 2005). And a tagging software was not the best choice either since it was constrained by several factors. The discourse-based

tagging would have to be done manually, therefore, almost impossible to carry it out on a corpus with millions of words (Flowerdew, 2005). In addition, this procedure used an inductive approach as categories were created once writings were first examined.

In order to obtain the performance score for each dimension within the rating scale, each dimension was given a point value from 1 to 6. For instance, in the dimension of content, 1 point is given when the number of ideas is not at all adequate and insufficient and the ideas are unrelated to each other; 2 when it is scarcely adequate and the ideas lack consistency; 3 when it is somewhat adequate, even though they are not very consistent; 4 when it is adequate and they are sufficiently consistent; 5 when it is very adequate and they are very consistent to each other; and 6 when it is extremely adequate and they are very consistent to each other; and similarly with rest of the dimensions (see Table 18).

Content: Is the number of information units provided in the text adequate and relevant?					
1	2	3	4	5	6
The number of ideas is *not at all adequate* and insufficient and the ideas are unrelated to each other.	The number of ideas is *scarcely adequate* and the ideas lack consistency.	The number of ideas is *somewhat adequate*, even though they are not very consistent.	The number of ideas is *adequate* and they are sufficiently consistent.	The number of ideas is *very adequate* and they are very consistent to each other.	The number of ideas is *extremely adequate* and they are very consistent to each other.

Table 18. Content dimension of the FA rating scale (Kuiken & Vedder, 2017)

Each one of the assignments received a score for each of the dimensions, then these scores were added and then divided by 5 because that is the number of dimensions in the scale. In this way, each writing was given a final average performance score for FA.

The final average scores of writings were included into a database to perform the corresponding statistical analyses by using means, standard deviations (SD) and ranges in order to determine correlations among raters and subjects. This quantitative analysis was then complemented by a qualitative one trying to explore learners' performance in

terms of their strengths and limitations in each of the dimensions (content, task requirements, comprehensibility, coherence and cohesion).

The implementation of this FA rating scale required a series of raters to ensure its validity and reliability. Consequently, the writing rating process was carried out by 3 raters in total: the main was the researcher, and two other raters. This way, the study took into account interrater reliability and provided, an empirical way to avoid ambiguity in the interpretations or compromise the validity and reliability of the rating scale itself. The two other raters were university English professors. Since these two raters had no previous experience using the rating scale, training sessions to teach them how to use it were provided by the researcher.

The training consisted of two in-person three-hour sessions each in a classroom. During these training sessions, raters were introduced to the three types of writings, what they were about and what to expect. They got familiarised with the rating scale, how to use it and how to decide one score or another. They practiced on a sample first and individually gave a grade while also having a discussion in order for all raters to agree on the same standards holistically. Finally, raters were explained the coding system and how to add the final numbers. The researcher offered her further assistance throughout the entire coding and rating processes. During the sessions raters started to work on the assignments and questions were addressed whenever necessary.

During the training sessions, the raters received all the writings already coded through a flash drive, along with an Excel document where they could include the scores for each assignment. They were given a month to complete them and return them in a flash drive. The final writing scores assigned by each one of the raters were then included into the database in order to perform a final comparison between the three raters. This whole process was considered a first pilot study from where to make further necessary adjustments. These adjustments were in regard to the five dimensions complemented by the academic writing characteristics from the analytical framework presented in Chapter 2. This way raters had more clear characteristics to identify and look for in the written assignments, thus, provide a more accurate rate to each of them. Once these adjustments were made, raters were contacted again and underwent a final analysis of the 100 written

assignments following the same procedure as in the pilot study but with other two in-person three-hour sessions where they were given further details about the analytical framework to support the rating scale.

Finally, excerpts from the writings regarding the dimensions analysed were kept during the process of analysis in order to be used to illustrate and support the quantitative results of the analysis (see *Chapter 5 Analysis of results and discussion of corpus 2: students' assignments*). These extracts contained needs or areas of improvement in assignments and were used as visual aids to support or explain the findings in this study as well as to reinforce the quantitative data of comments mentioned by professors and by students in their respective surveys, for instance, choice of voice (formal - informal), or use of personal pronouns, among others (see Table 19).

Data analysis	Data collection instrument
Quantitative	Written assignments analysed through the rating scale
Qualitative	Written assignments extracts

Table 19. Data collection instruments and data analysis

3.6 Ethical considerations

In collaboration with ITESM and its code of ethics (Tecnológico de Monterrey, 2020a), approval to conduct the research was applied for and granted by the university prior to collecting the data through the researcher's superiors at the institution after explaining this research project for the current doctoral thesis.

Extra efforts throughout this qualitative and quantitative research were made in order to protect the participants' identity from being used for negative purposes and avoid privacy issues. The steps followed for this purpose were, first, to obtain students' and teachers' agreement without imposing upon them by explaining in detail the purposes of the study via conversations, explanatory emails and the first page of the online surveys

(Dörnyei, 2007; Norris, & Ortega, 2000). Secondly, the participants' confidentiality was kept by removing their real names and identification numbers when they were included as appendices in this study (Creswell, 2009). And in the third place, a friendly attitude before, during and after the collection of this data was kept so participants would feel more comfortable with this research (Creswell, 2007). In addition to this, the researcher's contact information was always available in case they had any questions or concerns about it.

This research did not have any harmful consequences on the participants who were freely volunteering without feeling any pressure and were based on informed consent (Cohen et al., 2007; Creswell, 2009; Dörnyei, 2003, 2007; Pérez-Paredes, 2020). Furthermore, all participants anonymously involved during the study were aware that they had the right to refrain from participation and to withdraw from the process at any point without any negative consequences. For the purpose of protecting their identity, none of the participants were required to write or include their personal details at any stage of the process and were informed of the approximate time needed to complete the questionnaire. The importance of their participation in the project was emphasized and their feedback appreciated. Finally, all participants were treated with respect at all times and thanked for their participation at the conclusion of the online survey, which was closed after the collection of all data. There is no possibility of any participant as individuals to be linked with the data, the information was regarded as strictly confidential and was held securely until the end of the research. As an example of the treatment given to the data protection of the participants, and for the sake of anonymity, writings were given a code (see section *4.5.4 Writings analysis*) which also contributed to a better categorization and analysis of the results.

3.7 Chapter summary

This chapter has highlighted the methodology designed for this research. It started by presenting the RQs again and how they would be answered in this study. Next, a presentation of the participants involved was included. Then, the methodological

approach undertaken with triangulation and a mixed-method design provided a deeper understanding of the paths taken. This section was followed by the description of, on the one hand, the instruments implemented to gather the data along the research (surveys) with a careful examination of the collection procedures and the analysis process, and, on the other hand, the data source collected (writings). This last section followed a similar procedure in terms of presenting the writings, the collection procedure and both the pilot study and the final analysis with special emphasis on the rating scale as a tool to analyse them. This chapter concluded with a final section dedicated to ethical considerations.

As a result, this chapter contributed to the understanding of the writing practices of students and their needs in relation with their academic writing for assignments, essays and dissertations. Furthermore, all the information provided above had the purpose of informing the reader of the fact that the use of triangulation as a research method, with a mixed-method design, are established as the core from where this research parts. Finally, it is important to remember that students were not the only group of participants involved in this research but also their own professors, as well as their written assignments. The next two chapters are dedicated to the analysis of the data. First the analysis of the survey responses from professors and students is presented and then the analysis of the writings is presented with the use of the rating scale and the results obtained from the three different raters. Both of these analyses are supported with direct quotes from the participants or extracts from the texts in order to reinforce the results obtained in this research.

Chapter 4: Analysis and discussion of surveys: RQ1.1 professors' survey

4.1 Introduction

As presented in the previous chapter, this study revolves around three main RQs. These RQs are intended to be answered through a careful design of different research methods able to handle various data, all of which is capable by implementing a triangulation process. For organizational purposes and considering the reader's easier understanding, Chapters 4, 5, 6 and 7 are presented to provide an answer in the same order of the RQs. Therefore, the purpose of this chapter is to present the results obtained from teachers' self-reported beliefs on the needs of EME students writing, which corresponds to RQ1. All the results have derived from the answers given to a survey specifically designed for teachers. First, these results for teachers are presented and discussed, and the next chapter proceeds similarly with the results for students followed by a last comparison of both surveys.

Therefore, the research question addressed in this chapter is the following:

> RQ1.1 What are the students' academic written language needs in EME Humanities subjects as seen by professors?

For this survey, the results are articulated around the categories that make up the survey, which in turn revolve around a number of topics. As it was mentioned in Chapter 3 (see *Methodology*), the information obtained from the survey has been grouped into five categories from more general to more specific, these being (1) participants' background (these data have been used to present the participants along with their background in Chapter 4), (2) importance of English and confidence in the area, (3) disciplinary genres, (4) self-perceived difficulties and needs in academic writing and (5) possible help and support for academic writing. These are first introduced with an overview of the findings from the five categories of the surveys for professors. Then, each of these categories (four left) are presented quantitatively, followed by a qualitative analysis that is supported by the participants' voices. The pertinent discussion of the results is accompanied by graphs

and tables to ease readers' comprehension. Throughout this chapter the information presented becomes more significant as we move further into the answers of the professors first (Chapter 4), students next (Chapter 5) and later the writing samples of students' academic work (Chapter 6).

4.2 Importance of English and confidence in the area

The category of Importance of English and confidence in the area finds its purpose on setting a firm base from where to part regarding professors' feelings towards English as well as their command of the language in order to cope with the learning and teaching of classes. This category contained a total number of n=7 items or questions in professors' survey with the subcategories of "English competence", "English fondness", "Feeling comfortable teaching content subjects through the use of the English language", "Confidence in English", "Writing in English" and "Command of English".

The first question in this area focused on whether from the professors' experience, students enjoyed learning other subjects in English. The answers fell mainly under the agree option (58%), with also 8% showing a strong agreement, 34% being neutral and only 1% disagreeing with the statement (see Figure 6).

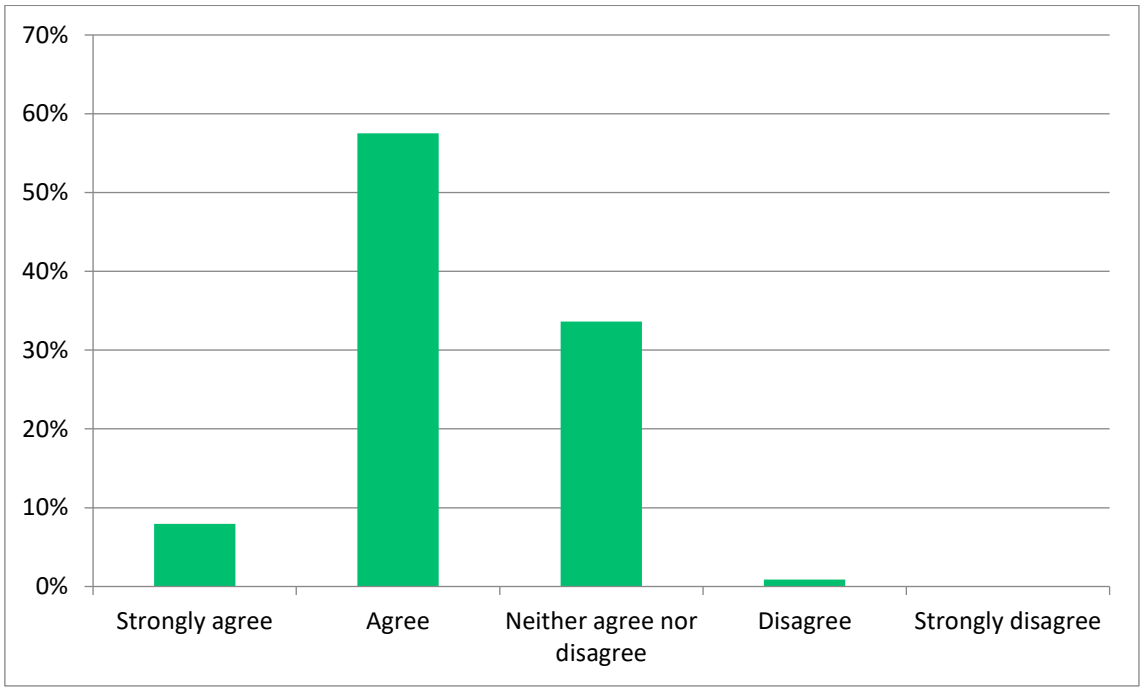


Figure 6. Students feel comfortable learning other subjects in English.

According to the findings seen in Figure 6, there is a good sense towards students learning in English from the professors' perspective. As it was seen in the theoretical framework of this research, the place English holds at a worldwide level in education is quite high and often becoming more and more relevant in nowadays globalization. In this context, professors consider a high competence in the language to be a key driver in the learning enterprise. Ideally a minimum of B2, as it is mentioned by P1:

> P1: *"I think they do not mind if it is in English or Spanish if they have a good level of English"*[9]

[9] Voices are original from authors with slight clarifications included by the researcher between square brackets for easier understanding when necessary.

Teachers were also asked to answer the same question but about themselves in terms of teaching. Once again, the findings indicated 13% of strong agreement, 50% of agreement and 38% remained neutral as seen in Figure 7 below.

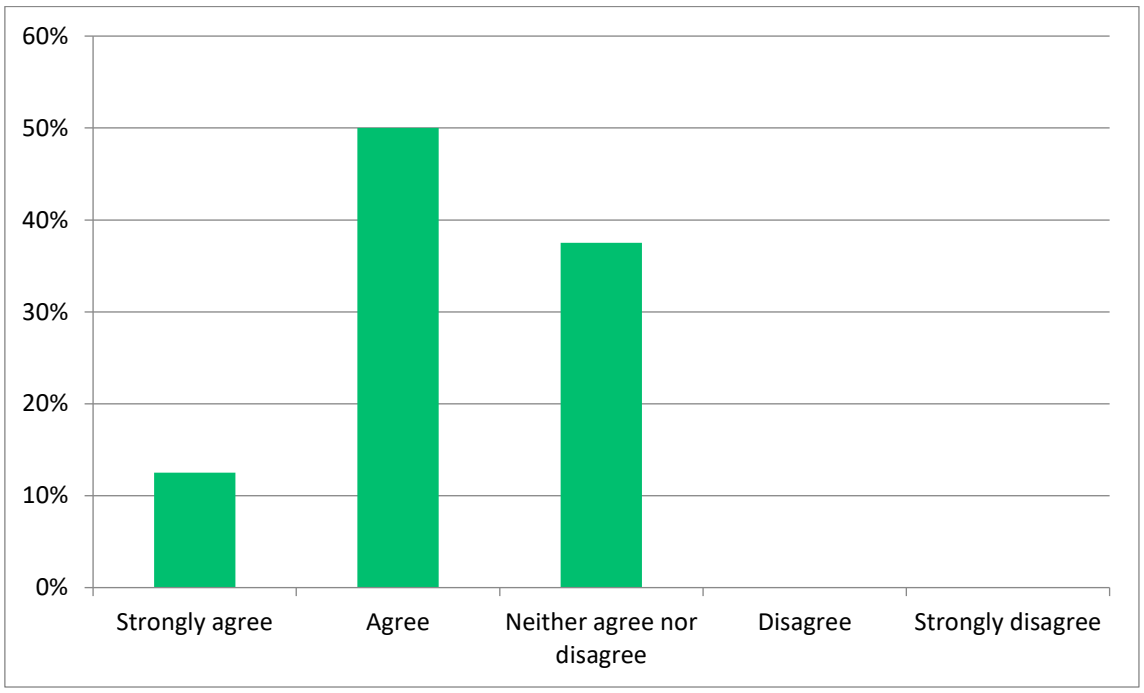


Figure 7. Professors enjoy teaching subjects in English.

These seemingly positive results resonate with those professors who seemed to also perceive English as a way to internationalise the university to make it more prestigious (Coleman, 2006; Evans & Morrison, 2011; Dafouz & Smit, 2020). This characteristic is commonly found in the private university sector of Mexico with its push towards internationalisation (Gacel-Ávila, 2007) as well as the position English holds as the international language in education, research, publications, etc. However, the only voice commenting on this section seemed to associate teaching in English with simply translating the syllabus or materials from Spanish into English:

P1: *"At this point I don't mind, sometimes it was a bit difficult because the syllabus and materials were in Spanish but now I translated them and have new ones in English"*

This may explain the high number (38%) of those professors who seemed neutral to teaching in English. The perception here may be that content teachers simply have to translate the content of their subjects in order to be able to teach through EME. Contrary to this teachers' assumption, teaching in English needs to be also combined with new methodological techniques and changes in order to be successful (Lasagabaster, 2022; Valcke et al., 2022) and therefore, these professors may not be aware of those necessary adjustments that need to be implemented in their teaching.

In terms of academic writing, participants were asked whether they felt confident to teach academic writing in English since it was required in their students' writings. To this question, 22% of the professors strongly agreed, 74% agreed, 3% was neutral and only 1% disagreed (see Figure 8).

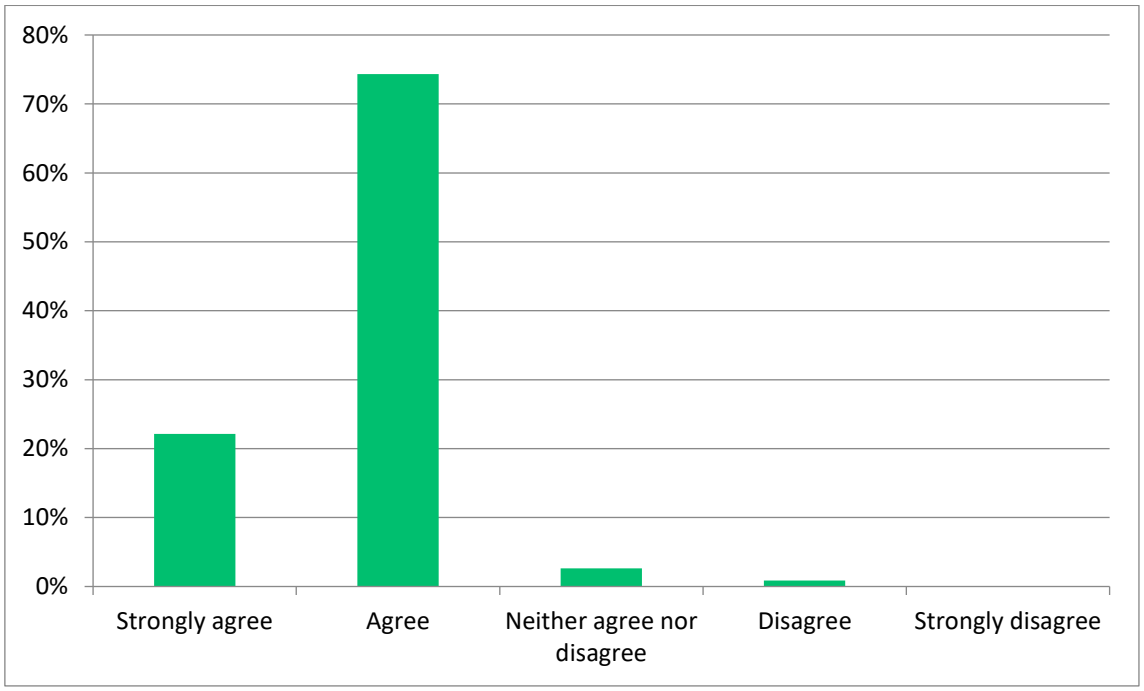


Figure 8. I am confident that I can teach academic writing in English.

These finding indicate that content teachers seemed to have a general positive feeling of being able to teach academic writing in English even though they might not have specifically being trained for this. This may be explained either by the years of experience teaching (see section *Professor participants* in *Chapter 3*) or also by their proficient level in the English language. As put by another teacher:

> P1: *"*[I feel confident teaching academic writing] *because of the level in this language that I have but it takes a lot of time off my class"*

However, it is important to remember again that having a high level of English does not necessarily guarantee an effective teaching in EME (Lasagabaster, 2022). In addition to this, the previous voice seemed to indicate a strong association between being able to teach in EME and having a high level of English, this may be due to the fact that professors employ academic language for research and publishing purposes (Macaro et. al., 2018) and as a results they may feel confident in the area.

In the context of this research, the skills of writing in English was one of the students' aspects/competence assessed in regard to their knowledge of the content with the completion of assignments. For this reason, it was relevant to know whether teachers also considered the writing skill an important part of their subject or not. Therefore, findings indicated that 17% of professors strongly agreed, 64% of them agreed to writing being important, 19% of the participants were neutral and only 1% of the participants did not consider them relevant in their subjects.

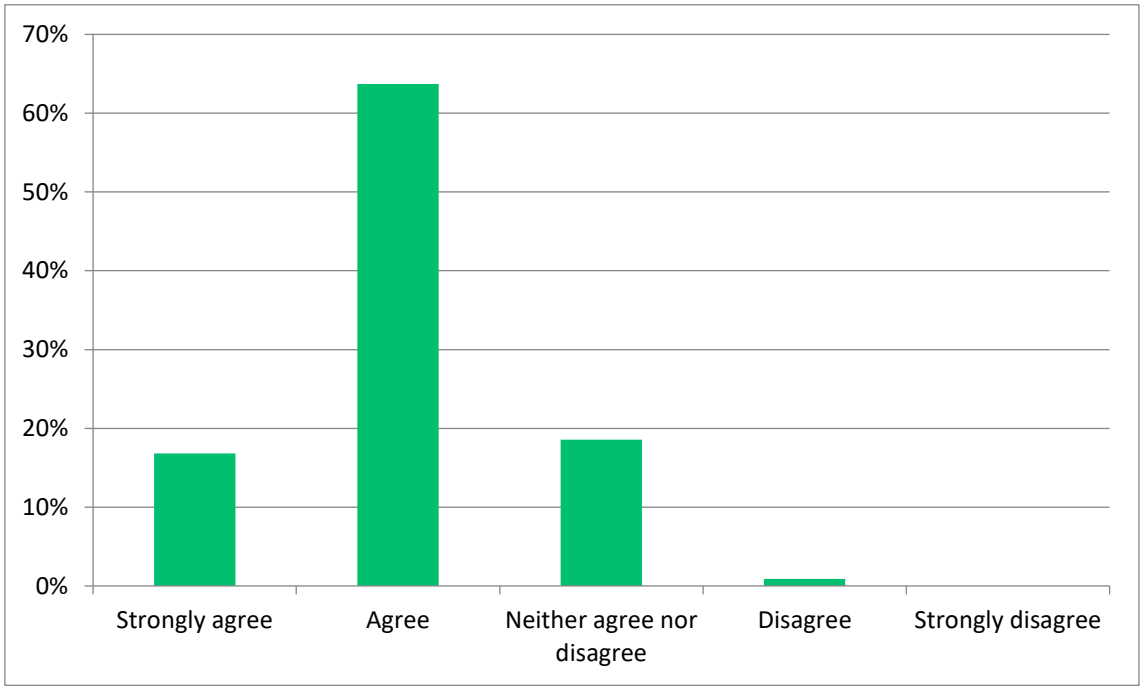


Figure 9. Writing in English is an important part of the subject.

As it can be seen, writing is an important part when asking students to write assignments for those subject in English as it is part of the students' assessment. This is emphasised through the professors' voices when mentioning also the use of oral assessment through presentations:

P2: *"*[Writing in English is an important part of the subject] *because of what I ask them* [the students] *to write (essays and assignments), sometimes also oral presentations in English"*

P3: *"When they have to write yes* [other times students are asked to do presentations]"

P4: *"If it is* [in those subjects that I teach] *in English yes"*

These comments also indicate that content teachers are sometimes teaching their subjects in Spanish or in English depending on the different requirements of the degree where they are involved (see voice P2 and P4). Moreover, as explained in the context of the ITESM institution, EME was only starting to be implemented in some subjects of different degrees.

This category included two separated sections that addressed on the one hand, academic literacy in English, and on the other hand, general English, along with their importance for students' learning and future employment. The first one, academic literacy (see Figure 10), showed that 42% of professors strongly thought that academic literacy was an important role in students' learning and future employment, then 55% agreed to this and only 4% felt neutral about it.

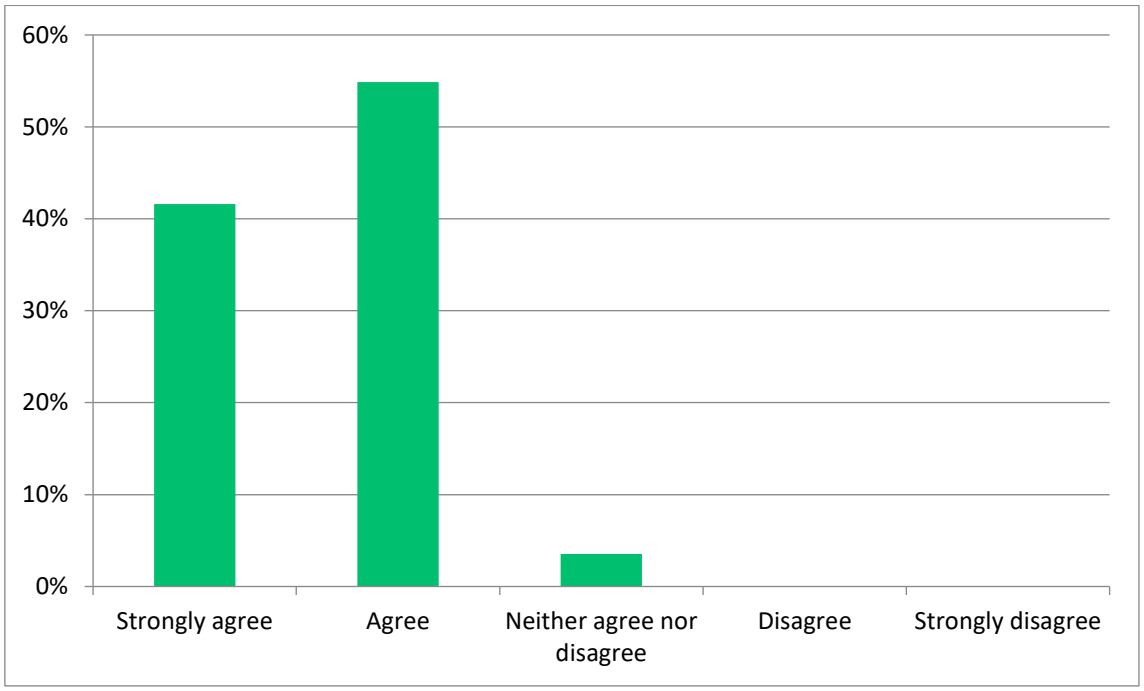


Figure 10. Academic literacy in English plays an important role in students' learning and future employment.

Then, in the second one, general English (see Figure 11), similarly to the previous one, participants provided a positive response with 44% strongly thinking that the English language was crucial in students' learning and future employment, 53% agreeing to this and only 3% remaining neutral about it.

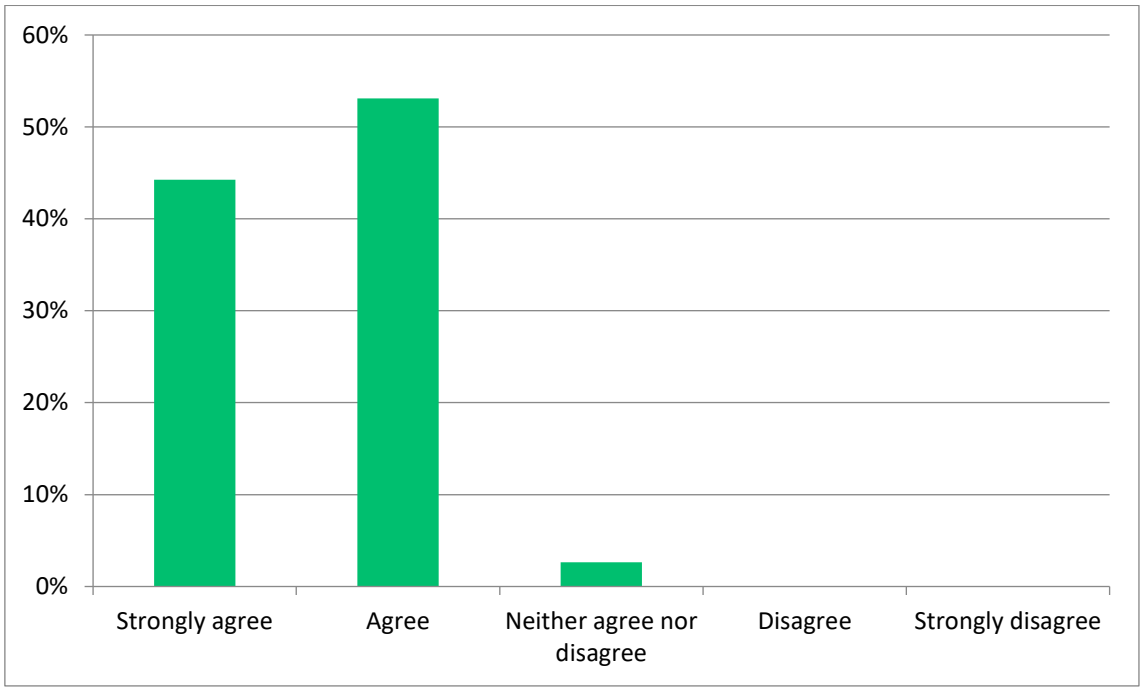


Figure 11. The English language plays a crucial role in students' learning and future employment.

These results in both categories indicated that the role English, academic and general, plays in their current learning and future lives is considerable regarding pursuing futher prestigious studies leading to better job opportunities and higher levels of employability. This was supported in the comments by emphasising its importance for work purposes and correct communication with the following voices from participants:

> P1: *"Of course, it helps them a lot in their future and they need to communicate correctly"*
>
> P2: *"Yes, for work absolutely"*

None of this comes as a surprise since it was already demonstrated in findings by Ament and Pérez-Vidal (2015), Lasagabaster, Doiz & Sierra (2014) and Earls (2016) (see

Chapter 2) which indicate that proficiency in English hold value and is considered as asset when looking for a job.

Finally, within this category of importance of English and confidence in the area, it was relevant to find out whether participants considered the students' level of English sufficient to be able to follow the classes without difficulties (see Figure 12). To this topic, participants' answers spread along the range of available options with 7% of them strongly agreeing, 68% agreeing, whereas 22% neither agreeing nor disagreeing and finally 3% disagreeing.

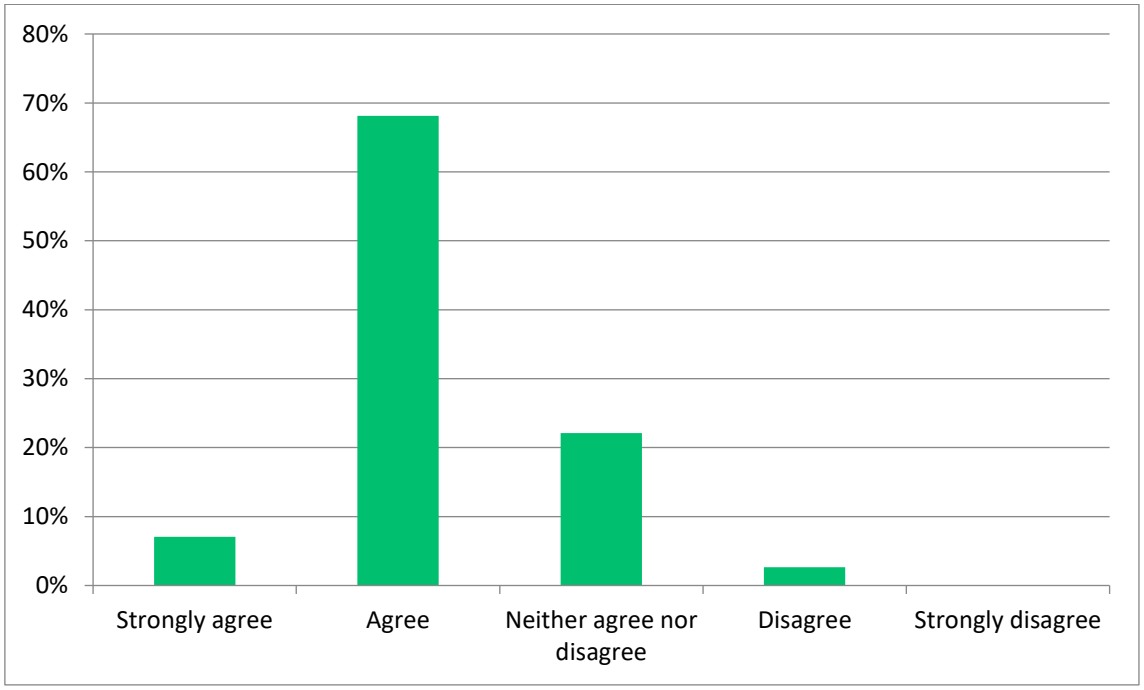


Figure 12. Students' English competence is good enough to follow the classes.

This notable upsurge in affirmative reaction is once again in line with the requirements mentioned earlier of the minimum level of B2 in EME, as stated by one of the teachers:

> P1: *"Most of my students already have a B2 level in English in order to take my class so yes"*

However, it is relevant to take into consideration the significant percentage (22%) of neutral and the 3% who disagreed. These findings support the fact that something else is required in these contexts to support academic literacy than simply having a good level of proficiency in the English language. This goes in line with previous studies (Ellis, 1990; Hinkel, 2002; Nation, 2001; Norris & Ortega, 2000; Schmitt, 2000) proving that students do not acquire effective academic written discourse by simply being exposed to L2 grammar, vocabulary, formal written text and discourse. However, this may be acquired over a period of time through different exposures, for instance, an EAP course.

4.3 Disciplinary genres

The category of disciplinary genres presents the importance of knowing the text types or genres used and required in each academic discipline and in those EME subjects. This is of relevance for professors' awareness purposes so they can guide students towards the correct completion of those assignments. This category contained a total number of n=5 items or questions in professors' survey.

Within all the different disciplinary genres commonly employed in Humanities, professors in this research were provided with five options included in this section which were *descriptive, expository, persuasive, narrative, technical* and *poetic*, with the final option of including others. From these disciplinary genres, those that were employed the most by the professors in this research in terms of requiring them in their subjects were in the first place *persuasive* with 90%, in the second place *expository* with 86% and in the third place *descriptive* with 31%. Following this line, those disciplinary genres that received the lowest percentage of responses in terms of requiring them in their subjects were *narrative* with 21% of responses, *technical* with 11% and in the last place *poetic* with only 4% of responses (see Figure 13).

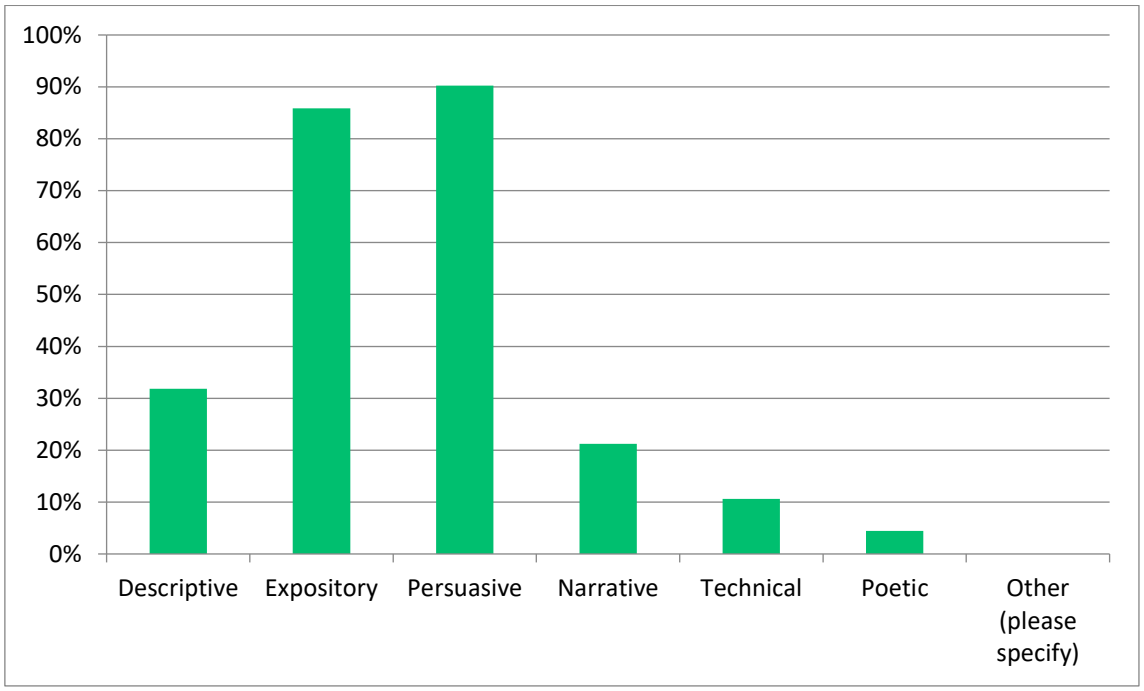


Figure 13. Types of written genres required in the subject

The results with the highest percentage of responses, these being *persuasive*, *expository* and *descriptive* genres, are in agreement with the disciplinary genres collected in this research and presented in Chapter 5. Nevertheless, since this survey was answered by various professors teaching through EME in the Humanities branch, a series of different percentages of responses were divided among the different options of written genres provided. It is worth mentioning that no other genres were added by the participants in the comment section. This was supported and emphasized in more detail by the importance given to those genres in their subjects as seen in the next figure (Figure 14). The response was quite positive specially to the Expository 4,5%, the Persuasive 4,6% and the Descriptive that received an answer of 2,1%. The other options received an importance of 1,8% in Narrative, 1,5% in Technical 1,5 and finally Poetic 1,2%.

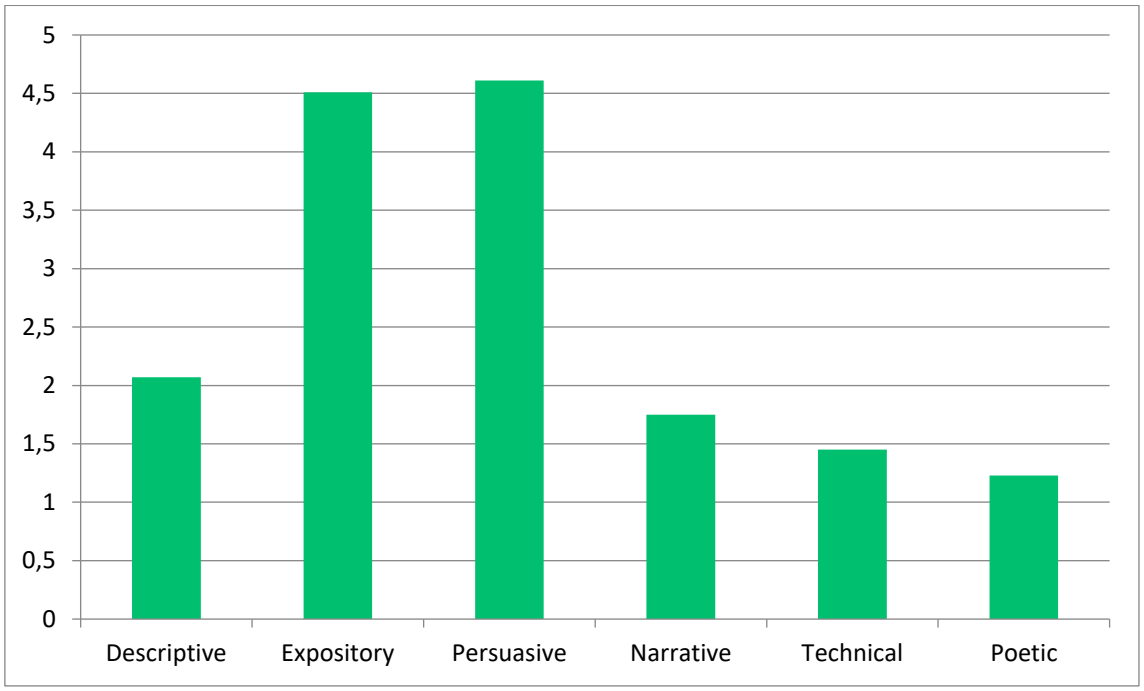


Figure 14. Importance of the written genres in the subject (1 being the least important and 5 the most important).

Once those genres were identified and participants had answered their importance to each one of them, it was relevant to see that given their importance in their subject, whether professors presented, studied and practiced them in their classes. It was surprising to discover that given the relevance of those disciplinary genres in EME subjects, an extremely negative response of 68% from the participants confirmed that professors did not study or practiced these written genres in their subjects; whereas only 32% of them answered positively to it (see Figure 15).

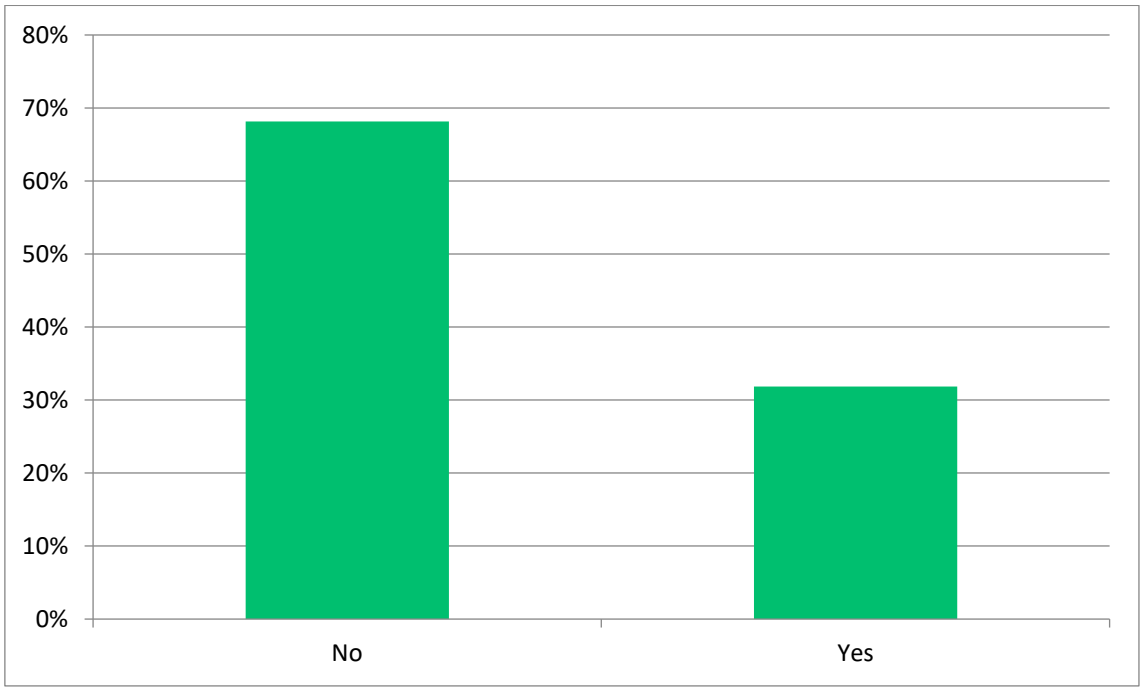


Figure 15. These types of written genres are studied and practiced in class

These results may be due to the fact that, professors might not be aware of the importance of working and reviewing writings skills, despite the fact that they consider them fundamental in their disciplines. One of the reasons for this lack of awareness may be that, when teaching an EME class, most content professors have not necessarily mastered or even studied the complexities of EFL instruction in order to focus on its details of writing (Biber et al., 1999). These content professors are versed on their specific content disciplines and these disciplines are currently changing to be taught in English. Therefore, it may be common that those professors do not see the instruction of writing in English as part of their responsibilities or duties in EME lessons, as shown in previous studies (Airey, 2012, 2016). This is also supported by the voices in this section providing details on how those genres are studied and worked in class and how often as a general overview to back up their subjects:

> P4: *"Yes but as a revision of what they should already know because otherwise it takes too much time off my class" (C3)*
>
> P9: *"When students ask for it" (C3)*

P21: *"We practice writing very often and the structures of a text and how to create it"* (C3)

P24: *"Students are taught what structures to use and how to organise it before any assignment is required"* (C3)

P25: *"The structure of these texts is explained whenever it is necessary" (C3)*

P28: *"With the information from those workshops* [the writing centre] *I can review it better with my students later"* (C3)

P35: *"Every week in reports and expositions of readings and research."* (C3)

P36: *"Giving instructions to complete them correctly, for an entire week"* (C3)

Regarding these voices, the fact that the focus on English would take too much time off the class, as presented in voice P4, is supported by Dafouz (2020), Dafouz et al., (2016) and Cammarata & Tedick (2012). In these studies, content teachers in EME expressed that the use and practice of English took certain amount of time from their classes. This is also mentioned in voice P9, P25 and P36 as professors only focused on writing skills when students requested it, when they thought they needed it or for only a week as a support for students. Therefore, these practices meant that they often needed more time, not only to plan their lessons, but also to teach in English as well as their disciplinary content, which sometimes led to reducing syllabus coverage. The fact that these professors use some of their lesson time to teach language, even if it is a limited amount of time, appears in contrast with Airey's research (2012) where professors would refuse to teach language as they were not experts in this area. This may be an indicator of a change in professors' mentality towards EME. Other voices such as P21, P24 and P35 seemed to acknowledge the importance of writing and therefore worked on it on a weekly basis by focusing on coherence and cohesion, the different steps to write through readings and research. Finally, voice P28 mentions how useful the support from the Writing Centre (see Chapter 2) was in order to have better results in assignments.

Since only a few of the participants (32%) were working on those assignments in class with students, it was interesting to see whether they did it as it was part of the syllabus requirements, they personally acknowledged the need to do so or there were other reasons. In this case, a syllabus requirement only received 24%, personal need got 66% and others only 10% (see Figure 16).

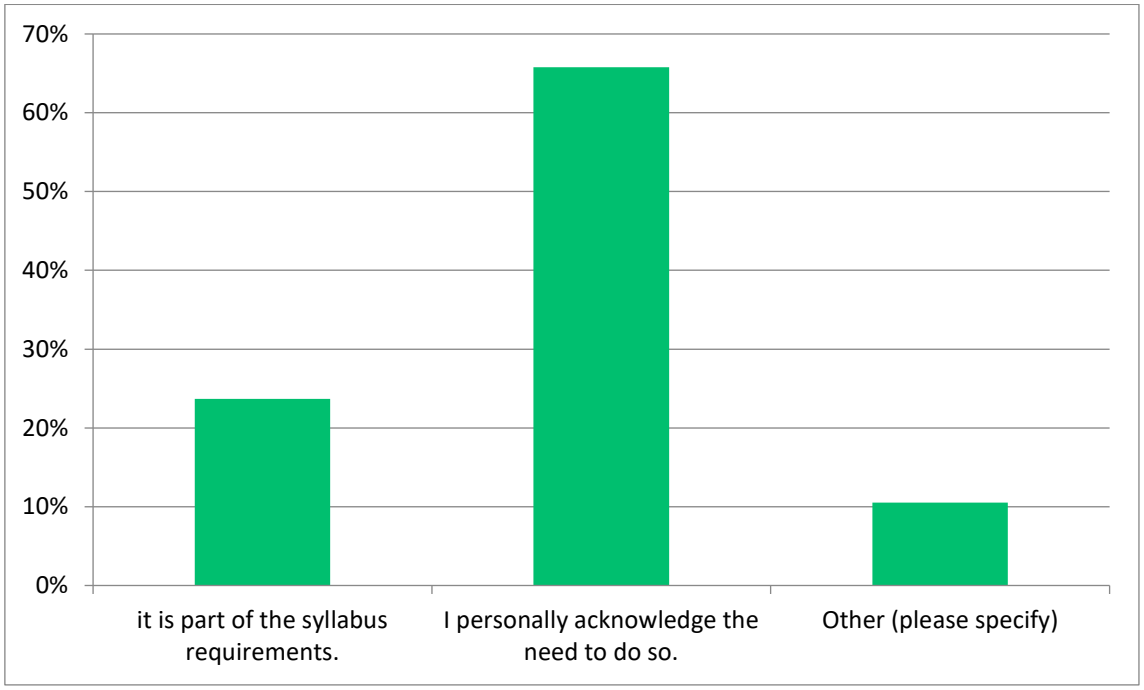


Figure 16. Reasons for these types of written genres being worked on in class

These findings indicate that professors were detecting a need that had not been addressed from an administrative or top-down perspective and they were implementing adjustments in their syllabus based on their personal experience with students and their writings from a bottom-up setting. This is also the case of EME implementation in monolingual regions such as some parts of Spain (Dafouz et al., 2014, 2016) or Mexico. Moreover, the fact that students did not know the genres and how to write them may have negatively influenced their academic performance. Therefore, this may be one of the reasons why professors have abandoned the idea that English is not part of their teaching responsibilities. It is worth mentioning that those participants who chose the other option

did not specify another reason but saw it as an option in between by including both answers.

However, by considering the information explained in the syllabus of those subjects available on the ITESM website and presented in Chapter 3, and seeing there is mention of the English language but not specific language objective, this research may be inclined to think professors thought of EME subjects as implementing adjustments on those subjects in terms of writing in English. Some of those adjustments may include a revision of the required genres, the language needed in those assignments as well as the structure, a clear explanation of what is expected from students and the corresponding assessment of them. Nevertheless, the mention of the use of English in the subject syllabus is contrary to the EME mainstream where there are no language objectives but only content, and it is an indicator of some adjustments regarding the importance of language.

In regard to those participants who explicitly taught writing skills in their subjects, the focus remained on whether they saw some kind of improvement in the students' written assignments by doing so. To which an enormous positive response was obtained of 92% in comparison to an 8% who thought there was none (see Figure 17).

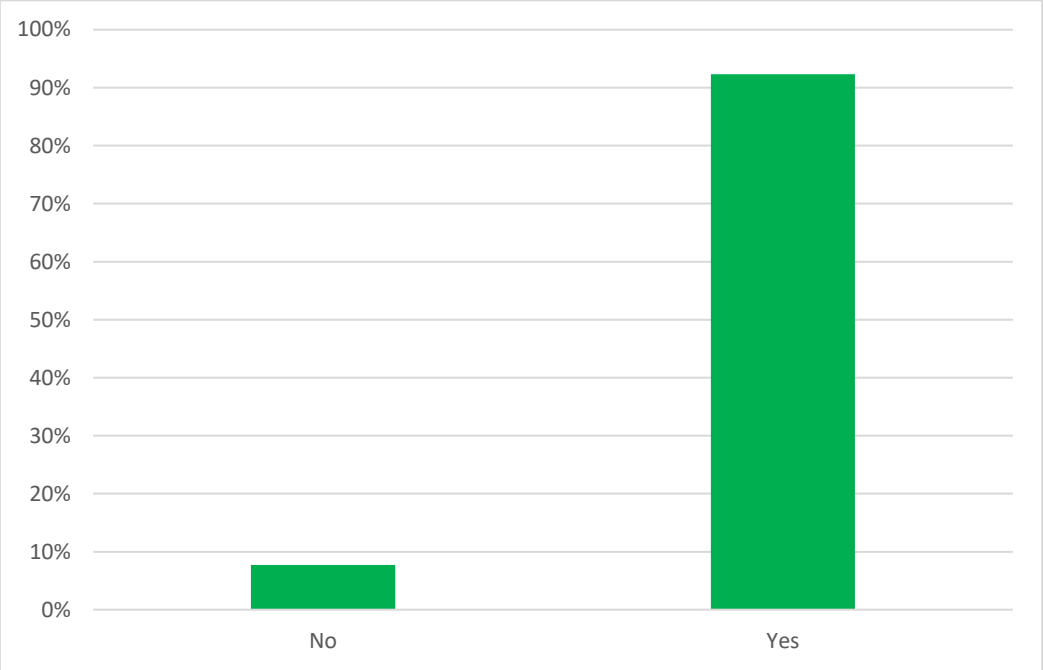


Figure 17. There is an improvement in students' assignments because of working and studying genres in class

These findings clearly may indicate that an explicit teaching approach towards writing in class may impact students' performance in terms of their writing assignments positively. Thus, teaching explicit writing in content classes may even improve students' general performance in the subject, as content and language cannot be separated (Aguilar, 2017; Valcke & Wilkinson, 2017; Dafouz & Smit, 2020), and any improvement in written language can also improve students' written output and therefore how they communicate content ideas through writing (Leki & Carson, 1994). This is supported by teachers' voices specifying in what aspects written assignments were improved in terms of lexis, grammar, coherence, cohesion, formal style or even confidence to write more academically. These voices mentioned some of the different characteristics of academic writing included in the analytical framework of this research such as coherence, cohesion, academic vocabulary or grammar (Halliday & Hasan, 1976, 1985; Johns, 1997; Jordan, 1999; Hinkel, 2004; Bailey, 2011; Biber, 1988) as seen in the following voices:

P2: *"use of connectors, more coherence, better sentence structure"*

P3: *"Mainly in vocabulary and structure"*

P15: *"Improvement of academic writing, acquisition of vocabulary"*

P17: *"Grammar and organization of the writing"*

P18: *"Yes, because they learn word order, and how to organize ideas and structure them appropriately"*

P35: *"Students are forced to formally structure their arguments depending on the purpose of the task"*

Moreover, the improvements to the difficulties mentioned in the voices such as word order, organizing ideas, structure, vocabulary or grammar, are often found in EFL learner writings. They are also developed during the years of EFL learning or even induced by the type of teaching received, which is often also linked to a lack of writing practice (Paquot, 2010). In order to be successful with academic writing, this would depend on a set of well-developed general skills such as audience awareness, logical organization, paragraph development, clarity, sentence structure, grammar and mechanics (Zhu, 2004).

Furthermore, the upcoming voices addressed the fact that students' writings obtained better results after working on them in class:

P21: *"The results of their writings are much better"*

P25: *"Students improve their assignments"*

Then the following voice P23 makes a reference to the division of subject, meaning that once students finish with their English subjects they no longer see much instruction for writing in other subjects:

P23: *"They do not write as much anymore once they are done with English"*

As a possibility, the use of the steps in the writing process may be useful when providing guidelines as seen in P24:

P24: *"Clearly guidelines are given so results are better"*

In addition, presenting different genres in class along with examples may be of great help as supported in voices P11, P19 and P34.

P11: *"It is explained in class so sts* [students] *know what it is"*

P19: *"They learn the format of different types of writing"*

P34: *"Students study examples"*

Furthermore, this work on writing in class seemed to be influenced by the four steps of the writing process established by Flower (1993). These steps involved organising and structuring students' ideas beforehand in reference to Step 1 (Planning) as seen in P35. There was also a reference to Step 2 of the writing process (Generating ideas in words) in P18. The revision of the paper and its purpose task referred to Step 3 (Designing for the reader) mentioned in P4. And finally, the edition of the paper for connections and coherence, which referred to Step 4 (Revising for effectiveness).

P4: *"A revision of what I ask for my class is always good"*

Moreover, by working on those writings in class, students were made aware of their mistakes (as stated in voice P11 and P36), thus, professors had the opportunity to provide an explanation of what they were expecting in the assignments:

P36: *"*[This way] *Students know what is expected"*

Nevertheless, the low percentage of answers (8%), who thought there was no improvement in students' assignments, requires also to be considered. In this case, a strategy needs to be implemented that does not simply fall under the professors' point of view but that is implemented through a strong training process of the staff, and through policies that would benefit students, professors, staff and the entire institution (Sánchez-García, 2020; Airey, 2016; Dafouz, 2021).

4.4 Self-perceived difficulties and needs in academic writing

The fourth category focuses on difficulties and needs in academic writing. This category presents a reflection on areas of improvement where learners may have some kind of struggle. It specifically focuses on the process of writing academically in those content EME subjects and the professors perspective on them. This category contained n=2 items or questions in the professors' survey.

To begin with, there was a need to learn whether professors found difficulties in their students' written assignments. In this respect, 70% of the participants strongly agreed to finding the needs, 29% of them simply agreed and only 1% of all of them answered in a neutral manner (see Figure 18).

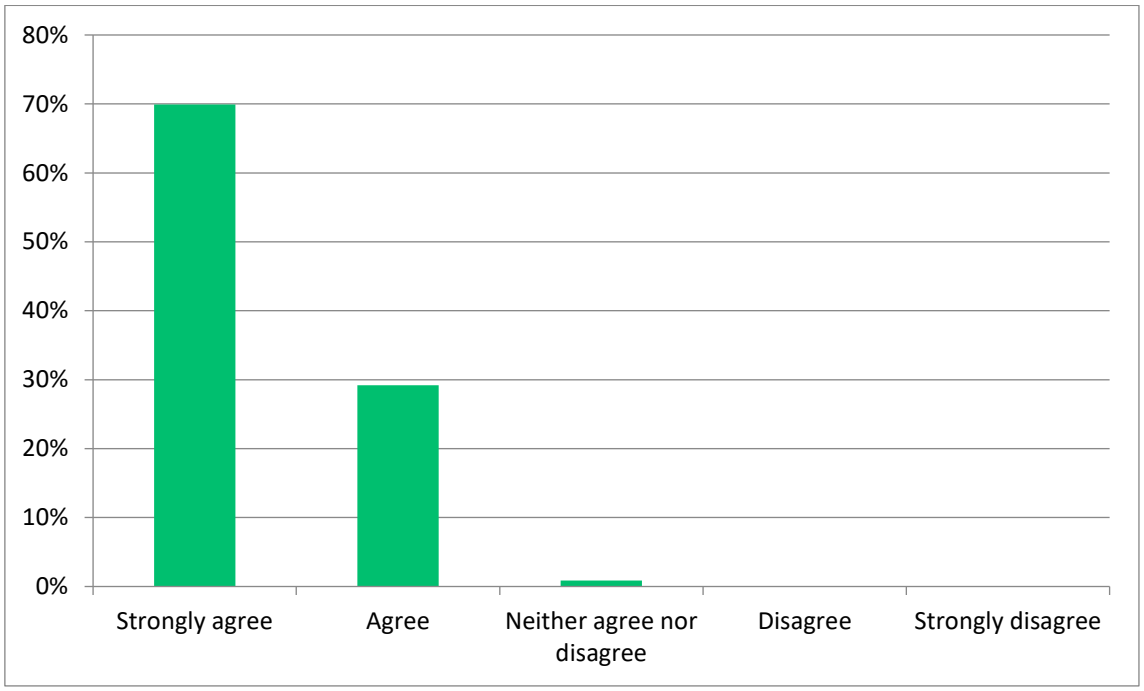


Figure 18. There are needs/difficulties in students' written assignments

These findings resonate with previous studies (Zhu, 2004) regarding faculty member's point of view towards areas of improvements in students' academic writings. The considerable proportion of responses garnered by this option might be attributable to the fact that it is common or easy for professors to find areas of improvement or needs in their students' work since the purpose of obtaining better results is often part of their job (Fathman & Whalley, 1990). On this issue, professors may be recognising these needs but may not know exactly from where they originate and the role language plays in their classes. As identified by P1, those writings seemed very casually written as if it was a spoken activity and not a writing one. This may be a clear indication of a need to distinguish academic and formal written language from its oral and informal variety:

P1: *"They tend to be written very casual, like if they were speaking"*

In order to deepen into further details about those difficulties and what the previous voices meant, it seems key to delve into specific characteristics commonly found in academic writing and the possible difficulties they may represent for students.

To start with, 4,7% of the teachers said they found difficulties in the choice of voice (formal or informal) or register, another 4,7% struggled with (im)personalization, 1,6% the characteristic of use of slang such as “gonna”, “wanna” or others, 1,7% in the option of appropriate vocabulary in comparison with the 1,6% of appropriate grammar, and finally 1,6% in coherence in the text in contrast with the 1,5% of cohesion in the text (see Figure 19).

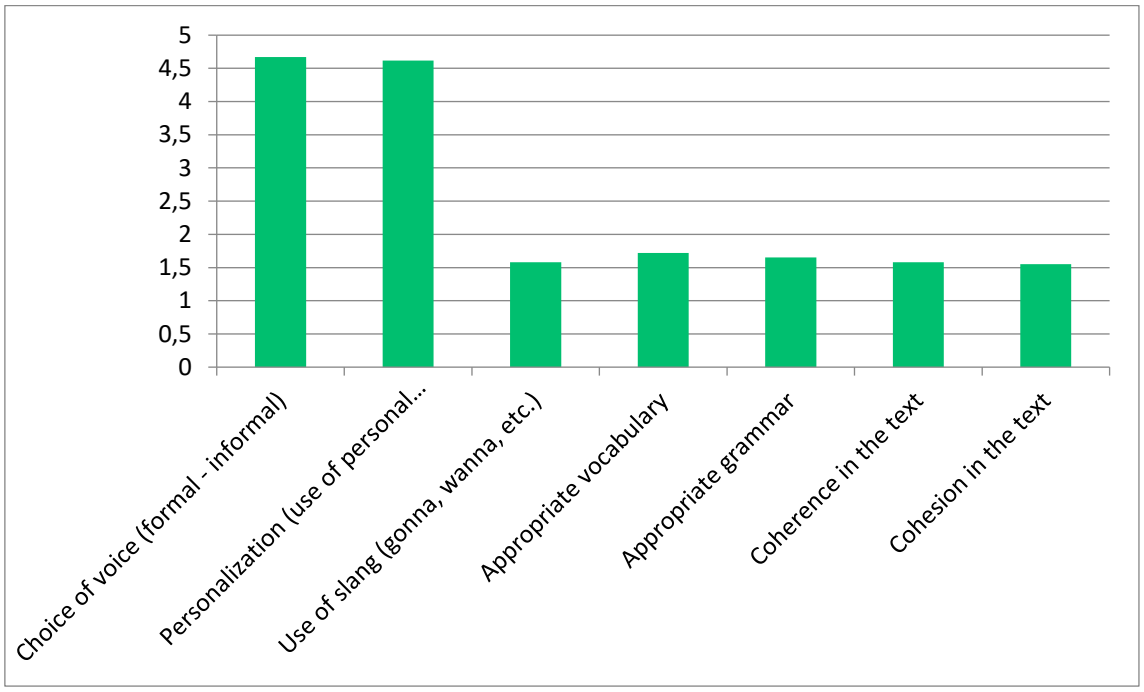


Figure 19. Needs/difficulties in written assignments (1 being the least common and 5 the most common).

As seen in the previous figure, the categories that received the most pronounced response were those of use of register and personal pronouns. However, the rest of the options also received an important percentage of answers. In this area, only two participants participated with their voices showing certain reference to other needs including the use

of connecting devices and emphasising again the informal register employed in those writings:

P1: *"Use of formal connectors"*

P2: *"In general they are very informal, they write ten as if they were talking"*

Those two categories of choice of voice and personalization may be included in the area of register. On this topic, an explanation behind these findings may be that lack of register awareness is an often found feature of EFL learner writings as well as the lack of writing practice (Paquot, 2010). Furthermore, these responses may be explained due to the professors constant search for improvement in their students as indicated in various research (Belcher, 1990; Fathman & Whalley, 1990; Lasagabaster & Ruiz, 2010).

4.5 Possible help and support for academic writing

Finally, the last category analysed, "Help and support for academic writing", contained n=6 items or questions referring to the collaboration between content departments and the English or EAP professors. This category also analysed any type of support from the English department, possible solutions for the needs seen in the previous category. Finally, it also considered participation in professional education programmes to teach academic literacy in English and support from the institution regarding academic literacy in English.

As it was seen in the previous category, there seemed to be a need for improvement in EME subjects, therefore, it is seemed relevant to review the kind of help and support professors received from the university in terms of making language and academic writing conventions visible for students. First of all, since EME uses the English language in the content lessons, it was important to ask participants for the level of collaboration they had in their EME subjects from the English or EAP professors. The content professors exhibited an overwhelmingly positive response towards having no collaboration of this sort (81%). However, there were responses indicating varying

degrees of collaboration frequency: rarely (7,9%), sometimes (4,4%), and consistently in usually and always (2,6%), as illustrated in Figure 20 below.

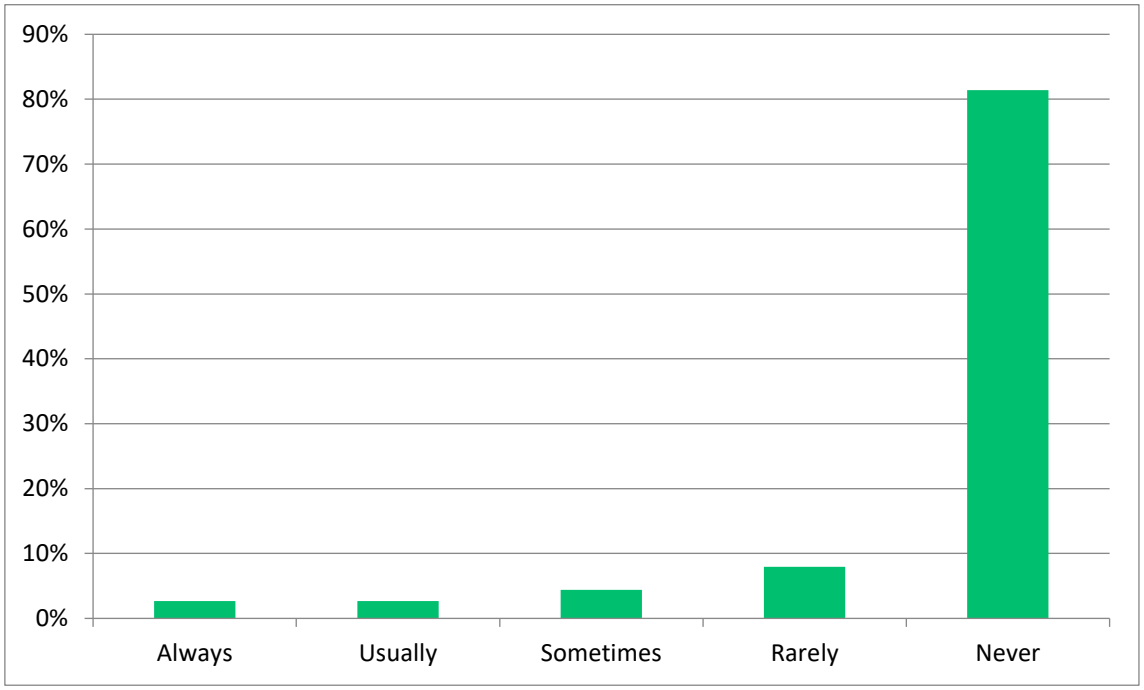


Figure 20. There is a collaboration with the professor of English or EAP when teaching subjects in English

These results may be due to the low amount of existing courses in which lecturers and language specialists work together. This reality was also reported in Airey (2012). Ideally, universities should work towards a cooperation between content and language experts, as already proposed in different EME contexts (Aguilar, 2017; Dafouz, 2021; Sánchez-García, 2020; Valcke & Wilkinson, 2017; Valcke et al., 2022). Therefore, this response from professors suggests that, in order to improve EME classes, certain amount of support is needed in terms of academic language conventions in writing and its importance, at least at the beginning of the process and until the goals previously established are achieved (Dafouz, 2021; Macarao et. al., 2018). However, the lower percentages of responses to the rest of the options may be explained by the possibility of sending students

individually to English or EAP professors in the writing centre[10] for extra help. This is supported by the following voice that mentioned the writing centre:

> P1: *"Sometimes there is the possibility to send them for extra help to the writing center"*

This is a common strategy study as ESL students required one-to-one tutorial and more individual attention rather than working in big groups as the individual feedback received from skilled writing teachers is more valuable for them (Leki & Carson, 1994). Based on these results, there seems to be a refusal to teaching language in EME context by the lecturers, therefore, content and language are seen as two different aspects that need separation even with subjects. Nevertheless, this scenario seems to be in the process of changing as seen in a small percentage of professors who focus on some language features (see section of *Disciplinary genres*). This seems to be something common for hierarchical knowledge structure disciplines (science) but not necessarily for horizontal knowledge structure disciplines (humanities) in different HE institutions (Airey, 2009, 2012). However, this may be due to the abrupt and rapid implementation of the EME subjects and programmes in this university as they are gaining more and more importance globally but their operation has been undertaken from a bottom-up perspective as seen in other studies (Dafouz, et al., 2014) leaving content lecturers alone in the decision making process.

Following this line, it appeared imperative to investigate the provision of any form of support from the English department for EME subjects. Once again, participants exhibited a robust response concerning the absence of any form of assistance from them in this domain (78%). Nevertheless, 11% reported a rare occurrence of support, while

[10] The writing centre was a space were students were able to attend by previous appointment and receive one to one help from an English professors on how to improve a writing students presented or having an assignment reviewed.

2,6% provided responses for both sometimes and usually, and 5,3% opted for the always option, as illustrated in Figure 21.

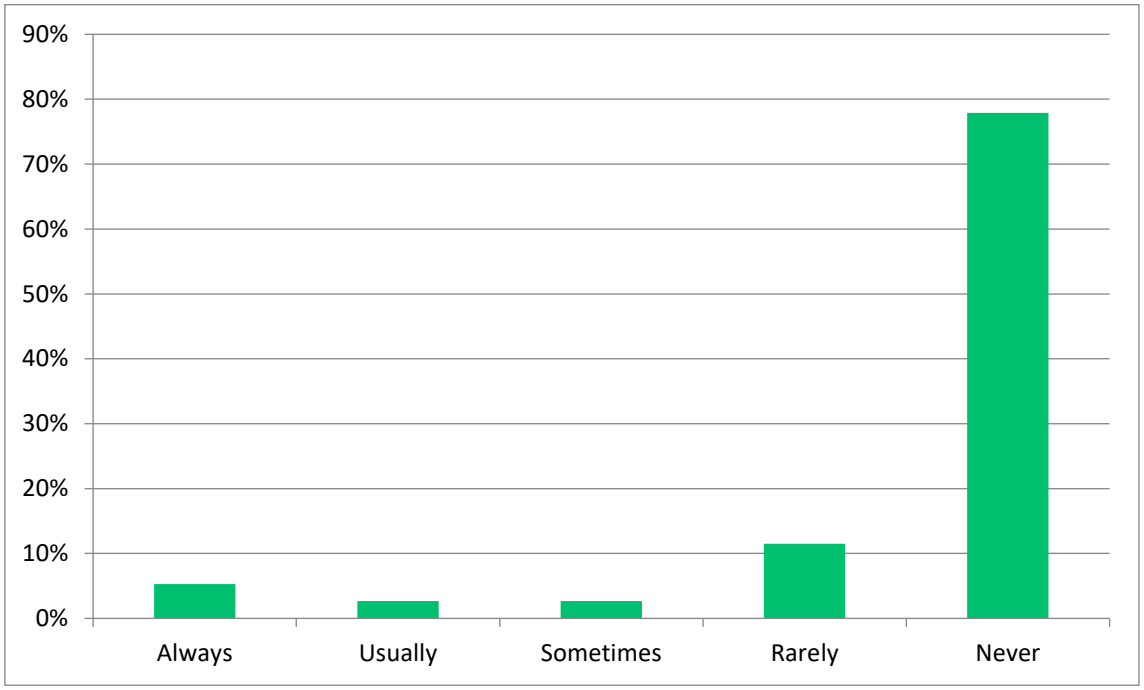


Figure 21. There is support from the English department when teaching subjects in English.

By taking these results into consideration, as well as the previous ones, there seemed to be a general feeling of lack of structure that supported professors in this situation. In other words, these results seemed to state an absence of top-down policies that could be applied to the EME programmes (Dafouz, et al., 2014). Therefore, a stronger involvement of the institution is needed so that lecturers know how to address difficulties regarding language, as it is part of their subject and assessment (Aguilar, 2017; Aguilar & Rodríguez, 2012; Airey, 2016). Nevertheless, those percentages of responses that indicated certain support were clarified through the next item that requested professors' explanation and details about that support, for instance, preparation of lessons together or teaching collaboratively with other teachers among others. These voices explanation was in terms of techniques or correction of academic writing provided to students, help in lesson planning and how to correct writings from a more colleague to colleague relationship.

They seemed to make a reference to a collaboration system among professors in order to create content for the new EME subjects as part of the strategic plan of the ITESM that would promote collaboration among departments or faculties (Tecnológico de Monterrey, 2020a) as seen in the following voices:

P1: *"Collaborative creation of syllabus, exams, evaluation material"*

P2: *"Preparing syllabi and exams together"*

P9: *"I don't get support for teaching purposes, from the language department. I sometimes get some support from colleagues in lesson planning or activities."*

P19: *"Revision of lesson plans"*

More specifically, voice P9 mentions professors searching for support in preparation for their classes in the form of consulting their language colleagues as also found in Dafouz et al., (2016). In addition, voices P4, P6 and P16 made a reference to the support system provided by the Language Centre, more specifically, the writing centre, or workshops offered by it (P10), although it seemed as if the language professors' task there was of correcting students' writings before submitting the final result to the corresponding EME subject (see voices P4 and P16):

P4: *"The English department provides help for improving writing in English and Spanish* [meaning the writing centre], *but it is more of a correction before sending the assignment."*

P6: *"Writing Center* [offers] *open support* [for students]*"*

P10: *"Workshops"*

P16: *"I ask to review my writings from students* [at the writing centre].*"*

This seemed as if once again, content and language were being divided at higher education. Thus, these results, along with the voices, seem to be in line with those of Salaberri-Ramiro and Sánchez-Pérez (2015) who pointed out the need to incorporate new

methodologies in the form of policies, to help EME teachers in the process of integrating writing skills with the content taught in those courses. Finally, voices P11 and P18 mentioned some teachers who were working as language or EAP teachers as well as content teachers:

> P11: *"I am both the teacher of EAP and the other subjects"*
>
> P18: *"Some of us also teach English in the Translation Department or Language Center so we are familiar to the dydactics"*

Therefore, by being aware of language needs, they were able to combine them with their content subjects as part of the raising language awareness among content teachers supported by Dafouz (2018).

Those results and voices would call for professors' perspectives over the institution and training programmes provided in order to be able to teach academic literacy in English. Hence, a significant proportion of participants (77%) reported having attended none of the professional education programs. In contrast, 5,3% selected 6 or more programs, while none opted for the option denoting 5 programs. Responses of 2,7% were gathered for choices of 3 and 4 programs respectively, 3,5% fell into the category of 2 programs, and 8,9% indicated having completed only one professional training program (refer to Figure 22).

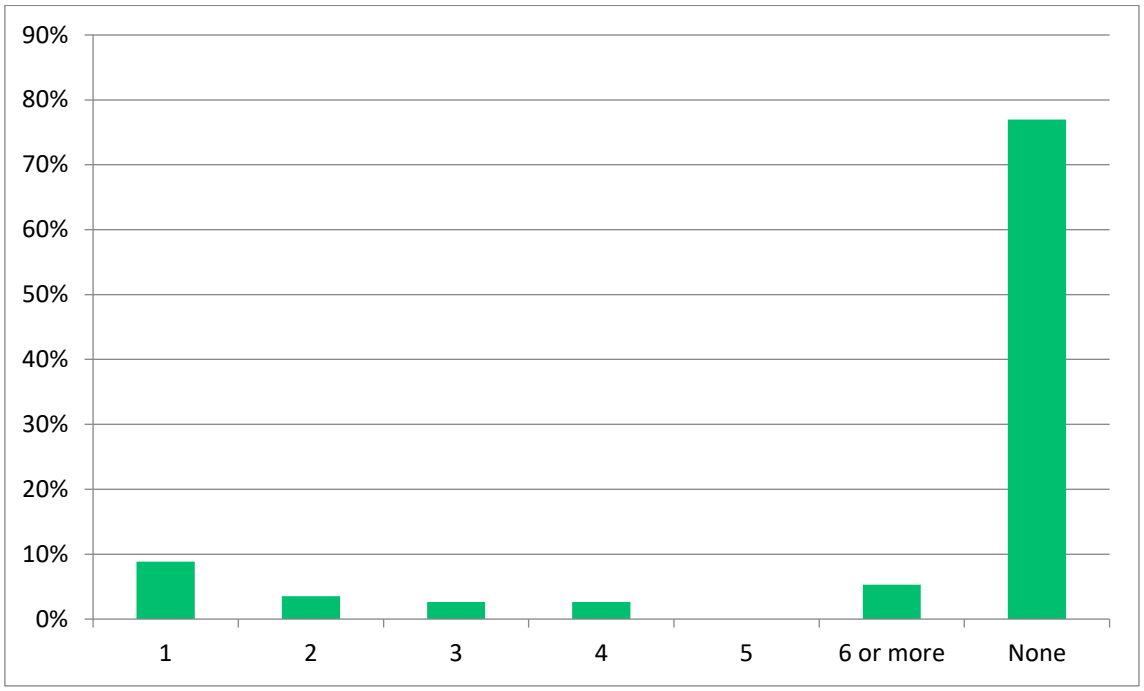


Figure 22. Amount of professional education programs in which professors participated in order to be able to teach academic literacy in English

These results make evident an absence of professional education programmes available in the institution to those professors who were suddenly asked to change the language and therefore their syllabus and materials (Dafouz, 2021). As it was explained in Chapter 2, the ITESM institution provided their faculty with training development programmes named CADi at the end of each semester. These programmes, being the main training resource for teachers, did not focus on EME or mentioned it, as they were mainly divided among specialities depending on the faculty and EME requires a collaboration between departments. This may explain the high percentage of 77% and the lower percentages that participated in other CADi programmes that might focus on some areas relating to language.

In light of these results, professors were also asked for possible solutions to address their students' writing needs in EME. Different options were suggested by teachers, as can be seen in Figure 23.

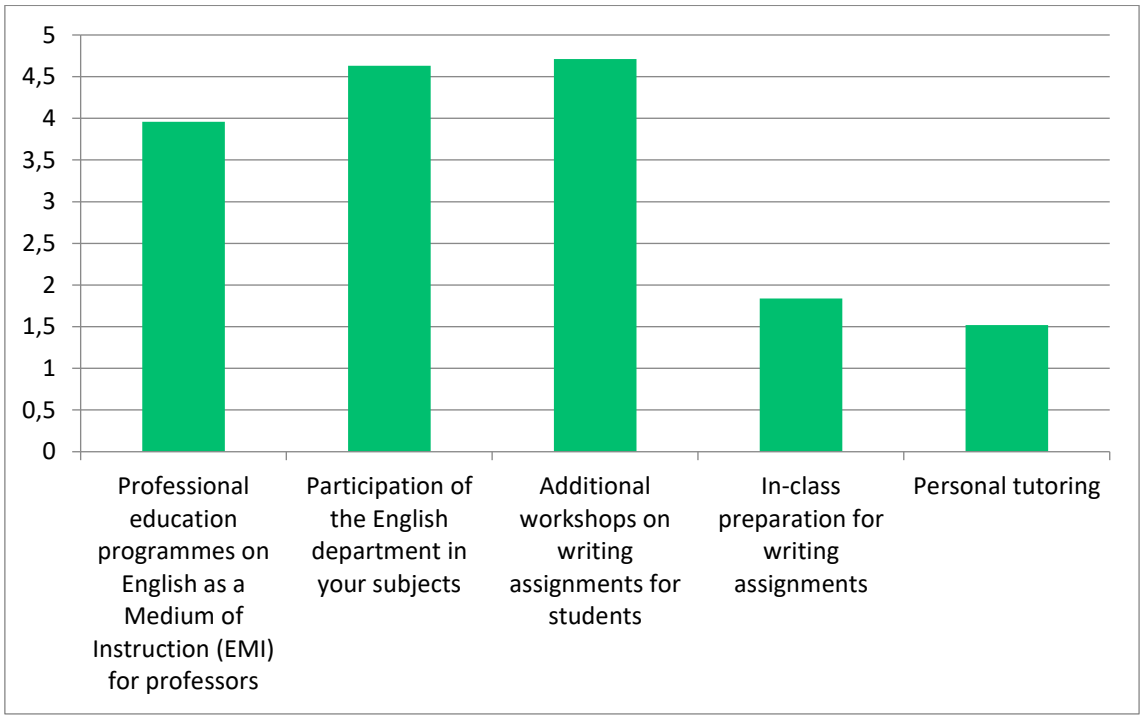


Figure 23. Solutions for academic written needs in students' assignments (1 being the least effective and 5 the most effective).

Regarding possible solutions for the needs seen earlier (see Figure 19), Figure 23 presents a tendency towards choosing the use of professional education programmes (3,9%), involvement of the English department in these subjects (4,6%) and workshops on writing for students (4,7%) rather than working on those needs inside the class (1,8%) or through tutoring sessions (1,5%).

Among the options available, the implementation of professional education programmes has been suggested as a useful tool in research (Ellison et al., 2017; Sánchez-García, 2020). This could be beneficial to prepare teachers when helping students with the development of adequate discourse for disciplinary learning (Sánchez-García, 2020) and would be easy to be implemented as part of the CADi programmes mentioned in Chapter 2 this HE institution offers to staff and teachers. Regarding the participation of the English department in subjects, this could be implemented through interdisciplinary collaborations by having content teachers and language teachers working in tandem in a collaborative manner for lesson preparation and materials (Ellison et al., 2017; Dafouz,

2021; Dafouz & Smit, 2020; Fortanet-Gómez, 2013; Sánchez-García, 2020; Valcke & Wilkinson, 2017; Valcke et al., 2022). Then, the option of additional workshops could be offered at this institution through the Writing Centre and Language Centre as part of the student development. The next option, in-class preparation for writing assignments, can be implemented through content teachers addressing the language needs in the classroom (Valcke & Wilkinson, 2017). Finally, personal tutoring would mean receiving personal feedback during tutoring hours in order to help students with content and form (Fathman & Whalley, 1990; Ferris, 1997).

All of these findings may be explained by the general feeling of overwhelming workload and requirements that these professors shared due to the changes in EME the institution was undergoing. This was mentioned by Airey (2012) and Ament and Pérez-Vidal (2015) as a common complain among professors in EMPs.

Finally, the last Figure intends to obtain information concerning whether from professors' personal opinion, the professional support provided by the ITESM institution on academic literacy was sufficient or not. A substantial response of 80% was elicited for the negative option, in contrast to the comparatively lower response of 20% for the positive choice.

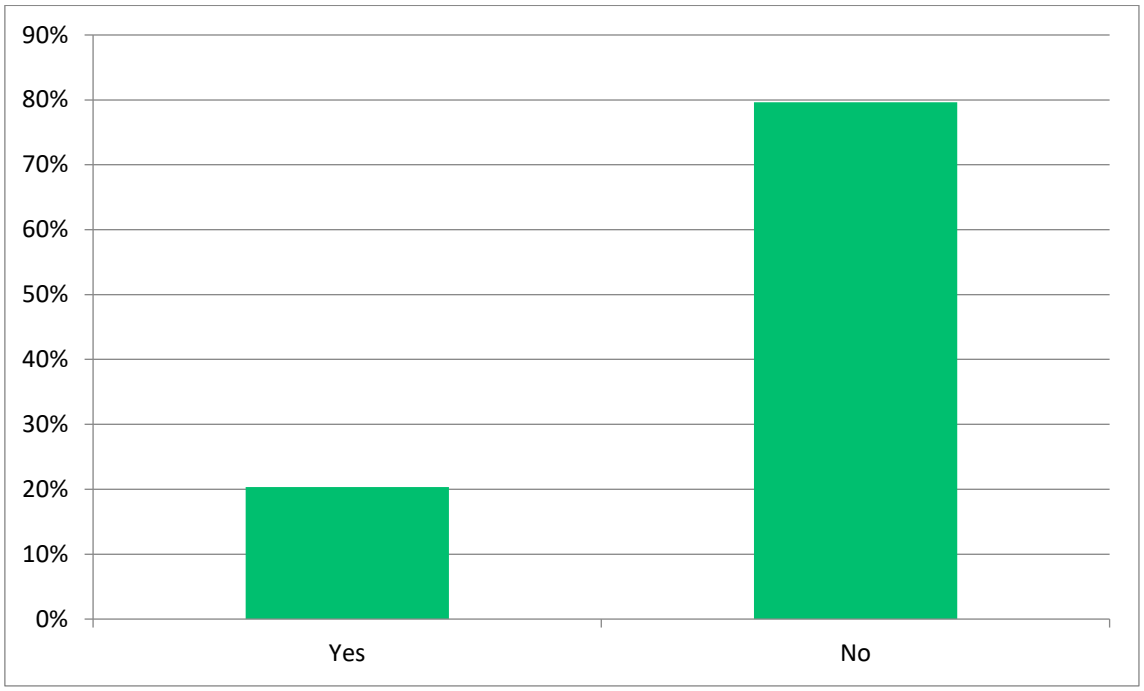


Figure 24. The professional education/support given by the university on academic literacy in English is sufficient

Once again, these findings were not surprising as the professional development programmes (CADi) offered by the ITESM were limited or had not been adjusted to the current needs in terms of EME the institution had been implementing. Moreover, this may be once again evidence of the overwhelming workload mentioned earlier. On this topic, the EME professors, along with the language professors including the Language Centre and Writing Centre, when asked about this issue expressed their displease with their current situation emphasising their amount of workload, the absence of support, the limited time to deal with all the issues in class and the pressure of their teaching requirements (Nashaat Sobhy & Sánchez-García, 2020). On this note, it is important to mention that, as Cortes and Csomay (2015) mention, the majority of content and language teachers, especially part-time instructors or support teachers, show a tendency of having a heavy researching and teaching load that includes teaching several courses with a mix of different levels even in the same classroom under unstable circumstances. Many of those teachers tend to also be overwhelmed and underpaid. As a result, they may not show the best disposition or availability to participate in research studies. Despite of this, when

teachers are involved in those type of projects or research, it may benefit them in being more implicated in the decision-making process that concerns students, teachers and both their development (Cortes & Csomay, 2015).

This was also supported in other studies (Johns, 1997; Zhu, 2004) and may indicate that this is not simply the professor's responsibility but also the institution's. Furthermore, from professors' voices there seemed to be plenty of pressure to fulfil all the requirements for their subjects and obtain positive results (Macaro et al., 2018). These requirements may refer to not only the responsibilities a teaching position entitles regarding teaching and various administrative tasks, as well as management; but also, the unavoidable one of learners being able to write successfully in a second language, raising the status of the university in national and international rankings and the status the English language holds as an international language. For example, some professors expressed it as follows:

> P26: *"Because my colleagues and me have too much pressure to do everything"*
>
> P51: *"We are asked to get good results from students but we don't even know how exactly to teach writing, we need more input."*

Their voices also indicated the need for support and collaboration with other departments to complete all the requirements established by the institution with these new EME programmes. EME rises some issues such as the need for greater support among professors as they are integrating language within their content subjects. Professors in the study argue this as follows:

Therefore, some adjustments such as additional support from the English language department working closely on the curriculum of the subject may be beneficial.

> P21: *"Because they should be part of our training if they want us to teach that"*
>
> P31: *"Because there is no involvement or collaboration between departments or someone in class with us."*

In addition, those results may also be part of the process of academic adaptation as the introduction of EME in this context was fairly new. This process and adjustment may include professors needing to reconstruct their teaching techniques and language skills to be able to fit into the EME context, therefore, this may also lead to academic stress (Herraiz-Martinez & Alcón-Soler, 2018).

4.6 Chapter summary

This chapter has presented findings on professors' perspectives through the analysis of four big categories: Importance of English and confidence in the area (Category 2), Genres (Category 3), Difficulties and needs in academic writing (Category 4) and Help and support for academic writing (Category 5). The initial section of this chapter highlighted professors' positive outlook on students learning content subjects through English and themselves teaching in English. The recognition of the relevant role of writing within their subjects was made evident, underlining the importance of academic writing proficiency.

Then, professors gave importance to academic literacy in English and the English language in general for students' learning and future employment. This perspective was complemented by the belief that students possessed sufficient English competence to effectively engage with their coursework. Regarding disciplinary genres, the prevailing utilization of expository, persuasive and descriptive genres was identified although a notable divergence was observed in their implementation within their teaching.

While the majority of professors emphasized the value of writing, a significant portion admitted limited integration of these essential genres into their teaching methods. Notably, among those who did incorporate these genres, a consensus emerged regarding the considerable improvements in students' assignments.

Within the category of difficulties and needs in academic writing, professors pinpointed various areas of language that required enhancement in their students' written work. In

this regard, register and personalisation seemed to the biggest areas for improvement, alongside vocabulary, grammar, coherence and cohesion. The fact that they found needs for language emphasised the need for policy making in EME.

Finally, in the last category of help and support for academic writing, professors emphasised an absence of collaboration with the English language experts or EAP instructors as well as any support from the English department when teaching subjects in English. Numbers showed that the majority of professors had not partaken in professional education programs dedicated to enhancing academic literacy in English, further underlining the existing gaps in their support structure.

The solutions discerned to address academic written needs in students' assignments revolved around the implementation of professional education programs in EME for professors, increased involvement of the English department in content subjects, and additional workshops on writing assignments for students. These solutions are rooted in the perceived inadequacy of institutional support for academic literacy in English as numbers indicated.

In summary, the findings obtained from this comprehensive analysis reveal various challenges within professors' perceptions regarding academic writing within the context of EME. Evident are professors' poor views on their students' assignments in different areas of academic writing, low awareness on academic needs or genres, an absence of a clear support structure for them as well as guidance on the needs the new context of EME requires. Furthermore, there seems to be a clear division between content and language, content professors are trying to address as they know without clear policies, training or requirements. This analysis has been helped and supported by figures and direct voices to illustrate the information in a more visual manner. The complete analysis undertaken has contributed to understanding the academic language needs of students from the professors' perspective answering RQ1.1. However, students' views are still to be reviewed in order to contrast them, thus, the interpretations of the findings in relation to the analysis and discussion of the RQ1.2, students' perspective on their academic written needs is provided in the upcoming Chapter 5.

Chapter 5: Analysis and discussion of surveys: RQ1.2 students' survey

5.1 Introduction

The previous chapter has been responsible for presenting the results of professors' beliefs regarding the academic language needs in students' written assignments and the context around these in EME. Following this line, the purpose of this chapter is to present the results obtained from students' self-reported beliefs on the needs of their writing in the context of EME. All the results have derived from the answers given to a survey designed specifically for them. Therefore, the research question addressed in this chapter is the following:

> RQ1.2 What are the students' academic written language needs in EME Humanities subjects as seen by students?

This chapter follows the same organizational structure as the previous chapter although with the students' answers. However, the results, along with their corresponding discussion, are interpreted from the students' perspective and applied to their position in the EME context. As it was performed in the professors' survey, the results are articulated around the categories that comprise it, which in turn revolve around a number of topics (see section *Students' survey content*). As it has been mentioned in Chapter 3 (see Methodology), the information obtained from the survey has been grouped into five categories from more general to more specific, these being (1) Participants' background (has been used to present the participants along with their background in Chapter 3), (2) Importance of English and confidence in the area, (3) Disciplinary genres, (4) Self-perceived difficulties and needs in academic writing and (5) Possible help and support for academic writing. These are first introduced with an overview of the findings from the five categories of the surveys for students. Then, each of these categories (four left) are presented for their quantitative view and supported by their comments for their corresponding qualitative view. The pertinent discussion of the results is accompanied by

graphs and tables to ease readers' comprehension. The information presented here takes into consideration the findings from the previous chapter and prepares the reader for a final comparison of beliefs between both groups of participants in the next chapter before finalising with the results of the writing samples of students' academic work.

5.2 Importance of English and confidence in the area

The first category of Importance of English and confidence in the area intends to detect students and professors' feelings towards English as well as their command of the language in order to cope with the learning and teaching of classes. This category contained a total number of n=10 in students' survey with the subcategories of "English competence", "English fondness", "Feeling comfortable teaching content subjects through the use of the English language", "Confidence in English", "Writing in English" and "Command of English".

The purpose of the first item in this category was to unravel the reasons behind choosing to study a degree in English. The responses were distributed among the available options, with 1,8% of participants choosing to improve their language skills, 1,9% seeking to enhance their subject-specific knowledge in English, 3,3% expressing interest in enrolling in specialized courses not offered in their L1. Then, 1,7% aiming to enhance employment opportunities, 1,7% striving to augment the value of their degree, 1,9% desiring to experience a challenge and boost their self-confidence in English, and finally, 2,6% selecting other alternatives (refer to Figure 25).

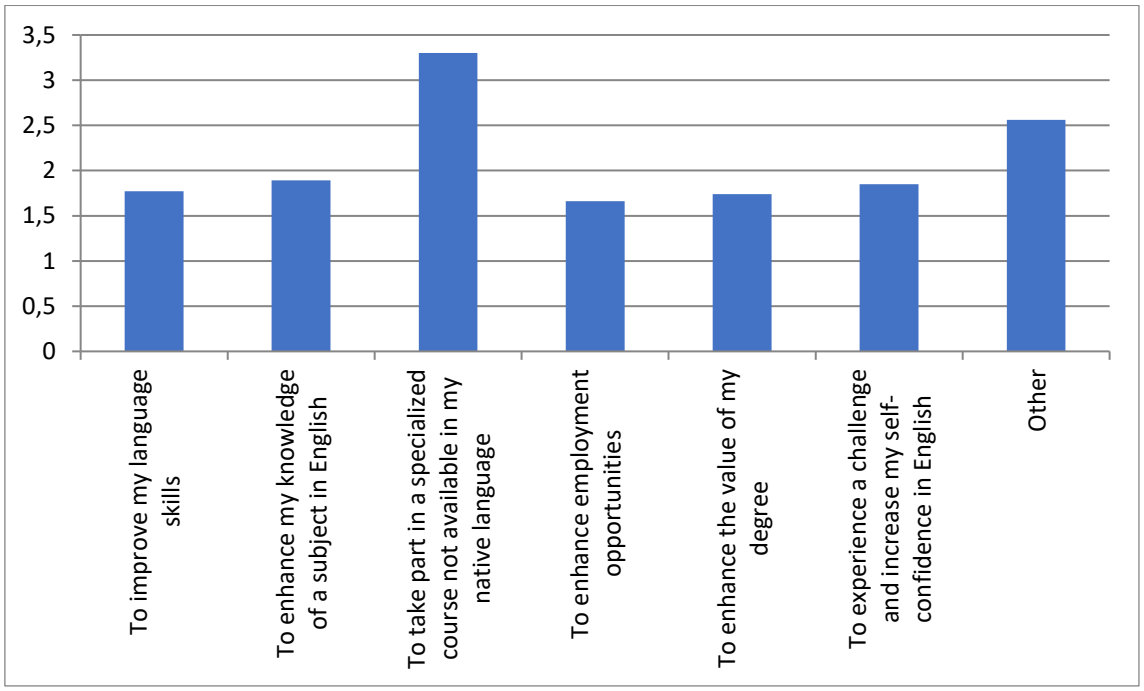


Figure 25. Reasons to study in an L2 language

Based on the numbers seen in Figure 25, the option that received the highest percentage of responses (3,3%) was to take part in a specialized course not available in their native language. This trend may be understood in the context of the internationalization process, particularly considering the growing number of undergraduate programmes offered in English (Lasagabaster, Doiz & Sierra, 2014; Earls, 2016).

Furthermore, students are facing various challenges at EME including the language (Bitchener & Basturkmen, 2006; Evans & Green, 2007; Leki & Carson, 1994; Silva, 1993). There are several L2 challenges that students may encounter during their degree programme. One such challenge involves understanding the reading texts that they will be using throughout their studies. Another challenge pertains to writing in an academic tone (Krause, 2001). This factor may account for the 1,9% of respondents who mentioned experiencing a challenge and increasing their self-confidence in English, as well as the 1,8% who aimed to improve their language skills. Moreover, the 1,7% of answers for enhancing employment opportunities may be linked to having a high level of proficiency in a second language such as English. This has become a tool to enhance job prospects

around the world (Del Campo, 2020) and so has obtaining a university degree that was taught through EME (Ament & Pérez-Vidal, 2015). This last justification provides at the same time an understanding to the 1,7% for enhancing the value of their degree. Unfortunately, no further comments were included in this question to specify the other options the 2,6% chose.

Once reasons behind studying in an L2 were identified, answers regarding whether students enjoyed learning in English were collected. To this end, the findings obtained fell mainly on the agreement side with 15% strongly agreeing, 68% agreeing, 17% staying neutral and only 1% disagreeing (see Figure 26).

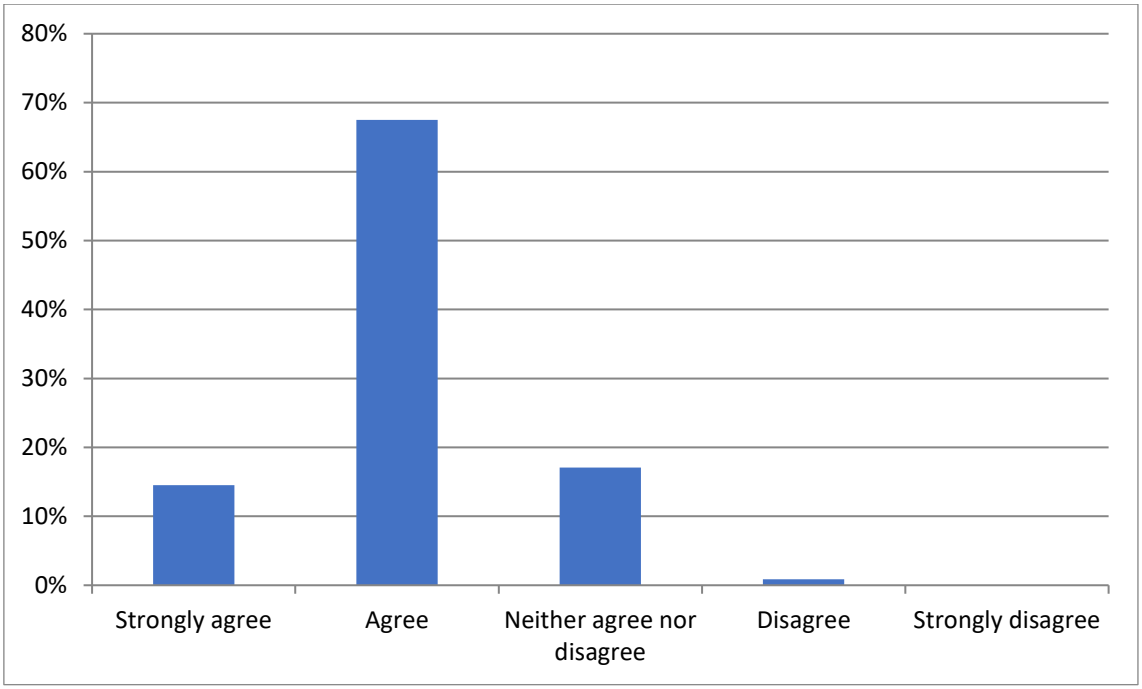


Figure 26. Students enjoy learning in English.

As it can be seen, there is an overwhelming good sense towards students learning in English from their own perspective, rather than a negative one with only 1% disagreeing in this case, especially after considering the reasons to do so mentioned in the previous

section above. This may be understood due to the low position Mexico holds in terms of average level of English language skills (EF English Proficiency Index, 2019) and therefore the interest in improving the level of the language, considering the status this language holds at a worldwide level in terms of education, research, publications, employability, etc.

These student participants were also asked to answer the same question but this time about their professors teaching them content subject through the use of English. The findings here indicated 13% of strong agreement to professors enjoying teaching subject in English, 50% of the respondents showed agreement, 29% remained neutral, 7% disagreement and only 1% strong disagreement as presented in Figure 27 below.

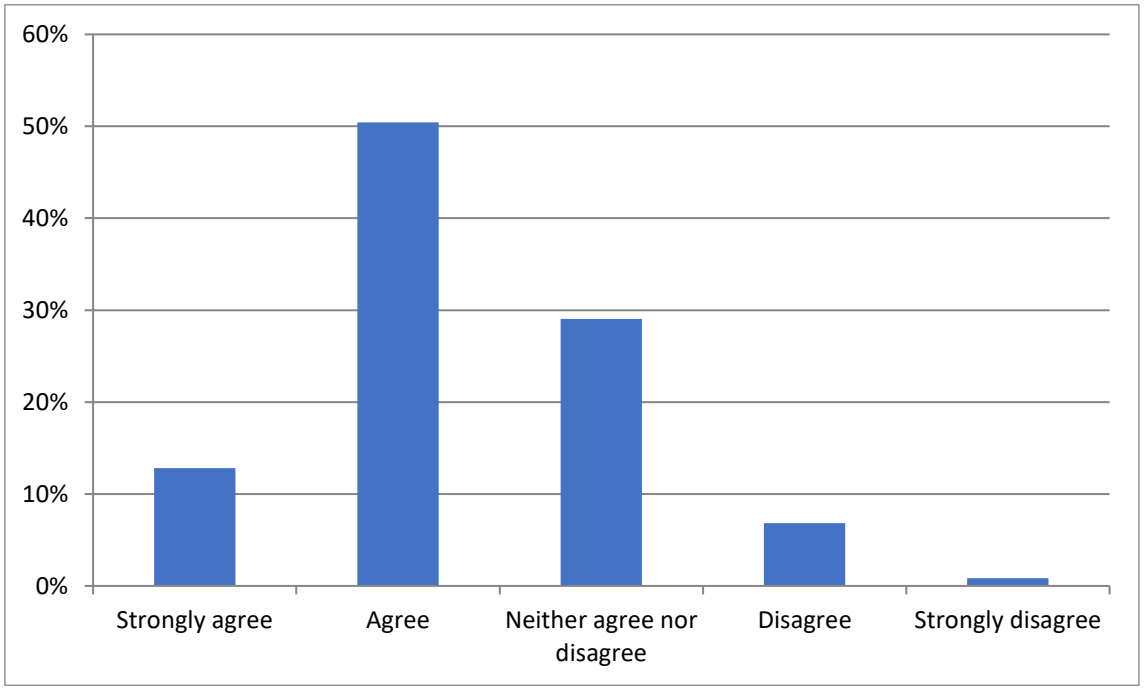


Figure 27. Professors enjoy teaching subjects in English.

These findings indicate that from students' perspective, content teachers seemed to have a general positive feeling of enjoying teaching through EME, although there seems to be an important percentage of disagreement. An explanation behind those percentages of

disagreement may be explained by students perception of their professors' level of language, maybe certain lack of training in their teachers towards language or a clear division in the classroom between content and language. However, no further comments in this section were provided by students to deepen into this topic.

It had been mentioned earlier in this research the importance of academic writing in EME subjects as a tool to assess students' performance through the completion of written assignments in the subject. Therefore, students were asked whether they felt confident when writing in academic English in those subjects. Thus, numbers indicated that 13% of students strongly agreed with feeling confident when writing in academic English, 74% of them agreed with this, 10% of the participants were neutral and only 3% of the participants did not agree with feeling confident in this area (see Figure 28).

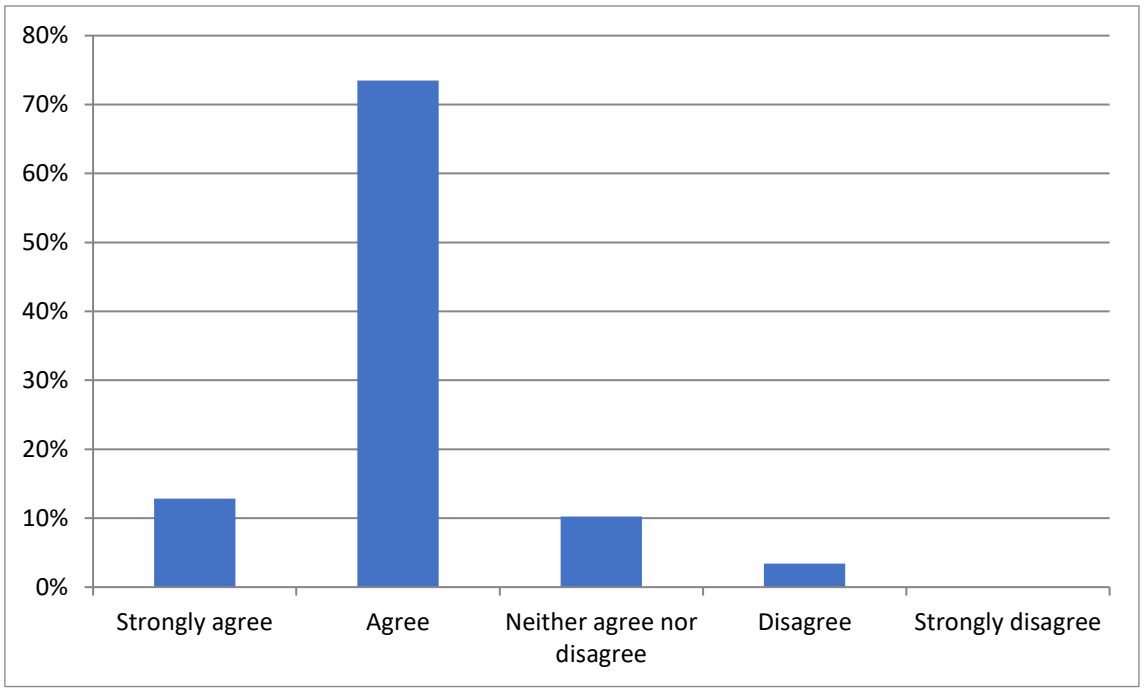


Figure 28. Students are confident they can write in academic English.

This positive response towards it may be understood by the students' high level of proficiency in the language as seen in the student participant's demographics in Chapter

3 as well as the significant amount of years acquiring the English language and learning through EME. This is in contrast with the low proficiency levels of English among students mentioned by Egron-Polak and Hudson (2014) and the EF (2019). These findings seem to coincide with those of Austrian students as seen in (Baker & Hüttner, 2019) regarding their high level of proficiency in English. It is worth remembering that in order to access these EME subjects, students were requested to provide evidence of a minimum level of B2. Interestingly enough, the positive response in this section was particularly unusual when learners accepted having difficulties with academic writing in another question later in this chapter, this will be further discussed in the category of "Difficulties and needs". Nevertheless, the low percentage of respondents who did not feel confident in writing may be because they feel they excel in other language skills such as reading or speaking rather than listening or writing. By considering the student demographic section of this research, their level for each skill seemed to be higher in speaking and reading than in writing and listening. This idea was supported by the only voice provided in this section that mentioned having a lower level than B2 in the area of writing.

Additionally, as it was mentioned earlier, the skill of writing is a particular challenge found in EME context and shared among students (Zhu, 2004).

On the subcategory of Writing in English, the focus now was on whether learners thought of writing in English as an important part of their subject. As a result, findings indicated that 27% of student participants strongly agreed with that statement, 69% of them agreed with it and only 3% remained neutral on this topic (see Figure 29).

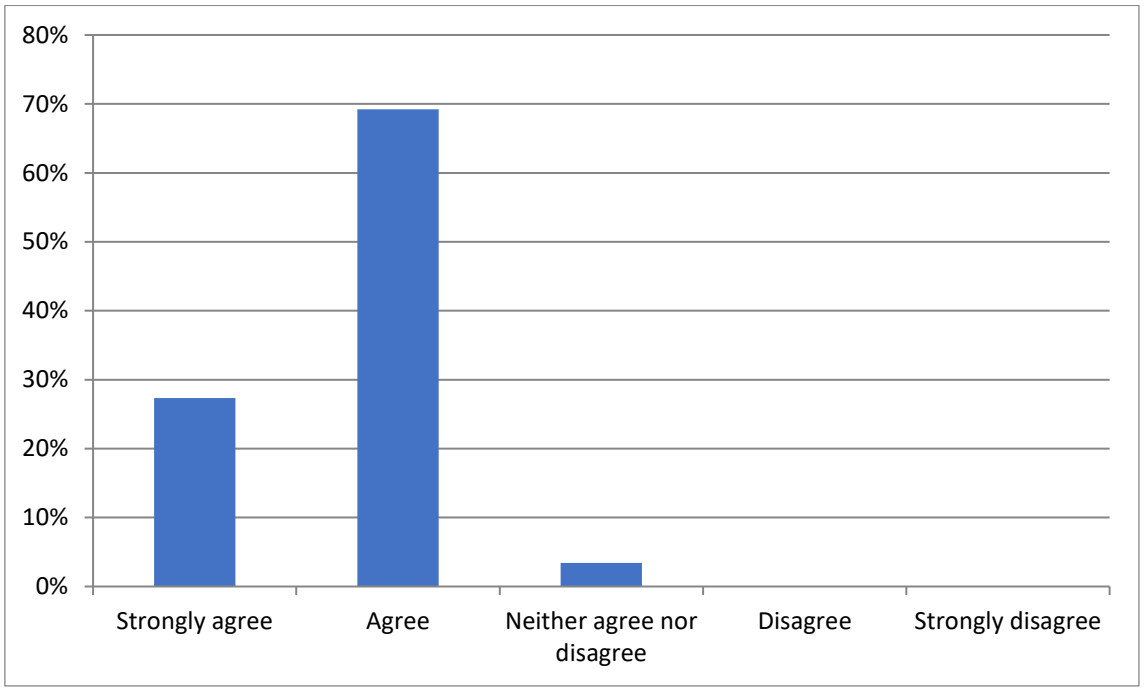


Figure 29. Writing in English is an important part of the subject.

These numbers indicated big awareness among students of the role writing in English played within their subjects. Therefore, the importance given to it in terms of the subject assessment criteria as well as working in class through the use of texts around the subject of study seemed clear. Furthermore, writing is an important part of the discipline to become a full-fledged member of the academic discipline. This is key for students performance and acculturation in their prospective jobs.

Deepening into the area of academic writing, it seemed relevant to uncover students' opinion regarding whether they knew what was expected from them in academic written assignments before starting to work on them. The responses on this area were found with 9% of them strongly agreeing, 72% agreeing to knowing, 15% of them remaining neutral on this topic and, finally, 4% of the respondents disagreeing (see Figure 30).

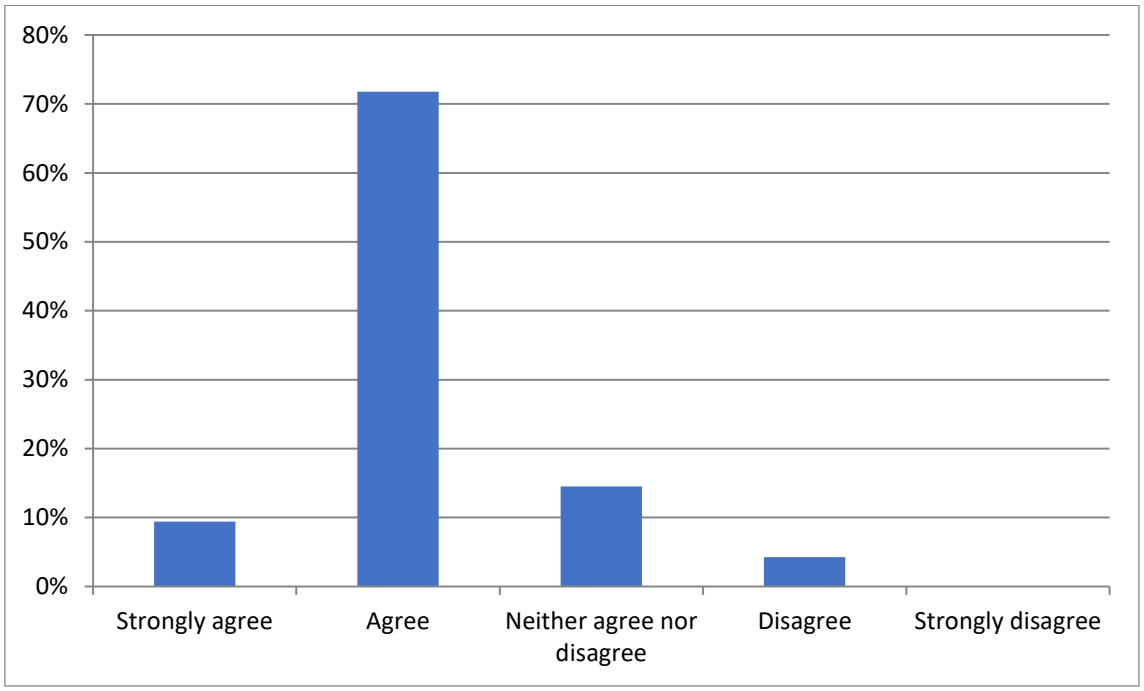


Figure 30. I know what is expected in an academic written assignment before doing it.

Based on the responses provided, there seemed to be a high confidence in knowing what was expected in an academic written assignment before even starting to write it. This may have been due to, again, the years of experience facing written assessments in their degree or in previous educational years. However, in this case, a higher response (4%) in the disagreement area along with the 15% remaining neutral, seemed to emerge in comparison with previous sections. This indicates that some of the students may have received a more skill-oriented teaching through, for instance, their EFL courses (Wingersky et al., 1995) instead of a more social approach. As a result, when these learners were implementing their writing skills at HE, these did not necessarily fit with the academic conventions (Clark & Ivanic, 1997). Therefore, those learners might be undergoing an academic acculturation process (Ying Xian Wang & Li Bai, 2021) as it was also seen in Dafouz et al., research (2016) where students needed some time and support to undergo this process.

Similarly as in the professor survey, student participants were asked to answer questions about the importance of academic literacy in English and the importance of the English

language in general, both for learning and future employment. The first question addressing academic literacy, showed that 25% of students strongly thought that academic literacy played an important role in their own learning and future employment, then 70% agreed to this, 3% remained neutral to this topic, 1% disagreed and, finally, 1% strongly disagreed (see Figure 31).

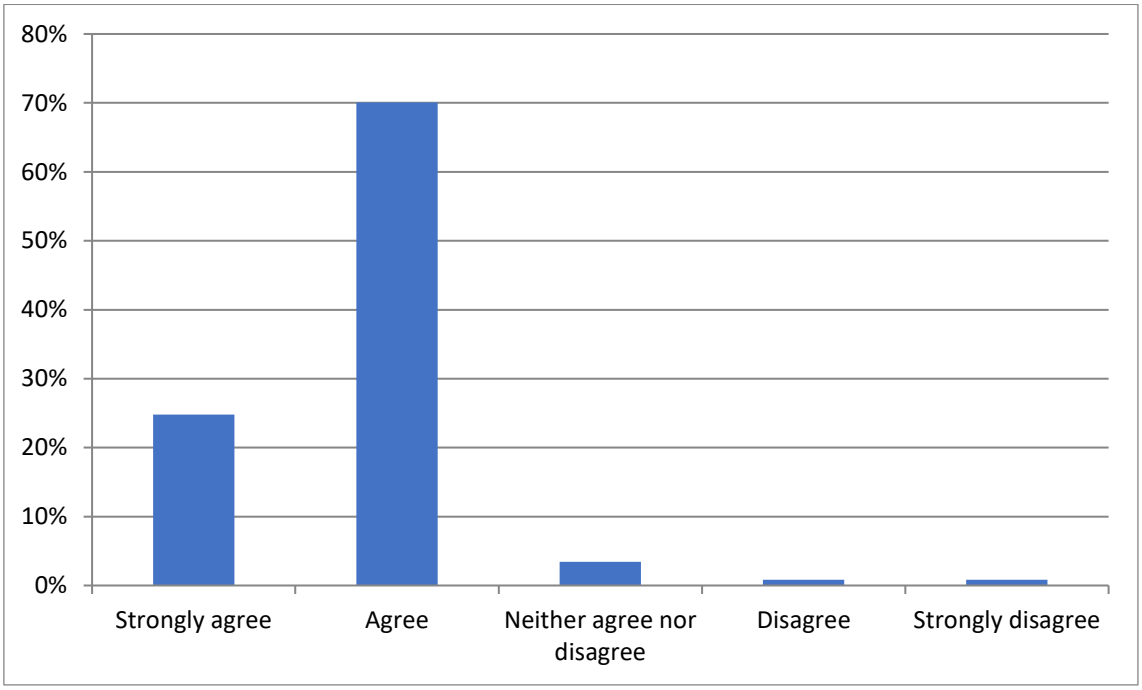


Figure 31. Academic literacy in English language plays an important role in students' learning and future employment.

Regarding the second question that referred to the importance of the English language for learning and future employment purposes, the answers were of 41% in the strongly agreed with the English language playing an important role in their learning and future employment, 58% agreed with that statement, and only 1% strongly disagreed with it (see Figure 32).

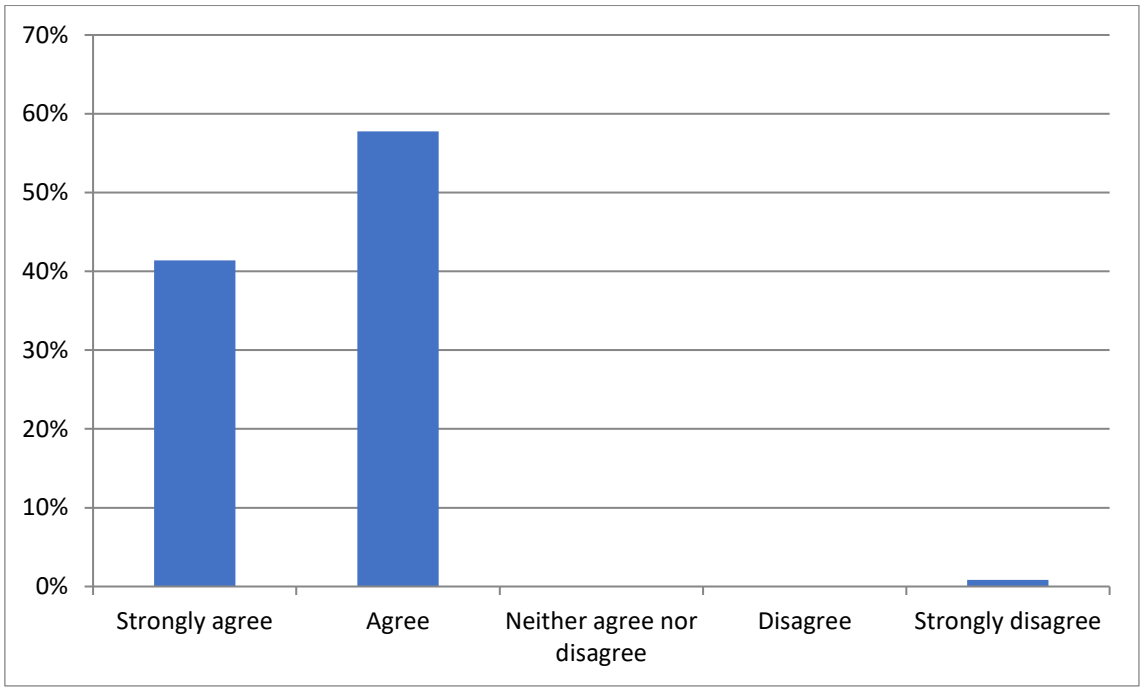


Figure 32. The English language plays an important role in students' learning and future employment.

The high positive responses in both categories indicated that students are aware of the important role English, academic and general, plays in their own current learning and future lives. Its influence is considerable in terms of pursuing further prestigious studies leading to better job opportunities and higher levels of employability. Similarly as in the professors' survey, this had been mentioned in findings by Ament and Pérez-Vidal (2015) where English and a degree taught in English were considered extremely useful to find a job.

Returning to students attention regarding their confidence in the area, it was relevant to find out whether participants considered their own level of English sufficient to be able to follow the classes without difficulties. Thus, the results on this topic were that 26% of all participants strongly agreed with it, 71% of them agreed to having a sufficient English level in order to be able to follow the classes, 3% remained neutral and 1% disagreed with it (see Figure 33).

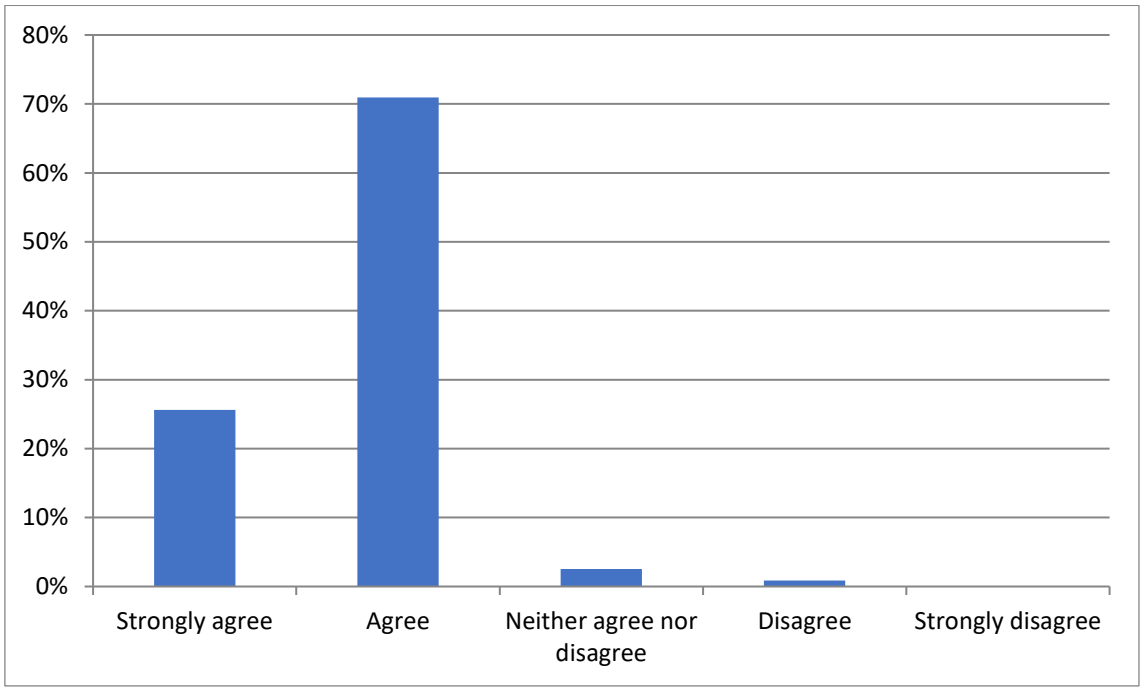


Figure 33. Students' English competence is good enough to follow the classes.

This strong and positive response on the topic by student participants may be explained, as it was mentioned earlier, by the minimum requirement level of B2 students needed to present in order to be able to study these subjects. Furthermore, as it was explained in the context section of this research, students were required to pass remedial subjects of English before officially starting their studies at HE or while studying other subjects not taught in English. During those courses, students improve their level and may finally obtain a B2 certificate, one of the graduation requirements at this institution. Therefore, by having this level, students were sure their level of English was more than sufficient to be able to follow the classes without difficulty. Nevertheless, it is important to remember that having a good level of English, although helpful, does not necessarily guarantee success in EME or in academic performance and other elements need to be considered (Coleman, 2006; Cosgun & Hasirci, 2017; Doiz et al., 2011; Evans & Morrison, 2011).

Finally, within this category of importance of English and confidence in the area, apart from asking students about their opinion regarding this level of English, it seemed pertinent to ask them the same question but about their professors this time when teaching

them those classes. As a result, student participants strongly agreed with their professors' English competence being good enough to teach their classes (23%), while 59% of them agreed with this, 9% remained neutral on this matter and 9,1% disagreed on this topic (see Figure 34).

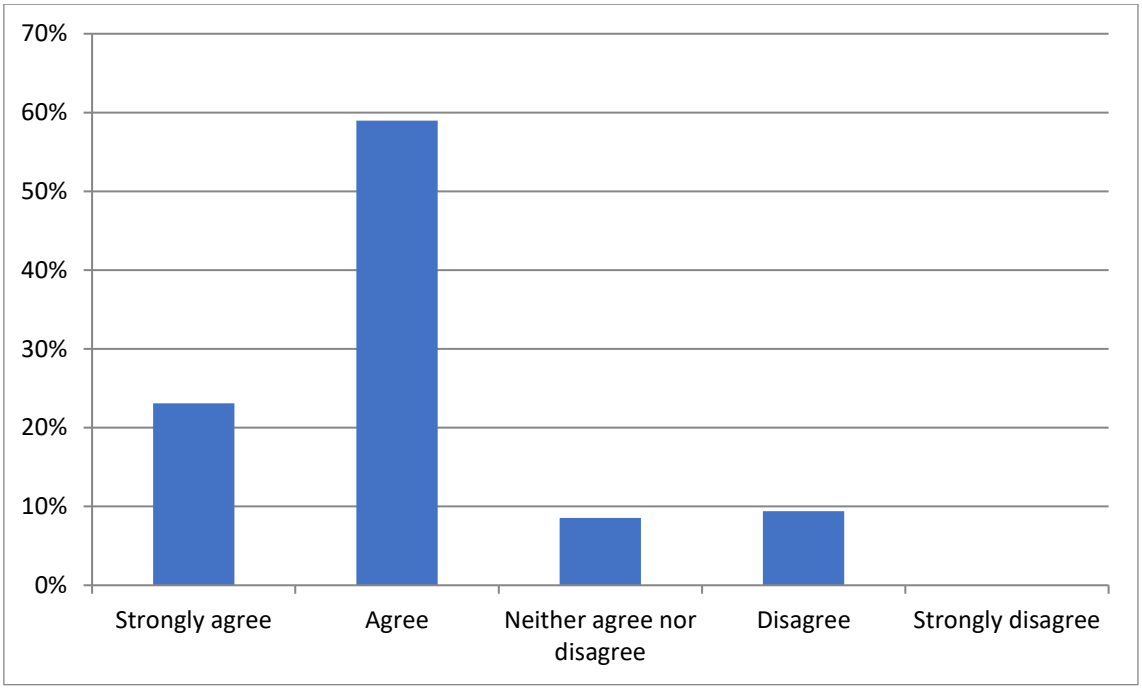


Figure 34. Professor's English competence is good enough to teach the classes.

The findings seen before present again a positive response from students towards professors having a good level of English to teach the class. However, there is an important percentage who remained neutral on this matter and who even disagreed with this. An explanation behind those findings may be found on the fact that teachers at this institution are required to provide evidence of a minimum level of C1 in order to be able to teach EME subjects, therefore, professors communicative skills may be high. Then again, having a high level of English does not necessarily guarantee an effective teaching in EME (Lasagabaster, 2022; Valcke et al., 2022) and students may have detected some deficiencies in their professors regarding language as there is a distinction found in the classroom between language and content as they both need to be addressed in a holistic

and integrated manner (Dafouz & Smit, 2020). Furthermore, students may have been influenced by the nativeness paradigm and the English as a lingua franca (ELF) may still have not been understood by them (Nashaat Sobhy & Sánchez-García, 2020).

5.3 Disciplinary genres

As presented in professors' survey, the category of disciplinary genres attends the importance of knowing the various text types or genres used and required in each academic discipline, specifically in those EME subjects. This is of great relevance for raising awareness purposes in the student participants with the focus on the appropriate completion of those assignments. This category contained a total number of n=3 in students' survey.

Following the same procedure as in the professors' survey, student participants were given five different categories of disciplinary genres in this section which were Descriptive, Expository, Persuasive, Narrative, Technical and Poetic, with a final option of Other to specify by them. From these disciplinary genres, those that received the highest percentage of responses from students were in the first place Descriptive with 84%, in the second place Expository with 79% and in the third place Technical with 30%. After this, those disciplinary genres that received the lowest percentage of responses were Persuasive with 18% of responses, Narrative with 18% and in the last place Other with only 3% of responses (see Figure 35).

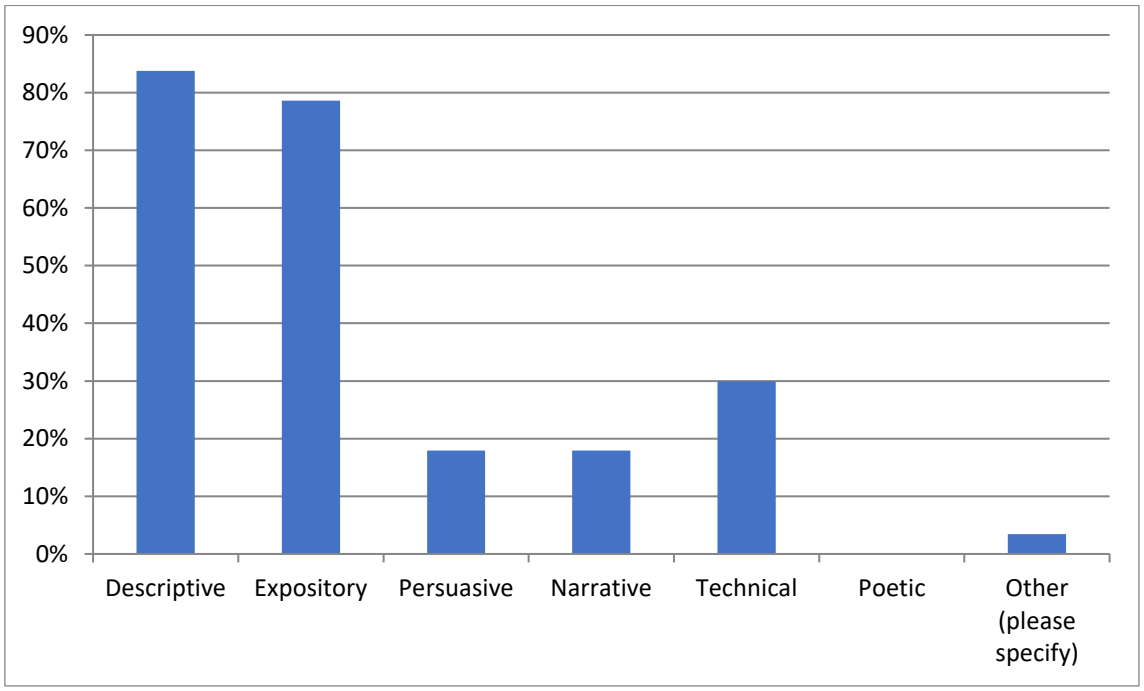


Figure 35. Types of written assignments required in the subject

Two of the results with the highest percentage of responses (Descriptive and Expository) are in agreement with the disciplinary genres collected in this research and presented in Chapter 5. Interestingly enough though, the Persuasive genre, that was also part of the genres collected, did not obtain that much response form students and instead the Technical one did. It is important to remember that the student participants were those studying the subjects from where the written assignments were collected. Nevertheless, students may have been thinking of other EME subjects or, more likely, they seemed to have some misunderstanding about the different genres they were working with, since this was a degree in the Humanities branch, more specifically Digital Music Production, and Technical might not be a popular genre found there. This was supported in their voices when providing more information or specifying about their Other genres, in this case participants indicated other genres such as scientific, letter, reports and emails. On this topic, with the exception of reports, which is a commonly found genre among the Humanities, the rest of genres mentioned are not commonly found in Humanities degrees or are not the type of genres this question was referring to. Those genres are more commonly found on the Science part of studies. This may indicate again that some

students may have not been aware of the required genres as there is a relationship between students' academic performance and genre awareness (Salaberri-Ramiro & Sánchez-Pérez, 2015b).

Once the types of genres were identified, it was of relevance to discover whether those genres mentioned earlier were studied and worked during the classes. It was interesting to discover that the important amount of 74% of student participants answered negatively to this question, whereas, in comparison, only 26% of them replied positively to it and continued to provide details on how and how often through their own responses (see Figure 36).

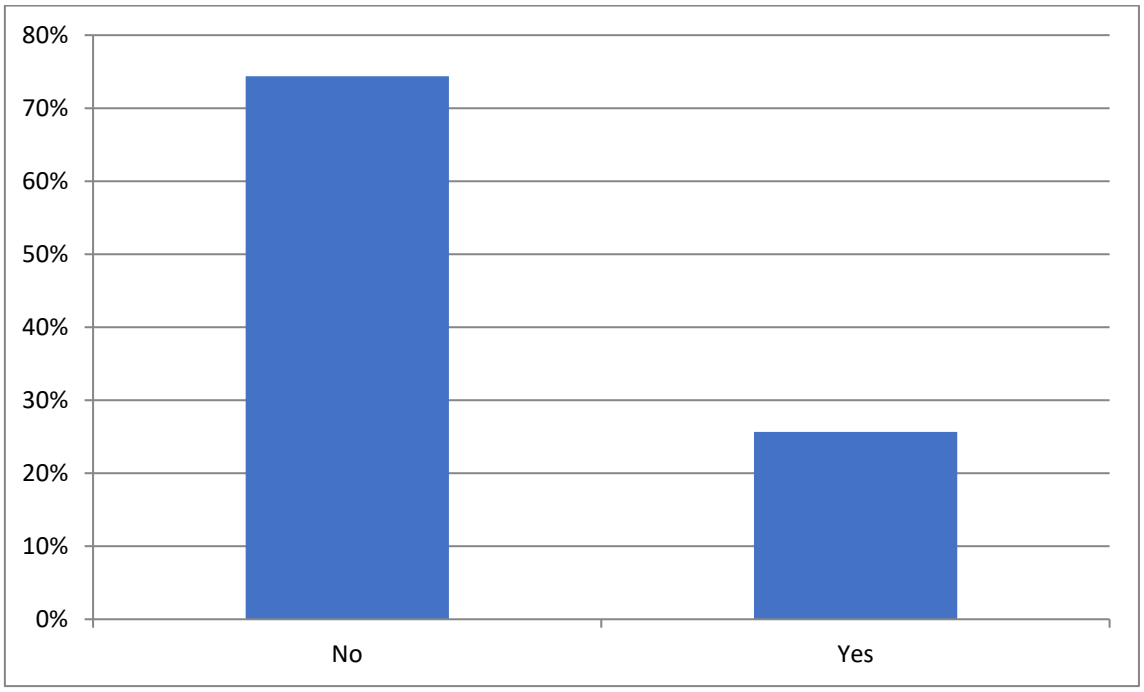


Figure 36. These types of written assignments are studied and worked in class

These numbers seem to be similar to those in the professor survey and therefore support the explanation of content teachers not seeing the instruction of writing in English as part of their responsibilities or duties in EME lessons since, at the same time, they have not been trained on it. As a result, linguistic aspects in the EME context may tend to be neglected (Doiz, Lasagabaster & Sierra, 2011). However, the substantial proportion of

responses (26%), even though it was lower, reflects how the need to study and work on genres in class is tangible and content teachers are counteracting as they may feel fit (Dafouz et al., 2014). As commented by the students who answered yes to the question, studying and working on those genres in class, the following voices indicate that it is done on occasions and through some explanations, exercises, presentations, practices or the Writing Center. Those voices are evidence of the fact that content teachers are adapting their lessons to the EME context by providing other resources to students such as a higher number of examples, visual materials, written words, exercises, etc. (see voices S4, S7, S9, S18 and S22) (Dafouz, 2020; Morell, 2020):

S4: *"with presentations and exercises. One week"*

S7: *"we have classes about that and teacher help us to improve or gives us some tips"*

S9: *"We make some presentations on class about any kind of subject"*

S18: *"The teacher show us examples, and maybe once a week we see this kind of things"*

S22: *"Writing an answer, expositions, etc."*

On this topic, Dafouz et al., (2016) also mention providing more materials to students, and professors preparing classes in greater detail by considering language items that might occurred during class as a way of integrating language and content. Particularly, as the voice from S18 mentions, the technique of providing students with examples of pieces of academic writing to read so students know what is expected from them is an extremely useful tool for L2 writers. This way learners, after reading academic materials, may improve their academic style, organisation structure, lexical range and syntaxis (Dafouz et al., 2016; Hinkel, 2004; Mazgutova, 2020; Mu & Carrington, 2007). These content teachers seemed to be focusing on form during their lessons in order to improve student results (Costa, 2012). This is of no surprise since Fathman and Whalley (1990) as well as Ferris (1997), mentioned that one of the main possible solutions to helping learners face

the demands of university levels is to provide them with form and content feedback or practice (see voice S16):

> S16: *"Explainig in general what does an writting assingnment has to have and we see it 1 week in the semester"*

Voice S6 mentions the Writing Centre appearing again as a support to those students learning content through EME in order to have their writings reviewed, corrected or work on them before submitting their final work, focusing sometimes on stages 3 and 4 of the English writing strategies offered by Flower (1993). This support, even though useful, seems to be a resource that supports the constant division of language and content found in EME that needs to be addressed (Dafouz, 2021).

Nevertheless, as voice S29 clearly states, these types of measures employed by teachers vary from subject to subject, or from teacher to teacher, as they may be based on the teachers experience and perceptions from an induvial or experimental situation (Dafouz et al., 2014), therefore, are not set in the syllabus or clearly stated in the policies.

> S29: *"*[This situation] *Varies from subject* [to subject], *from 1* [once] *per class to 1* [once] *per week"*

By considering the positive response of 26% of participants to the previous question (see Figure 36), the focus remained now on whether those students considered there was a clear improvement in their written assignments because of having studied and worked on those genres in class with their partners and professors. The response to this was of 38% of participants considering there was no improvement in their written assignments, in contrast with the bigger response of 63% of them thinking there actually was an improvement in their writing because of it (see Figure 37).

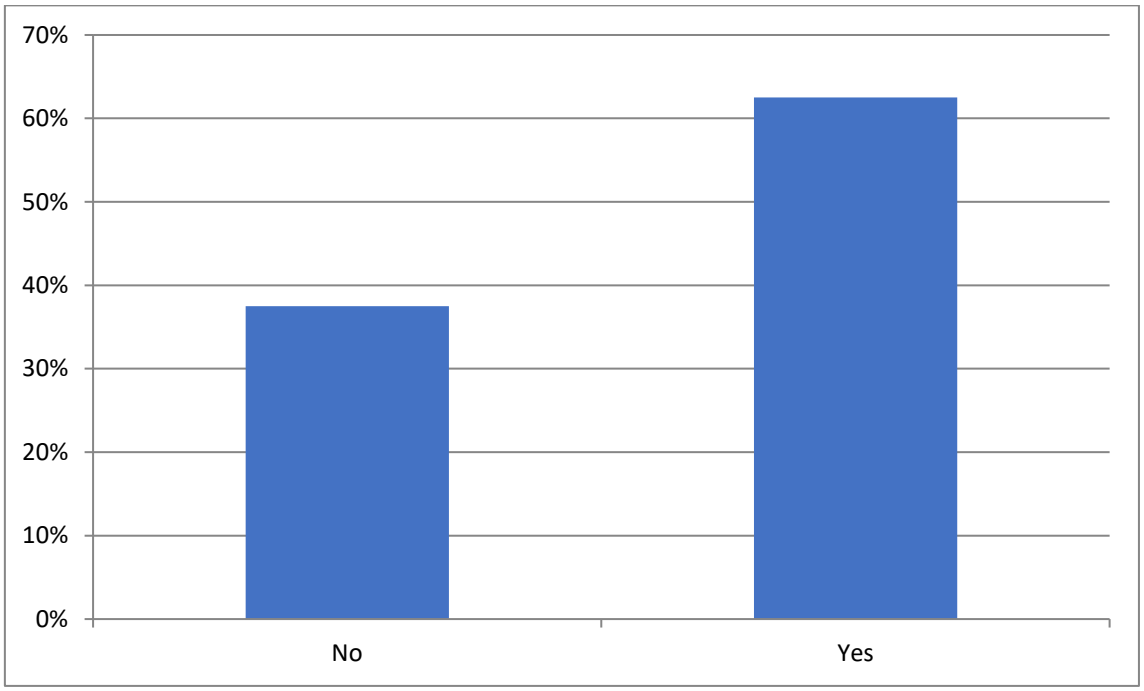


Figure 37. There is an improvement in students' assignment because of working and studying genres in class

The results seen in this section clearly indicate a positive response towards studying and working on genres during class specially when students are being requested to complete written assignments as part of their subject assessment. This is supported by the voices in this section that specified how and in what aspects their written assignments were improved regarding grammar, vocabulary, confidence, practice or work through the use of examples. These voices mentioned some work on form and content (Johns, 1997) such as S9, S12, S16, S20 and S22:

S9: "[I see an improvement] *In my grammar"*

S12: "[I have] *Better writting skills"*

S16: "I think we could understand more thing[s] *and at the same time we need to think in english for more time because we need to read, lisent and make conclusions so all that help you to increase your vocabulary"*

S20: "i know more structures"

S22: "[I see an improvement] *Vocabulary and grammar"*

These areas are key to deal with the academic written requirements that the university context places upon students (Lasagabaster, 2010) and both are important as one cannot function without the other for the final purpose of achieving a good communication through writing (Barton, 1998). As it was mentioned in Chapter 2, writing a university assignment demands students to manifest a deep and thorough understanding of the subject matter, also to present their ideas in a logical order and to communicate them efficiently by employing a corresponding academic tone and language (Krause, 2001), even so more in EME.

Furthermore, voices S8, S16 and S24 make a reference to the importance of including a social view for the writing process (Clark & Ivanic, 1997):

S8: "I started to thinking more outside the box"

S24: "started to critically review my works as if I'm a person who doesn't know anything about the topic, to see if my idea is understood"

On this note, students when entering HE find themselves in the situation of having to learn and acquire a new academic discourse for the purpose of adapting to the new conventions of the institution, in other words, they find themselves in the process of academic acculturation (Ying Xian Wang & Li Bai, 2021). Therefore, these voices mention that they are considering other strategies or attitudes towards writing (Ivanic et al., 1999) and they might feel more confident with their writing skills in English as mentioned in those voices.

Moreover, by working on those writings in class and practicing (as mentioned in S17) through the use of some examples (see voice S25), students were made aware of their mistakes (as stated in voices S10) and were taught techniques to improve (see voice S14).

S10: "Because I realize in where I have problems"

S14: "I learn new things and improve myself."

S17: "[Written] *practice helps with everything.."*

S25: "Because they give us examples"

Thus, students were able to improve their own writings and were aware of what was expected from them as well as the genres (Salaberri-Ramiro & Sánchez-Pérez, 2015b).

On the other hand, it is interesting to see that there was an important number of 38% who did not consider there was an improvement in their written assignments with the studying and working on those genres in class. Nevertheless, this may be due to the fact that the way these students perceived the study and work on those genres was not the most effective or their awareness about genres was not raised (Salaberri-Ramiro & Sánchez-Pérez, 2015a). In addition, it could be that students might consider the English level of their professors was not sufficient to be able to teach their class (Orduna-Nocito & Sánchez-García, 2022) or that they might still be thinking of separation of content and language between subjects and teachers instead of collaboration between those teachers (Aguilar, 2017; Airey, 2012). This again needs to be born in mind as clearly an overarching strategy of greater magnitude should be implemented with a strong training process of the whole staff and policies that would benefit students, professors, staff and the entire institution (Sánchez-García, 2020; Airey, 2016; Dafouz, 2021).

5.4 Self-perceived difficulties and needs in academic writing

Proceeding to the fourth category of difficulties and needs in academic writing, this category presents a reflection on areas of improvement where learners may have some kind of struggle during the process of writing academically in those content EME subjects and their own perspective. This category contained a total number of n=2 in the students' survey.

First of all, attention needed to be given to learning whether students found difficulties when writing in academic English for their EME subjects. To represent this, Figure 38 below presented that 11% of the participants strongly agreed to find them, 67% of them

simply agreed, 14% of the students remained neutral on this topic, 7% of all of them disagreed and only 2% strongly disagreed with finding difficulties when academically writing for those subjects.

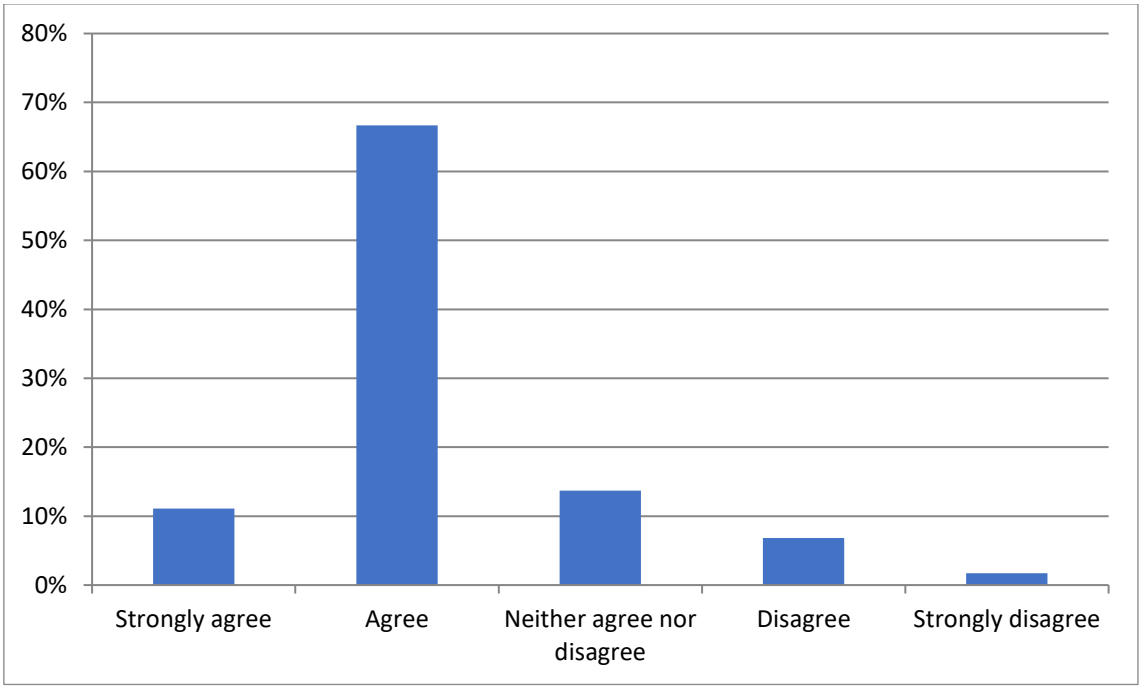


Figure 38. I find difficulties when writing in academic English for those subjects.

This surprisingly high percentage of difficulties when writing in academic English, with only very few responses that showed certain confidence and no problem in this area, was interesting to discover since it showed that there seemed to be an area for improvement within EME subjects regarding awareness of writing genres and development of skills for academic writing. The positive response in this area was also unexpected as, in Figure 28 above within section *Importance of English and confidence in the area*, the majority of students felt confident in writing academic English. It seemed that students were contradicting themselves and actually seemed to struggle with academic writing in these subjects. This is not surprising as lack of mastery in academic content and difficulties in appropriate academic literacy seem to be recurrent difficulties among learners (Del Campo, 2020).

Second of all, and in order to collect more details regarding those difficulties learners were having when writing academically in English, they were provided with some characteristics commonly found in academic writing in the next section. Correspondingly, 3,8% of the students reported encountering difficulties in the choice of voice (formal or informal) or register, 3,5% of them was given to the option of personalization meaning the use of personal pronouns such as "I", "you", "we" or others, 2,2% obtained the characteristic of use of slang such as "gonna", "wanna" or others, 2,4% received the option of appropriate vocabulary in comparison with the 2,6% of appropriate grammar, and finally 2,1% was given to the characteristic of coherence in the text in contrast with the 2,3% of cohesion in the text (see Figure 39).

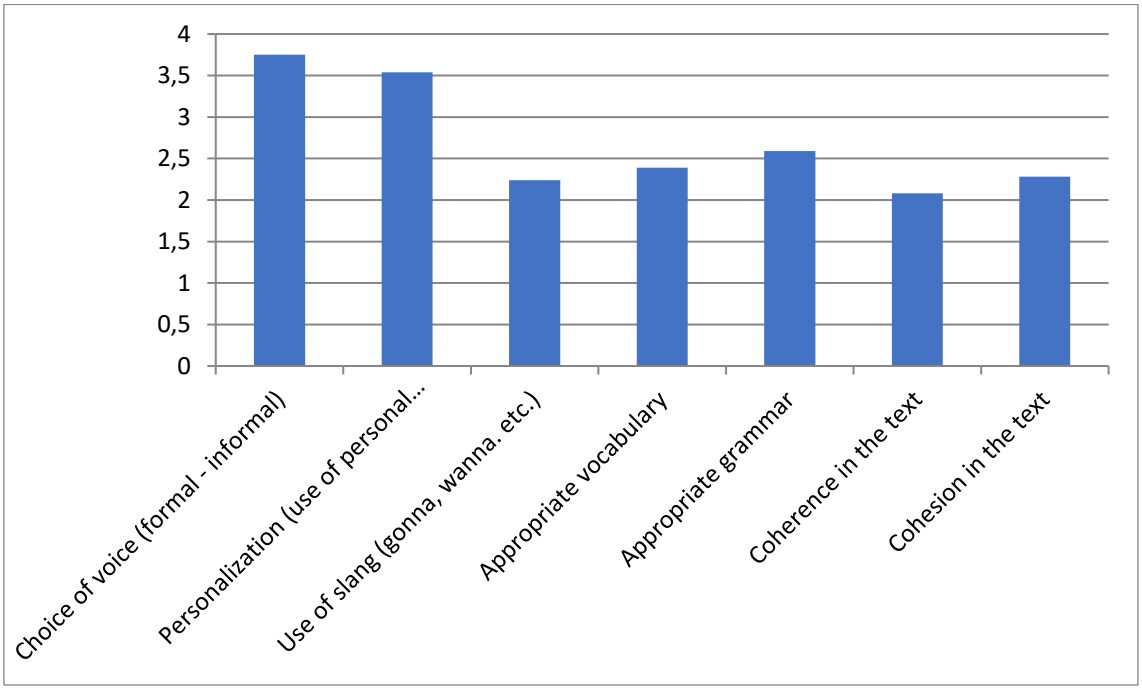


Figure 39. Needs/difficulties in written assignments (1 being no problem at all and 5 having many difficulties).

As evident from Figure 39, there were two categories that garnered the most substantial response, namely, the use of register and personal pronouns. Nonetheless, the remaining options also received an important and almost equal percentage of answers meaning

students find difficulties in all those areas on an almost equal basis. The two highest categories included in the area of register come as no surprise since the lack of register awareness is an often-found feature of EFL learner writings (Paquot, 2010). Furthermore, the rest of the characteristics are also part of the linguistic features and difficulties among learners (Connor-Linton & Polio, 2014). On this note, the options provided in this item were limited to the participants although there was an addition to this section with "Other (please specify)" where only three participants included their voices showing certain reference to other needs including the use of sentences to contrast ideas, emphasis in coherence and the use of technical vocabulary and passive voice:

S1: *"Apply colloquial sentences to contrast my ideas. I has been learn a few from leaders books."*

S2: *"Coherency, the possibility to transmit the right idea"*

S3: *"Regarding technical vocabulary or pasive voice"*

These were further details of the linguistic features included earlier which emphasised again the common characteristics of academic literacy as seen in the analytical framework of this research presented in Chapter 2, for instance the use of passive voice supported by Bailey (2011).

5.5 Possible help and support for academic writing

In the last place of the categories of this survey there is "Help and support for academic writing". This category contained n=6 items referring to help provided by the English or EAP professors, other type of support from the English department and details, possible solutions for the needs seen earlier, sufficient support for academic writing provided by the institution to students and any further comments regarding EME students wanted to share.

The results obtained in the previous category indicated that there seemed to be a need for improvement in EME subjects particularly in the area of academic writing. Thus, it seemed pertinent for this research to review the kind of help and support students received from the university. To begin with, since students were interacting with the English language through their content lessons, it was important to ask participants for the level of collaboration they perceived in their EME subjects from the English or EAP professors. These learners exhibited a significant response indicating the absence of such collaboration (64%). However, there were some responses towards rarely having a collaboration (3,4%), sometimes (8,6%) and usually and always having similar percentages of 13% and 11% respectively as presented in Figure 40 below.

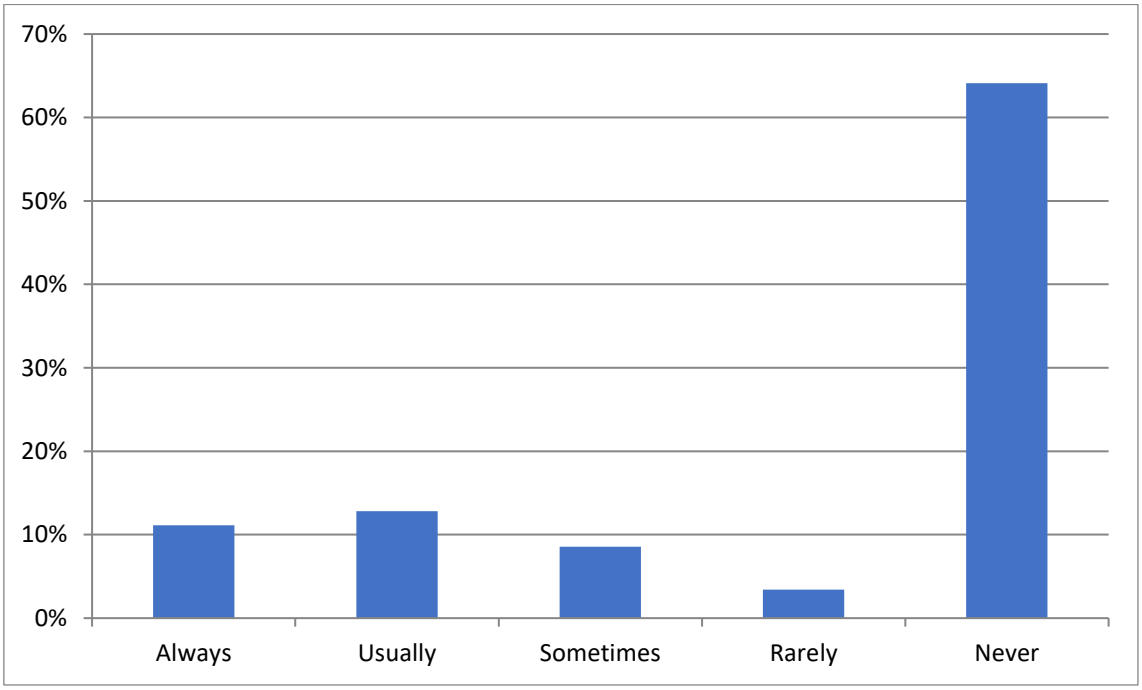


Figure 40. There is a support from an English language teacher during classes

Following the same line as in the professors' survey, these results may be understood by considering the low amount of existing courses in which lecturers and language specialists work together as it was seen in Airey (2012) and how the desirable goal would be a cooperation between them (Aguilar, 2017). Once again, this high negative response

from participants suggests that, in order to improve EME classes, certain amount of support provided to students involved in the new changes is needed, at least at the beginning of the process and until the goals previously established are achieved (Dafouz, 2021; Macarao et. al., 2018). On this note, this support may be given, at least as a first resource, through students receiving some kind of help in the classroom (Valcke & Wilkinson, 2017) such as language teachers including some lessons on academic writing, the possibility of sending students individually to English or EAP professors in the writing centre for extra help as mentioned in previous sections, or, lastly, learners taking extra EFL or ESP courses aside their studies. These possibilities may also explain the rest and lower percentages of responses in the other options of this question. This is supported by the only voice that mentioned there was a clear separation between language and content.

The employment of EFL courses or support from EFL teachers has been seen as a common strategy to provide students with more individual feedback (Lister, 2007). However, as Froedsen (1995) mentioned, language teachers providing feedback on writing to students might not be ideal, since when facing content specific topics they might lack some subject specific knowledge. Despite of this, they might help with rhetorical development and language use in writing. Furthermore, this division between content and language teachers roles is also seen in the Finnish context as presented in Dafouz et al., (2016).

After this topic was answered, another one began that tried to discover whether some sort of support from the English department or the university regarding academic writing in English was provided. On this topic, participants answered by showing a strong response towards never receiving any type of help from them in this area (66%), although 4,3% mentioned a rarely frequency, 5% responses were gathered for sometimes, usually received 10%, and 15% answered in the always option as seen in Figure 41.

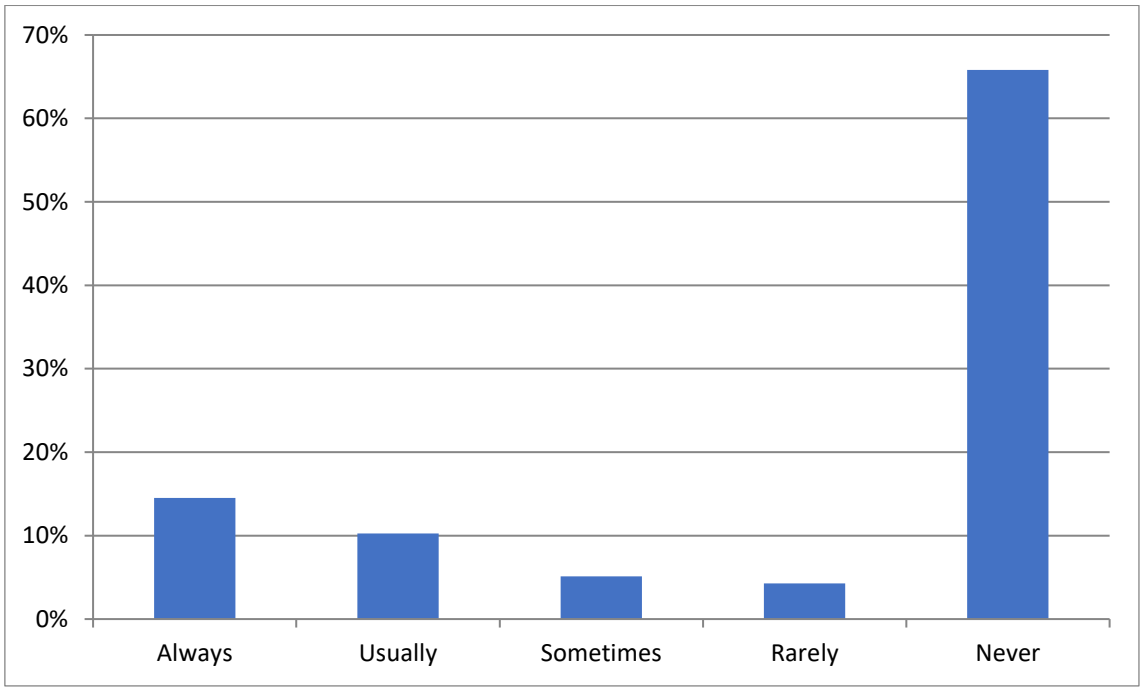


Figure 41. There is extra support from the language department or the university regarding academic writing in English.

By considering these results and those of the previous question, a tendency appears towards learners never receiving support on those matters. As a result, students' needs seem to not being taking into consideration, or there seems to be an absence of possible sources available to them, or a clearer transparency of the policies being implemented towards learners appears to be necessary. As it was mentioned in Chapter 2, research regarding professors' needs in EME are numerous (Aguilar, 2017; Dafouz, 2018; Lasagabaster, 2018; Lauridsen, 2017; Valcke & Wilkinson, 2017), nevertheless, research focused on learners is very few and limited. In terms of those percentages of responses that indicated certain support provided by the language department or the university, these were clarified through the next item that requested students' further explanations and details about that support, for instance language classes, tutoring session, etc. These voices referred to support in the shape of the writing centre, language classes, tutoring sessions, materials, certificate and other help. These voices were mentioning the type of existing support at the ITESM that would contribute to the improvement in language terms addressed to learners. First of all, voices S2, S6, S16, S20 and S27 commented on

the language classes the ITESM offers, these are presented in the EFL subjects students take during their Remedial Semester and also in the EFL courses offered at the Language Centre:

> S2: *"*[There are] *Language classes and a writing center"*
>
> S6: *"We can have tutoring sessions and also we can take some extra classes* [offered through the Language Centre]*."*
>
> S16: *"Tutoring sessions* [with our professor and at the Writing Centre, and] *we can take extracurricular English classes but it has an extra cost."*
>
> S20: *"They* [the institution] *give us help as language classes, tutoring sessions, extra help for our writings* [with the Writing Centre]*, etc."*
>
> S27: *"Language classes, tutoring sessions and certificate preparations* [for English level]*"*

Secondly, voices S2, S7, S10 and S14 make a reference to the Writing Centre offered within the Language Centre to students as part of the new changes in the Tec21 strategy plan (Tecnológico de Monterrey, 2020a):

> S7: *"We have tutoring sessions at Centro de Escritura, which is a space specialized to take that kind of help"*
>
> S10: *"Exactly, I have tutoring sessions and always there's a teacher if you need some kind of help* [at the Writing Centre]*"*
>
> S14: *"*[At the Writing Centre] *It is like tutoring sessions, you have to schedule your tutoring session and one teacher help you in the assignment"*

As explained by the voice S14, this Writing Centre is offered to students by previous appointment and a language teacher available there would review the students' writing and provide the necessary help. This help is presented by voice S18 that mentions

improvement in writing regarding language, coherence and grammar, although it may not be limited to this:

> S18: *"They* [language professors] *give me tutoring on how can I improve in my language, coherence and grammar usage"*

Finally, voice S17 indicated apart from tutoring the support of materials to study probably offered during those tutoring sessions in the shape of, for instance, writing samples or lists of discourse markers to employ in students' academic writing, among others as also seen in voice S28:

> S17: *"Tutoring and materials to study"*
>
> S28: *"Support for CV* [preparation]*"*

All those measures mentioned are clearly examples of changes in methodology that EME is requiring in today's education as seen in Herraiz-Martinez and Alcón-Soler's study (2019).

Once those results and voices were obtained, the next section would focus on the students' perspectives regarding possible solutions to help them with their academic writing in those content subjects. Results were gathered as following: 4,5% of participants chose the use of professional education programmes on EME for professors, very close to the 4,4% gathered on the option of involvement of the English department in their subjects, followed also closely by the 4,3% of additional workshops on writing assignments for students. Then, 3,4% of participants preferred working on writing assignments during their classes, and 2,8% of them decided on personal tutoring (see Figure 42).

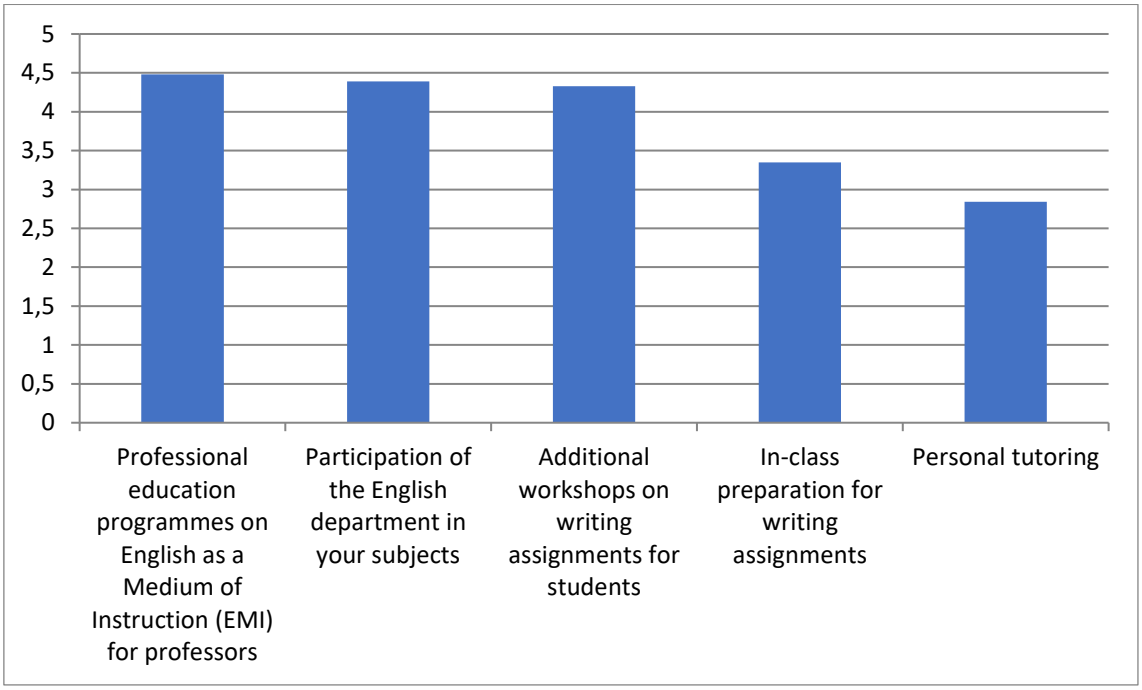


Figure 42. Solutions for academic written needs in written assignments (1 being the least effective and 5 the most effective).

As it is seen in these results, there seems to be a tendency towards the first three options as there was mention of them in the previous questions. In spite of this, students may have not been in the position to answer this question as they may not be aware of the many decisions behind the application of a methodology or an institutional change, this may explain the similarity in percentages divided among all the responses. It is important to mention that students were given the choice to specify other solutions but did not provide this research with any answer.

The last figure intends to gather responses concerning whether from students' personal opinion, the support provided by the ITESM institution on academic literacy was sufficient or not. To which a significant answer of 67% was given to the negative option in comparison with the lower answer of 33% in the positive choice.

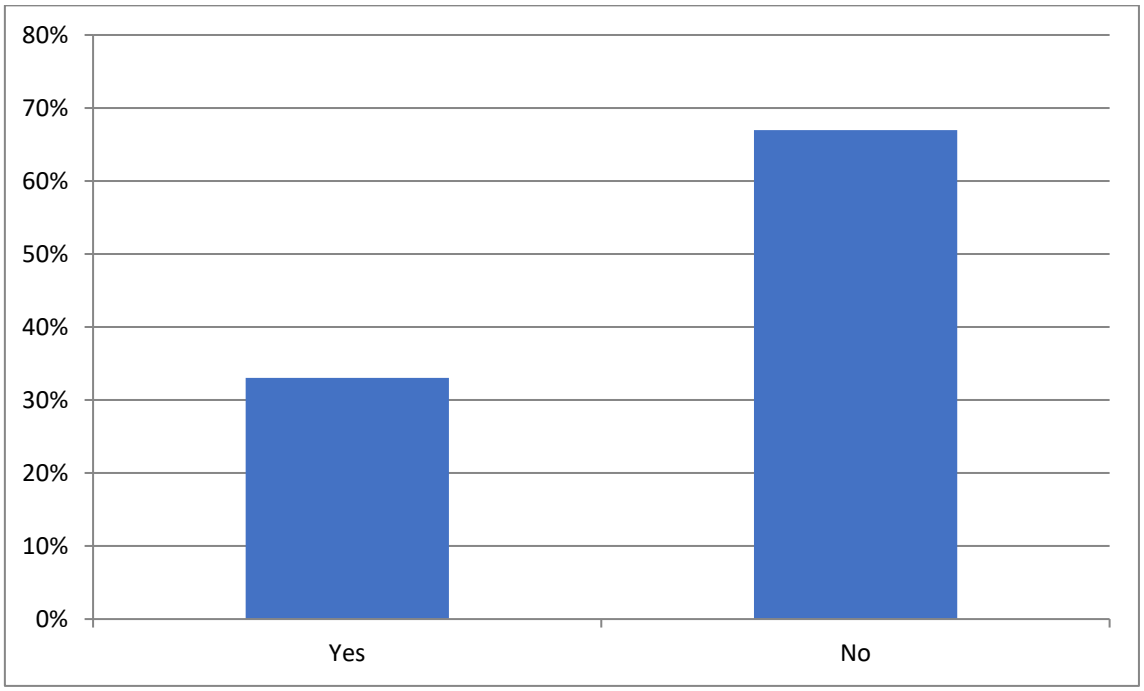


Figure 43. The support given by the university on academic writing is sufficient

This notable negative answer was not surprising as the current needs in EME seemed as if they were not being addressed entirely at this institution, although it is important to also consider the positive response was quite high due to probably the reasons mentioned in the previous questions regarding the type of support. Through a process of adaptation and changes at an educational level, learners may be one of the groups that suffers the consequences the most, therefore, this may be once again evidence of the need for new alternatives in EME subjects or degrees. Moreover, this was supported by the learners with a general sense of abandonment in addition to a general feeling of lack of information and help provided as pointed out in the coming voices:

> S32: *"In the classes taught in English they* [professors] *expect us to write very well but they don't teach us how or what they need or expect from us"*
>
> S69: *"Because there is a lot they* [professors] *ask but not a lot of help"*
>
> S76: *"Because they* [the institution] *don't care"*

This may present certain lack of support or involvement from the language department in those subjects, or lack of coordination within the institution that is finally reflected in the classes and noticed by students (Coleman, 2006). This was also supported in other studies (Johns, 1997; Zhu, 2004) and may indicate that this is not simply the professor's responsibility but also the institution's. Additionally, most of the answers from students indicated that in order to complete the objectives establish by their professors and institution, they would require more or better guidance from their instructors as seen in their comments:

> S30: *"No because classes are in English but the structures of what teachers want is not clear and is not explained"*
>
> S31: *"The requirements and levels are very high but we are not taught what they want"*
>
> S27: *"This is not the case in this university, they expect good results without no teaching you what is need"*

Particularly, voice S17 is an example of a student who seems to have gone through a process of acquisition of English with EFL courses for instance, inside or outside HE, but not necessarily applied to the academic context through ESP or EAP courses:

> S17: "*Because it is not sufficient at all, on the one hand we have English classes but they do not prepare us for those classes given in English, especially in writing and then our writings are wrong because of that, it is very confusing"*

Therefore, a cross disciplinary relation between EME and ESP (Dafouz, 2021a). Furthermore, these results may also indicate that students, as well as professors, were found on a process of academic adaptation as the introduction of EME in this context was fairly new. This process may include learners needing to reconstruct their identities to be able to fit into the EME context that also leads to academic stress in both parties, professors and students (Herraiz-Martinez & Alcón-Soler, 2018).

It is relevant to remember that these learners were part of a private university in Mexico, in this context, funding for educational purposes is mainly found in these institutions due to the lack of public funding available (Reyes Cruz, Murrieta Loyo and Hernández Méndez, 2011). As a result, other forms of privatization are found in this institution in terms of students being able to cover their writing in English needs through additional payment for courses as seen in the following learners' voices:

> S14: *"No here at all, there is no support for students in English to improve, only maybe if you pay extra"*
>
> S21: *"For extra classes paying maybe but not in the university alone"*
>
> S28: *"If you take extra courses of English or pay for that then maybe you can improve but I think it should be included if what they want is write perfectly and pass clases"*

Additionally, the voices in this section also stated some collaboration among teachers, or having more teachers, as well as the need for additional materials such as examples from where students could depart:

> S34: *"I think the instrument are very poor because we don't have enough teachers so the time we have for extra help is very poor at the same time the group are very big"*

Voice S52 is an example of a suggestion for EME content teachers working together with language teachers in preparing lessons and materials as teachers have the tendency to work in isolation (Ellison et al., 2017):

> S52: *"The language department should get more involved with students in other departments"*

On top of that, the need for students to be provided by more examples mentioned in voice S73 makes a reference to the changes in materials professors would need to start implementing as suggested by Morell (2020).

Finally, student participants were faced with a last open question where they were able to share further information in regard to learning with EME or their personal experience with it. These voices presented a variety of comments around the topic although the most outstanding examples are included below. Comments on the benefits of learning content through the use of EME were gathered as following:

S3: *"*[It] *Is difficult but it works"*

S4: *"I*[t] *has been really helpful for my development"*

S5: *"I think I can get a very good improvement using it"*

S8: *"In my experience as a student I can say that take courses in English helped to improve my skills as a professional also I could improve my English"*

S16: *"I would love to have all my classes in english"*

Those voices are indicators of the advantages of EME such as a possible improvement in English language proficiency as seen by Dafouz and Smit (2020) or becoming competent professional as presented by Orduna-Nocito & Sánchez-García (2022). However, disadvantages of this learning process were also identified:

S1: *"I think there is no connection between classes and English, they expect magically good results"*

There were as well suggestions on adjustments in teaching, or materials which were explained in more detail by the participants to become more dynamic or authentic situations learners might face in their lives through discussions or debates:

S10: *"They should take 2 weeks to emphasize on how to write things and also provide workshops so that each student can enter and learn new things so he/she can improve in the future"*

S13: *"I think the material and exercises are very good but need some more dynamic practices things like discussions debates or other thing or well maybe you have some but we don't practice these things in class"*

Thus, in this case, content teachers might be in need of adapting their lessons to the EME context by introducing new methodologies and teaching techniques. For instance, slowing down the lecturing pace, providing a higher number of illustrations and examples to support their explanations or uploading permanent materials for student consultation (Dafouz, 2020; Morell, 2020).

On a different note, some voices included an approval of their teachers along with their efficiency and skills to teach:

S14: *"They all are people with patience and they like what they do, so isn't hard for them to do their job right"*

Whereas other voices revolved around the need for teachers to be trained. This also showed, in contrast with the previous voice, certain level of complain with regard to professors' abilities with the English language:

S17: *"I think professors that teach in the English language should also be certified as being able to teach in this language. I am taking classes in English with non native professors and most of them have pronunciation problems; however, their English level is at good levels"*

In this respect, EME presents a significant difficulty when finding teachers who are qualified in both language and content as supported by Lara-Herrera (2015). Even more so, when the context of Mexico faces the low levels of education among its population in

general and among its HE teachers is often limited to a BA degree in addition to these professionals having poor access to reliable information in English (Encinas, Busseniers & Ramirez-Romero, 2007) that show certain unstructured organization among Mexican universities as seen next:

S20: *"There are no structured programs in most of Mexican universities"*

S21: *"I usually do not care if the subject is taught in English or not. However, what I usually observe if that, professors who are not very fluent in English are teaching classes in English. In those cases I would definitely prefer that classes would be in Spanish"*

These voices are illustrative of what Gacel-Ávila (2012) mentioned regarding learners often being the ones suffering the consequences of an outdated academic offer, an obsolete educational model and untrained faculty members at university levels. The process of internationalization of the institution also seems to be in need of a revision to push new structures implemented in other countries.

5.6 Chapter summary

This chapter has looked into the findings on students' perspectives through the analysis of four big categories: Importance of English and confidence in the area (Category 2), Genres (Category 3), Difficulties and needs in academic writing (Category 4) and Help and support for academic writing (Category 5). The beginning of this chapter has included the students' motivations for enrolling in an EME course, these being to take part in a specialized course not available in their L1 and to experience a challenge and increase their self-confidence in English.

Students' enthusiasm for learning in English, coupled with their perception of professors' enjoyment in teaching within this linguistic realm, presents an agreement between professors and students. This is further reinforced by their acknowledgment of the role of English within their subjects, alongside an understanding of assignment expectations.

Regarding the indispensable role of academic literacy in English and the English language itself played in students' learning and future employment was highlighted. While linguistic competences surface with students perceiving both their and their professors' language skills as competent yet recognizing the need for a higher English proficiency level to navigate subjects effectively.

Within the theme of disciplinary genres, a paradox is found as students identify descriptive, expository and technical genres as imperative, but also seemed to indicate an incongruity in their awareness of the required genres for their subjects as seen in their voices. Despite of this, the small percentage of students who engaged with those genres reported notable improvements in their assignments.

Focusing on academic writing challenges, the vast majority of students mentioned having difficulties with register, personalization and grammar as the main areas. The absence of comprehensive support from language instructors and the institution itself is evident. Therefore, proposed solutions for this situation with their corresponding challenges fall mainly under professor training, participation of the English department in their subjects and additional workshops on writing assignments for them.

As a summary of all those results and differences of opinion seen through the voices, it seems fair to declare that learners may have not been aware of the required genres as there is a relationship between students' academic performance and genre awareness. Furthermore, they are undergoing a process of academic adaptation and adjustments in the educational programme as an introduction of EME is being slowly implemented in this context. This process of internationalization of the institution through EME seems to be in need of a revision to push new structures implemented in other countries. In order to make this a reality, adjustments are requiring professors, in line with policy makers, to reconstruct methodologies, teaching techniques, organizational structure and the language department, all combine to be able to fit into the EME context (Dafouz, 2021). Moreover, findings in this chapter have indicated that students seem to go through many requirements without enough and clear guidance in the new context they are facing of EME. Those rare occasions where some guidance regarding academic writing has been provided by their professors based on their working experience, improvements in

students' assignments have risen. However, a clear division between language and content seems to be present in EME and therefore affects their genre awareness and their results. This analysis has been helped and supported by figures and direct voices to illustrate the information in a more visual manner. The complete analysis undertaken has contributed to understanding the academic writing language needs of students from their own perspective answering RQ1.2. The findings of students' written assignments analysed through the FA scale is provided in Chapter 6.

Chapter 6: Analysis and discussion of corpus: RQ1.3 written assignments

6.1 Introduction

The previous two chapters have presented the results from the professor and student surveys which make up the first corpus and address the first two RQs. Those results indicated there were some needs in academic writing that were affecting both groups of participants. These also revealed that those needs seem to originate from a lack of genre awareness and direct academic writing input. Based on this, the purpose of this chapter is to present results regarding the actual sources where those needs can be identified, the students' written assignments, and to discuss them in a deeper and visual manner. Therefore, the research question to be answered in this chapter is the following:

> RQ1.3: What are the academic written language needs as reflected in these particular students' own writings?

As it was mentioned in Chapter 3 (see Methodology), the results obtained from the assignments were grouped into three categories depending on the subject and genre from where they were collected, these being *Music and society (M&S)* with argumentation assignments, *Music appreciation (M&A)* with exposition assignments and *Ethics, person and society (EP&S)* with analysis assignments. These are first introduced with an overview of the findings from the three subjects accompanied by tables to ease readers' comprehension and make it more visual for the audience. Then, each of the subjects with their corresponding genre is presented individually from a quantitative perspective. This leads to supporting those findings with written extracts taken directly from the original assignments from a qualitative perspective. These extracts present the most representative features in terms of academic literacy characteristics from those illustrated in the analytical framework of Chapter 2 which are in line with the findings from the surveys. The five dimensions are presented one by one following the order of the rating scale (see Chapter 3).

6.2 Overview of assignment results

The total amount of written assignments analysed are 100 and these were examined applying the FA rating scale especially adapted for this study (see Chapter 3). This scale takes into account the dimensions of *Content, Task Requirements, Comprehensibility, Coherence* and *Cohesion*, as well as an overall performance result obtained from the sum of the five dimensions.

The first analysis using this FA scale included the assignments from the three subjects and these results can be observed in Graph 1. These results are representative of each one of the three subjects from where the assignments were collected, M&S, M&A and EP&S, along with the mean within each dimension. The figures presented below (Figure 44) provide the reader with an overview of the results obtained, creating a comparison at the same time of the results from all of the three subjects.

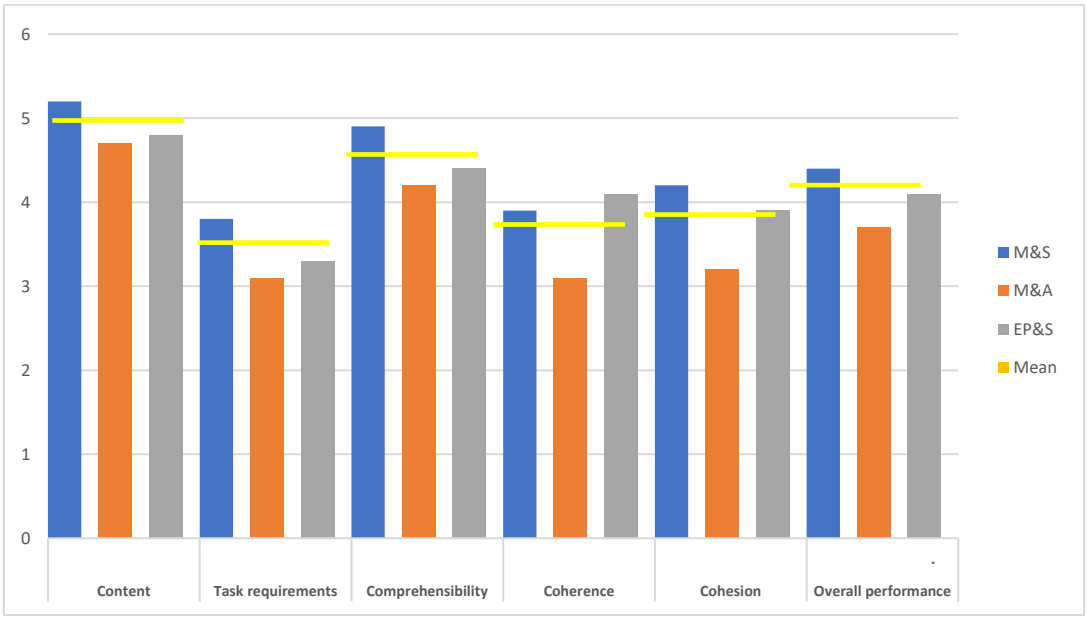


Figure 44. General descriptive statistics of FA performance per dimension (average score per category)

Results in Figure 44 indicate that the dimension that obtained the highest result was content with a 4,9 mean out of 6. In the second place was the comprehensibility dimension with a 4,5 mean. Then results dropped to a 3,8 mean in the cohesion dimension. In the fourth place, there was coherence with a 3,7 mean out of 6 and, finally, the lowest graded dimension was task requirements with a 3,4 mean. This means that content is the dimension best graded by the raters and, as a result, the area were students best performed, while task requirements was the worst graded dimension. All of these results gave the final overall performance score of 4,1 in learners' FA. In general terms, the results of the written assignments indicate areas of improvement in the five dimensions but most importantly in task requirements, coherence and cohesion. These findings are in agreement with those dimensions that showed improvement after specifically working on them in the EME context in Herraiz-Martinez and Alcón-Soler's research (2018). As a result, it seems advisable to boost the focus on those dimensions in the EME context in order to produce written assignments that successfully meet the requirements of the task and are more academically coherent and cohesive.

Furthermore, as the quantitative analysis of these assignments was completed by three different raters, the following table (Table 20) displays raters' means, standard deviations, and differences for each of the five dimensions as well as overall FA performance in the three subjects. Maximum FA scores are 30 points since 6 points is the maximum given to each of the five dimensions. Overall scores are also presented as the sum of the scores obtained in content, task requirements, comprehensibility, coherence and cohesion. The range was obtained by taking the maximum result for each dimension and the minimum.

	Mean			SD		
	M&S	**M&A**	**EP&S**	**M&S**	**M&A**	**EP&S**
Rater 1	4,5	3,7	4,2	1,1	0,8	1,1
Rater 2	4,3	3,6	4,1	1,0	0,9	1,1
Rater 3	4,4	3,8	4	1,1	0,9	1,1
Overall	4,4	3,7	4,1	1,0	0,8	1,1
n	36	9	55	36	9	55

Table 20. General descriptive statistics of FA performance per rater (average score per rater)[11]

As it is seen in Table 20, the subject that obtained the highest result was M&S (Overall = 4,4; SD = 1,0). In the second place was EP&S subject (Overall = 4,1; SD = 1,1). The greatest difference appears in the M&A subject in comparison with the other two subjects as assignments had been graded with a lower mark (Overall = 3,7; SD = 0,8). However, as it may be seen, variation in the performance of all dimensions was moderate provided through the results of low standard deviations (SD). The interrater reliability scores indicate that raters judged the texts in a similar manner for the three subjects within all the dimensions. Nevertheless, when analysing each individual item along the assignments from each of the raters' perspective and in each of the three subjects, significant tendencies appear. The next sections present results divided in the three subjects with their corresponding genre for common characteristics within each one of the dimensions providing examples from students' assignments to support their corresponding discussions.

6.3 M&S argumentation assignment

The results obtained from the M&S subject with argumentation assignments contained a total number of n=36 items that were rated among each of the five dimensions. Additionally, the overall of those dimensions were also obtained. In order to

[11] Numbers indicate the mean results of each subject obtained from each one of the three raters. Each assignments received a score for each of the dimensions, then these scores were added and divided by 5 (the number of dimensions n the scale) giving a final average score for FA.

examine the FA of the M&S assignments, a careful analysis for each of the dimensions (content, task requirements, comprehensibility, coherence and cohesion) in the FA rating scale and interrater reliability applied to the genre of argumentation assignments were conducted. SD and range for each of the dimensions were obtained and included indicating that variation among dimensions and raters was moderate as it was seen in the previous section. Finally, the total mean for each dimension was obtained by considering the mean from each rater indicating its corresponding moderate range between them (see Table 21).

		M&S1		M&S2		M&S3			
	n	M	SD	M	SD	M	SD	Total mean	Range
Content	36	5,2	0,8	5,2	0,7	5,2	0,9	5,2	0
Task requirements	36	3,9	1,5	3,6	1,5	3,8	1,6	3,8	0,3
Comprehensibility	36	5	0,9	4,9	1,1	4,9	0,9	4,9	0,1
Coherence	36	4	1,5	3,8	1,4	4	1,6	3,9	0,2
Cohesion	36	4,3	1,5	4,1	1,4	4,2	1,6	4,2	0,2
Overall	36	4,5	1,1	4,3	1,0	4,4	1,1	4,4	0,2

Table 21. Dimension descriptive statistics for the M&S subject in FA performance (average score per dimension)

Results from the quantitative analysis indicate that this subject was graded the highest in terms of FA overall score among the three different subjects (Total mean = 4,4; Range = 0,2). Table 21 shows the content (CT) dimension as the highest graded dimension (Total mean = 5,2; Range = 0), followed by comprehensibility (CY) (Total mean = 4,9; Range = 0,1), cohesion (C2) in the third place (Total mean = 4,2; Range = 0,2), coherence (C1) in the fourth place (Total mean = 3,9; Range = 0,2) and finally task requirements (TR) as the lowest graded dimension (Total mean = 3,8; Range = 0,3). Therefore, findings indicate a more substantial scope for improvement in the dimensions of task requirements, coherence and cohesion, than in content and comprehensibility. For a better understanding of the reasons behind these numbers, these quantitative findings are complemented with learners' written assignments extracts as qualitative results as it is presented next for each one of the five dimensions with their corresponding discussions.

To begin with the dimension of Content (CT) presented quite positive results and it is relevant to remember that it takes into consideration the adequacy of the number and type of ideas provided in the text as well as their consistency and relevance to the general topic, regardless of the specific requirements of the task to be completed. As a reminder, argumentation assignments require a presentation, explanation and discussion of ideas from at least two sides while presenting the facts and information to develop reasoned and logical conclusions. Considering this, the following extracts present characteristics representative of the results obtained in this dimension graded positively (5 or 6 out of 6) as the number of ideas is extremely adequate and relevant and they are very consistent to each other.

To begin with, Extract 1 presents a number of ideas adequate, relevant and consistent to each other. The extract provides a satisfactory amount of information units and maintains relevance to the topics being discussed. The ideas presented are reasonably consistent and related to one another.

Extract 1: M&S32, CT[12][13]

The methodology followed by this essay is pretty simple, different articles, magazines publications, news and videos, which topics would be about XX century Mexican history, the Mexican Revolution, Corridos, Immigration and Drug trafficking, were looked for and different corridos were listened to and the lyrics were analyzed as well. These sources were chosen because, as they were published by trusting institutions or experts on the topic, are trustworthy sources.

A clear example of the positive result in this dimension can be specifically seen in the Extract 2 with the first sentence *"The next step was to write…"* that clearly presented a series of steps followed in the process of writing the assignment. The information

[12] Coding scheme: M&S= Music and society; M&A= Music Appreciation; EP&S= Ethics, Person and Society. CT= Content, TR= Task Requirements, CY= Comprehensibility, C1= Coherence, C2= Cohesion
[13] Names and IDs of students have been omitted for reasons of confidentiality

presented in these extracts was nicely linked and, as a result, the reader is able to easily follow the text through a discursive argument and synthesis of information. This is expected since in humanities, knowledge is presented through case studies and narratives while claims are accepted on strength of argument (Hyland, 2001, 2008).

Extract 2: M&S6, CT

The next step was to write *all the answers given by the 15 students and to analyze them in order to get a conclusion of what happened during the experiment. This gave a bigger image of what the conclusion of the essay could be. Although more investigation about the effects music has in the concentration was needed, most of the answers given by the students set the path that the final answer would become.*

Finally, Extract 3 introduces some ideas related to justification, importance, relevance to society, and organizational structure, that are later along the text explained in further detail.

Extract 3: M&S19, CT

Later, the justification made, was meaningful to explain why it is an important factto demonstrate how it relates to our society, as well as a concrete relationship on its relevance. To make the body of work and have a better methodology, I decided to follow the organization of the structure

In general terms, results in the dimension of content presented a number of relevant information units and ideas previously researched by students for their respective tasks, including the use of supported and convincing arguments. Interestingly enough, this dimension in this research is in contrast with Kuiken and Vedder' (2018) results that considered it one of the lowest graded dimensions, however, it is important to remember that even though the results here were high, they did not obtain the highest possible result

of 6. Most of those features mentioned were a requirement implicit in the choice of genre such as the structure of the text and the clear presentation of ideas and arguments; although others were the clear result of the use of an academic writing style for the genre such as the author-evacuated prose or the use of hedges (Snow & Uccelli, 2009) as it is presented in the next dimension.

Continuing with the dimension of Task requirement (TR), that was graded as the lowest dimension, this dimension focuses on the specific requirements and instructions of the task to be completed as well as the adequacy of the message transmitted by the writer A to the reader B, particularly in terms of genre, register, and speech acts. In other words, it refers to those language features that are key to establish the tone and level of formality in the assignment. Within the specific genre of argumentation assignments and the discipline of M&S in the academic setting, some examples of this may include, but are not limited to, the use of passive voice, subject-specific or specialised lexicon, referring devices, formal, impersonal and objective style, or use of tentative language as characteristics mentioned in the analytical framework. As it can be observed, the following extracts are good examples of low graded task requirement (graded 1 or 2 out of 6) as this dimension has not been fulfilled successfully or the requirement of the task has not been correctly answered in terms of employment of an informal register throughout the entire text. Some examples of the informal register can be specifically seen in all the extracts with the constant use of personal pronouns such as *I, their, they, he, you* or *our* (see Extract 4, 5, 6 and 7) addressing the reader too directly as Hinkel (2004) mentioned since the use of them in academic prose are relatively rare. In addition to this, and in order to avoid these personal pronouns, the use of the author-evacuated prose with its corresponding absence of first-person pronouns can be employed as well as using passive voice and muted arguments instead. This is suggested by Bailey (2011) and Johns (1997) in order to hide the writer's personal attitude in an academic context.

Extract 4: M&S1, TR

so, if governments could use these means to distribute amessage, ***why couldn't artist and social activist do the same but with more realistic and ethical messages?*** *Such as The Beatles did in the 1960´s, the way* ***they*** *expressed* ***their*** *disagreement with something was magnificent*

Extract 5: M&S1, TR

Punk rock ***wasn't*** *just a new music gender, it was a life savior for many people that felt lost in many moments,* ***their*** *lyrics are based on experiences that* ***we*** *all have lived, and* ***that's what's*** *makes it a very special gender,* ***you*** *are not just listening,* ***you*** *are remembering.*

Extract 6: M&S23, TR

… for the 5 genre more listening in the world appear Jazz, Pop, Electronic, Indie and Reggaeton that is the impact of this music that every year appear someone new with a new hit and could be millionaire, but ***what with their lyrics?****, what about the sexy and provocative dance?, many people express* ***their*** *nonconformity because…*

Following this line, the style used in academic environment is formal in an impersonal or objective style (Swales, 1990; Swales & Feak, 2012), thus, writers have a tendency to hide behind syntax and objective academic vocabulary (Johns, 1997; Jordan, 1999; Cortes & Csomay, 2015). However, Extract 7 above does not follow these guidelines as it is seen with the use of words or expressions such as *"Well", "of course", "I don't like very much…"*, or with the implementation of contractions instead of the long forms (Swales, 1990; Bailey, 2011; Swales & Feak, 2012). This is also seen in extracts 4 and 5 with *"couldn't", "that's", "what's", "wasn't", "didn't"* or *"don't"*.

Extract 7: M&S30, TR

***Well** first **I** chose this topic because **I** think that when the Berlin Wall was built a lot of people suffered for the ambition of a government, and **of course I** think that it wasn't **their** fault, at that time in the soviet Germany the people didn't have voice* […] *"bit of freeing of the human spirit" he said, **can you just imagine what was the meaning of that words for the oppressed German people? I** think that **our** imagination is not enough.* […] *So, in my opinion **I don't like very much** the music of Pink Floyd but…*

Moreover, extracts 4, 6 and 7 presented the use of direct questions as in *"why couldn't artist and social activist do the same but with more realistic and ethical messages?"*, again in *"but what with their lyrics?, what about the sexy and provocative dance?"*, and in "*can you just imagine what was the meaning of that words for the oppressed German people?"* which were addressed to the audience. This use was condemned by Swales (1990) and Swales and Feak (2012) whose research suggested the use of statements to directly express the ideas instead.

On the whole, in the dimension of task requirements, where the focus is on how well the task was undertaken in terms of speech act, genre or register, the texts seem to contain expressions or informal register such as direct and personal points of view, which make their texts not reliable or serious enough for the audience. This is not surprising since Spanish EFL students not only have difficulty in distinguishing between formal and informal registers, but they also have problems in identifying the different meaning which some linkers have for instance "*although*" (Neff et al., 2003) (see Extract 2). This study, in agreement with this research, also mentioned that Spanish speaking students frequently use a modal verb for instance "*can*" or "*could*" as a way of introducing either a new topic or additional information into the text as seen in Extracts 4, 6 and 7. This dimension in this research is in contrast with Kuiken and Vedder' (2018) results that considered it one of the lowest graded dimensions.

Based on those results and extracts, it may be possible to say that students may have not been aware of the variety of genres available or required for their discipline (Berkenkotter & Hucking, 1995) and how they had to follow and meet certain standards

such as styles or registers, and consistency throughout the entire writing while also taking into consideration the easy understanding for the audience among many other features (Swales & Feak, 2012). Even so, in the hypothetical situation of learners having been exposed to a background of extensive reading and practice with writing in academic contexts, which is unlikely, this does not inherently translate into successful written academic performance and awareness of the necessary characteristics without a specific teaching input. As a result, teachers should not simply assume students come with this background and not emphasise the need for genre awareness.

Moving to the next dimension of Comprehensibility (CY), that was graded as the second highest in this subject and genre, this dimension takes into account the extent to which the message of the writer A turns out to be adequate and comprehensible for a particular reader B. In order to complete this, to avoid run-on expressions needs to be a common characteristic of this dimension specifically in the argumentative genre as seen in the analytical framework. The following extracts present high-graded evidence in the dimension of comprehensibility from some of the M&S assignments, these were graded 5 out of 6 in the FA scale. This means that the text is very easily comprehensible and highly readable as seen in Extract 8.

Extract 8: M&S2, CY

In such societies, music making generally belongs to a social class of a low rank, and active participation usually takes place only on this level. The higher class is content to be entertained, or to leave the musical aspects of ritual and ceremonial occasions to professional musicians and others who assume musical roles in such contexts.

Sentences are kept short with full information and the necessary details to convey their meaning. Therewith, no important grammar or lexical mistakes that could impend communication or understanding of the information by the reader are identified. In fact, the writer goes beyond the effort of EFL Spanish-speakers by including the use of passive

voice (Bailey, 2011; Biber, 1988; Myers, 1989; Poole, 1991) specifically in Extract 9 in the following sentences "*This term was created by Allen Ginsberg in 1965. After that it was used for many things…"* for academic purposes.

Extract 9: M&S8, CY

Flower Power was a famous slogan used by the hippies ending the 60´s. It was used like asymbol of the ideology of the non-violence. ***This term was created by Allen Ginsberg in 1965. After that it was used for many things*** *like movies, tv programs and documentals. The Flower Power also included teenagers actions, like giving flower to the pólice and putting flowers inside the guns like signal of the peace.*

Extract 10 is generally comprehensible and effectively conveys its main message. The ideas are presented in a coherent manner, and the reader does not have to make significant efforts to grasp the intended meaning.

Extract 10: M&S16, CY

By far the meaning message that I learn from this research was that, the music BOOST with alot of power any message that you want to transmit. Also that the music impact in the horror gender in a way that by now we're used to, thanks to horror movies and TV series that if it wasn't because of the music maybe they shouldn't make the same scary impact in us.

Along these extracts, diverse ideas are clearly stated in a way that is easy to understand for the reader. An example of this can be noticed in Extract 11 in the following sentence "*This musical hybridization was not a one-way street. The music went back to…".*

Extract 11: M&S25, CY

This musical hybridization was not a one-way street. The music went back to *Cuba, Puerto Rico, and South America and continued to evolve there. It evolved a little differently in eachplace, so today we have Cuban salsa (timba), Puerto Rican salsa, and Colombian salsa (dura).Each style has a driving, electric energy that is the hallmark of the salsa form, but it also has the distinctive sounds of its country of origin.*

As a conclusion, this dimension is "operationalized in terms of the amount of effort required from the interlocutor to understand the purpose and ideas expressed by the speaker/writer." (Kuiken & Vedder, 2018: 275). There are no important mistakes that impeded communication or the comprehensibility of the assignments as a whole. The reader does not require to make a big attempt to understand the meaning or is not discouraged to continue the reading of those. Therefore, comprehensibility, is not an area of much difficulty as analysed and discussed by the raters.

Then, the dimension of Coherence (C1), that was graded in the fourth place, refers to the adequacy of the message of the writer A for the interlocutor B regarding the use of coherence breaks and structure (Kuiken & Vedder, 2017, 2018). In other words, coherence refers to the elements used for the, in this case, formal appearance of a written piece of work for presenting and organizing the ideas. Some examples of this in an argumentation assignment may be the use of a cover, an index, tables, paragraphs, references, or signposting among others as it is seen in the following extracts. These extracts have been taken from assignments that were graded the lowest in the dimension of coherence within the subject of M&S (graded 1 or 2 out of 6). According to the FA scale, the text is not at all coherent, unrelated progressions and coherence breaks are very common and the writer does not use any anaphoric device. When analysing it carefully, improvements in those areas of the definition provided above can clearly be seen in Extract 12 in the sentence "*According to Amparo Calandín psychologists said the music could influence in our behaviors this thinking…"*. This sentence is not coherent for the reader since it is not clear who is talking, Amparo Calandín or the psychologists, and the

progression to the next idea of *"this thinking…"* is completely broken and unintelligible for the audience.

Extract 12: M&S23, C1

According to Amparo Calandín psychologists said the music could influence in our behaviors this thinking *sounds like middle ages and Greek culture think, and said the music is usually linked to the customs and roots of a people like tango, banda, samba, salsa.*

Moreover, there is a lack of coherent or organizational structure seen in Extract 13, since a text needs to be clearly organized, the whole text needs to hang together, what has gone before provides the environment for what is coming next (Halliday & Hasan, 1976, 1985). This takes place again in the next sentence of *"Referring reggaeton a rhythm that repeats itself constantly and of low lines, almostall the songs have the same sound"* as the beginning does not clarify what the idea is about and later is linked with a comma instead of pausing the argument with a full stop and beginning a new sentence. This last idea can be seen again in the sentence "… *social denunciations, often because they…"* where long and complex noun-phrases are found, as also mentioned in Dafouz' research (2003), with the use of a comma instead of a longer pause provided by a full stop in order to distinguish topics and present them correctly and clearly as suggested by Pallotti (2009). This may be due to a possible influence of the writers' L1 in L2 writing (Neff et al., 2004) or their native culture (L1) on their writing in a foreign language (L2) (Cai, 1993; Connor, 1996; Hinkel, 2002; Hirose, 2003). Another possible explanation for this may be a limited mental lexicon among students or simply a pragmatic choice from the writer (Palloti, 2009). As a consequence, students' level of syntaxis may be affected negatively and therefore their coherence and cohesion skills.

Extract 13: M&S23, C1

Referring reggaeton a rhythm that repeats itself constantly and of low lines, almostall the songs have the same sound*, lyrics easy to remember at also provokes a freedom in the way of speaking, since the lyrics of these songs are full of idioms, words and expressions that are the cause of multiple* ***social denunciations, often because they*** *openlypromote sex, on drugs and despises women to such an extent that they see her as a slave to their movements and as a sexual object.*

Lastly, Extract 14 is an example of the use of references in assignments not being applied correctly. This can be seen with the mention of the five different authors *Nicolas Guéguen*, *Céline Jacob*, *Hélène Le Guellec*, *Thierry Morineau* and *Marcel Lourel* although the information within brackets only mentions one of the authors, *(Guéguen, 2008)*, similar mistakes were observed with other references employed throughout the rest of the text. Additionally, this reference, as well as the rest of those included in the text, were not correctly written following the APA style in the bibliography section of this and other assignments.

Extract 14: M&S14, C1

… according to ***Nicolas Guéguen, Céline Jacob, Hélène Le Guellec, Thierry Morineau*** *and* ***Marcel Lourel*** *(2008), who conducted an experiment observing forty male drinkers in two different bars. "The results show that high level volume led to increase alcohol consumption and reduced the average amount of time spent by the patrons to drink their glass."* ***(Guéguen, 2008)****.*

As it was seen in the previous dimensions, notwithstanding the significance of academic vocabulary and register as challenges faced by students, the task of developing coherent and cohesive arguments emerges as an even greater area of concern (Bitchener & Basturkmen, 2006) specially when facing argumentative assignments. A possible explanation for this could be the lack of experience writing these types of genres and,

therefore, receiving constructive feedback, as well as the pressure to have a positive outcome leading to students not having enough confidence in academic writing. Thus, L2 experienced writers may have a greater advantage when facing academic writing challenges (Kobayashi & Rinnert, 2008).

In general, coherence is presented with a general feeling among raters of breaks between sections, absence of clearly defined sections such as introduction, or conclusion but most importantly the reference section shows big areas of improvements regarding structure and presentation. Even though the extracts presented here are short to fully seen the complete coherent structure of the assignments, the format of the entire task would benefit from improvements and adjustments throughout the complete texts, while at the same time, the choice of register is too informal for an academic paper. Based on this and considering the studies mentioned in Chapter 2 regarding learners' written production in CLIL environments, findings are homogenously similar to those in Jexenflicker and Danton-Puffer's study (2010) in terms of areas of improvement in general organisation of texts as they are not well developed. Similarly, in Salaberri-Ramiro and Sánchez-Pérez's study (2015a), results show significant weaknesses in format, register and text organisation.

In the last place, the dimension of Cohesion (C2), that was graded the third highest, refers to the adequacy of the message of the writer A for the interlocutor B regarding the use of conjunctions, number of repetitions and cohesive ties (Kuiken & Vedder, 2017, 2018). In other words, cohesion refers to the way sentences and phrases are combined and used within sections and throughout the entire assignment. This is often done by including a variety of connectors in formal and academic discourses for this genre. Considering the analytical framework, the academic characteristics of collocations, avoiding run-on expressions and metadiscourse were added to this dimension as seen in the following extracts. First of all, these extracts are low-graded evidence in the dimension of cohesion from the M&S argumentative assignments, they were graded 1 out of 6 in the FA scale. This means that the text is not at all cohesive, connectives are hardly ever used and ideas are unrelated. As it can be seen in Extract 15, the sentence "*Music*

notation is not a thing you can learn from one night to the other, it is something…" has not been organized through the use of passive voice by creating a cohesive chain that connects the end of the first sentence to the beginning of the next one (Hinkel, 2004), even though the author here did not break the sentences but used commas instead. Following this line, in the sentence "… *to fully understand it, interpreters may…"*, once again sentences and ideas have been joined in one through the use of commas and it has not been organized in the paragraph through the use of linguistic resources in order to obtain a grammatical and lexical cohesion (Halliday & Hasan, 1976, 1985).

Extract 15: M&S29, C2

Music notation is not a thing you can learn from one night to the other, it is something *that if you wanted to, it would take you a lot of time in order* ***to fully understand it, interpreters may*** *need it in order to compose, or maybe not, because our smartphone is so smartz you can download an app and it will tell you if you are out of tune.*

Moreover, within Extract 16, in the sentence "… *pop up* ***and*** *will teach how to write a song using C, D, G* ***and*** *Em in under 15 minutes,* ***and*** *most artist use those 4 chords to write their songs,* ***and*** *there are many examples of this,* ***and*** *that is why many people have the belief that writing* ***and*** *understanding…"* even though the conjunction "*and*" is being used as a linking device, it has been constantly repeated and overused through an extremely run-on sentence. This sentence could have been split into several shorter ones with different linking devices to introduce each idea separately since this way the reader can easily get lost into the significant number of topics included (Swales, 1990; Swales & Feak, 2012). On this topic, by using linking devices or logical markers as connectors, these provide cohesion throughout texts and without them the text could even become unreadable as supported by Dafouz (2003).

Extract 16: M&S29, C2

It is very likely that a video tutorial or a link will pop up ***and*** *will teach how to write a song using C, D, G* ***and*** *Em in under 15 minutes,* ***and*** *most artist use those 4 chords to write their songs,* ***and*** *there are many examples of this,* ***and*** *that is why many people have the belief that writing* ***and*** *understanding music is easy, happens a lot with beginners, because they learn just4 chords just like nothing they have just become the main attraction of the party.*

Finally, Extract 17 is another example of the need for metadiscourse in order to structure the information more clearly and for the reader to be able to follow the ideas of the writer as it was originally intended. Therefore, this extract does not present any linking or cohesive devices to divide and link the various topics.

Extract 17: M&S27, C2

In this special intervention space, people who was asked to reproduce the tempo and the pattern maybe didn't knowmuch about music, maybe even didn't know anything related to theory or had no formalmusic instruction but definitely were active or passive music listeners and based on the musicthey listen on a daily basis, whereas is in purpose or unconsciously, they have the informationand the sources to basically identify a rhythm and try to reproduce it.

As an overview, the dimension of cohesion presents an absence of cohesive and anaphoric devices, with repetitions and extremely long and complicated sentences. All of these areas directly affected the coherence dimension once again. It seems relevant though to state that all aspects of the writing skill may not be developed among learners at the same rate or equally among them as it was supported by Salaberri-Ramiro and Sánchez-Pérez's research (2015a). Writing in an L2 stands as one of the most substantial challenges encountered by undergraduate learners combined with a general feeling of lack of preparation for the academic challenges of HE (Zhu, 2004). These students appear to be in need of being taken through a process of academic acculturation (Ying Xian Wang &

Li Bai, 2021) when accessing HE in order to acquire a new academic discourse to adapt to the new conventions. Therefore, the social view during the writing process that considers the process, strategy, purpose, choice and attitudes towards writing (Ivanic et al., 1999) may have not been taken into consideration during the lessons prior the writing of the assignments and, as a result, might have negatively affected those dimensions as seen earlier. As previously seen, those extracts were evidence of needed improvements regarding concluding statements or reference sections, the use of metadiscourse markers, and the need to incorporate academic vocabulary as well as formal register among others.

To finish this section, and even though this would fall under a different dimension, the register used in the extracts seen in this area are too informal and, therefore, do not follow the genre conventions required for this task. In addition to this, the structure of these assignments is missing an index and the reference section does not follow the correct format of APA style.

6.4 M&A exposition assignment

Following the same procedure as for the previous subject of M&S, the results obtained from the M&A subject contained a total number of n=9 items that were rated among each of the five dimensions as well as their overall. In order to examine the competence of the M&A assignments, a test for each of the dimension (content, task requirements, comprehensibility, coherence and cohesion) in the FA rating scale and interrater reliability applied to the genre of exposition assignments were conducted. SD for each of the dimensions were obtained and included indicating that variation among dimensions was moderate as it was seen in the previous section. Finally, the total mean for each dimension was obtained by considering the mean from each rater indicating its corresponding moderate range between them (see Table 22).

		M&A1		M&A2		M&A3			
	n	M	SD	M	SD	M	SD	Total mean	Range
Content	9	4,7	1,1	4,6	1,2	4,8	1,5	4,7	0,2
Task requirements	9	3,1	1,3	2,9	1,4	3,3	1,4	3,1	0,4
Comprehensibility	9	4,3	1,1	4,1	0,9	4,2	1,2	4,2	0,2
Coherence	9	3	1,1	3,1	1,5	3,1	1,4	3,1	0,1
Cohesion	9	3,2	0,8	3,1	0,9	3,3	0,9	3,2	0,2
Overall	9	3,7	0,8	3,6	0,9	3,8	0,9	3,7	0,2

Table 22. Dimension descriptive statistics for the M&A subject in FA performance (average score per dimension)

By considering the results in Table 22, this subject is in the third place among the three subjects in the FA overall score (Total mean = 3,7; Range = 0,2). Results from the quantitative analysis show the content (CT) dimension as the highest graded dimension (Total mean = 4,7; Range = 0,2), followed by comprehensibility (CY) (Total mean = 4,2; Range = 0,2), cohesion (C2) in the third place (Total mean = 3,2; Range = 0,2), task requirement (TR) in the fourth place (Total mean = 3,1; Range = 0,4) and finally coherence (C1) as the lowest graded dimension (Total mean = 3,1; Range = 0,1). Therefore, results show a bigger area of improvement in the dimensions of task requirements, coherence and cohesion; than in content and comprehensibility, similarly to those seen in the M&S subject. For a better understanding of the reasons behind these numbers, these quantitative findings are complemented with learners' written assignments extracts as qualitative results as it is presented next for each one of the five dimensions with their corresponding discussions.

Following the order of the FA scale, in the first place the dimension of Content (CT) is presented as the highest one. Similarly, as the information presented in the previous section of M&S argumentation assignment, this next section presents extracts with representative characteristics of this dimension and their discussion in the genre of exposition assignments. An exposition assignment intends to express opinions, explanations and ideas about a specific piece of knowledge or topic of choice. By taking this into consideration, the following extracts present characteristics representative of the

results obtained in this dimension graded positively (5 or 6 out of 6) as the number of ideas is extremely adequate and relevant and they are very consistent to each other. As it can be seen, Extract 18 presents a good example in the first sentence *"With this little piece of introduction we are going to talk…"* that clearly introduced the structure and argument of the assignment. The information was nicely linked and the reader was able to easily follow the text through a discursive argument and synthesis of information. This is understandable as in humanities, knowledge is presented through case studies and narratives while claims are accepted on strength of argument (Hyland, 2001, 2008).

Extract 18: M&A2, CT

With this little piece of introduction we are going to talk *on these pages about, what we considered, the most important periods that are shown and we are going to make a relation withthree pieces of music that have relation with three periods and make an analysis and a context in order to understand what happened in music on that three specific periods and make a relation*

Another example of this can be clearly seen in Extract 19 with the link of ideas from one sentence that presents two different *malls*, and the other sentence that focuses on the one interesting for the writer.

Extract 19: M&A9, CT

The Soumaya museum is a museum located in México City (CDMX) in two malls: the mall "Acuario Inbursa" and mall "Plaza Carso". The museum that we're going to talk about is the one located in "Plaza Carso" it counts with 16000 square metres of construction and it is located in New Polanco in México City; the museum counts with more than 66000 art pieces.

On a different topic, these assignments presented a good organizational structure according to its genre with introduction, sections and conclusion although the reference section could have been improved in terms of following the APA style requested for this task. On top of this, the use of linking devices or markers could have been improved.

Continuing with the dimension of Task requirement (TR), that was graded as the lowest dimension as well as the Coherence dimension in the exposition genre within the M&A discipline, the following extracts present characteristics of this dimension in terms of the use of passive voice, subject-specific or specialised lexicon, referring devices, formal, impersonal and objective style, or use of tentative language. The following two extracts are examples of low graded task requirements (graded 2 out of 6) as they appear to be implementing an informal register and lack some of the academic language features that are typical of this genre. Extract 20 uses vague and imprecise language as seen in *"interesting"* or *"really liked"* that could be improved with other vocabulary such as *"compelling"* or *"fascinating"* in order to convey the meaning more clearly and precisely as suggested by Johns (1997) and Jordan (1999). Moreover, this was also seen in Bailey (2011) and it was suggested to avoid personal attitude adverbs. The use of contractions seen in this extract like *"it's"* or *"hadn't"* are commonly used in informal writing and therefore should be avoided in academic writing to maintain a more formal tone (Swales, 1990; Bailey, 2011; Swales & Feak, 2012). Finally, by including more complex sentence structures with compound sentences for instance and more formal grammatical structures such as *"upon reading it"* instead of *"when I read it"*, the text would benefit from becoming more academic as supported by various research (Johns, 1997; Halliday & Hasan, 1976, 1985).

Extract 20: M&A3, TR

*This painting I chose it because **it´s** story is **interesting**; by this I mean that there a lot of copies of it but it is uncertain which of them is the original. Also, I **really liked** the piece explanation that tells the destiny of the child that is Jesus. First, I **hadn´t** understood that Maria was trying to pull him off the cross to prevent his death but **when I read it** I liked evenmore the painting.*

In this line, Extract 21 also shows needs of improvement in terms of speech acts and register that would benefit from including complex and compound sentence structure to become more academic. The use of tentative language through hedges would also help the text to express the uncertainty of the claims and improving its academic tone (Johns, 1997; Jordan, 1999; Hyland, 2001, 2008; Bailey, 2011). An example of this can be seen in the sentence *"only one recording of his work has survived"* that could be adapted to *"it appears that only one recording of this work has survived"*. Finally, expressions such as *"Like I said"* would benefit from avoiding the use of personal pronouns (Bailey, 2011), including passive voice (Bailey, 2011; Biber, 1988; Myers, 1989; Poole, 1991; Swales, 1990; Swales & Feak, 2012) and more formal grammatical structures (Johns, 1997; Halliday & Hasan, 1976, 1985), for instance using a structure like *"As it was previously mentioned"*.

Extract 21: M&A5, TR

Like I said *in the beginning of his history there was little physical evidence of his musical contributions remains, as nearly all of his scores and inventions no longer exist* ***(only one recording of his work has survived).***

In the area of task requirements, it is relevant to mention that variety and knowledge of vocabulary is a key element to continue progressing in writing, however, Leki and Carson (1994) as well as Mazgutova (2020) mentioned that development of vocabulary was one of the biggest areas for improvement in L2 academic writing as it can be noticed in those extracts. Nevertheless, in this last study (Mazgutova, 2020), students seemed to gain confidence in this area after practice and constant exposure to these type of lexis during an EAP course. This gives the idea that learners had not gone through this practice period as evidence of their extracts.

Furthermore, the low graded extracts presented earlier with their characteristics are good examples that support Johns' study (1997) regarding the existing tendency among faculty

members who perceived students' academic papers as vague, confusing, rhetorically unstructured and overly personal. This also includes students' writing lack of sentence-level features considered to be basic, for instance, the use of modal verbs, balanced generalizations, correct uses of hedging, exemplification, active and passive voice use and pronouns, among others (Johns, 1997).

In the third place, the dimension of Comprehensibility (CY) was graded the second highest in the rating scale for the specific genre of exposition assignments. Some common characteristics of this dimension are avoiding run-on expressions and using signposting as seen in the analytical framework. These two following extracts present high-graded evidence in the dimension of comprehensibility from two of the M&A assignments, they were graded 6 and 5 out of 6 respectively in the FA scale. This means that the texts are very easily comprehensible and highly readable. The ideas and the purpose are clearly stated. This can be clearly seen for instance in extract 22, specifically in the sentence "*The reasons for the emergence of this new demonstration were given by several factors, especially related to the greatest exponent…"* where there are no important grammar or lexical mistakes that could impend communication or understanding of the information by the reader. Apart from this, there is also the use of passive voice (Bailey, 2011; Biber, 1988; Myers, 1989; Poole, 1991) specifically in "… *new demonstration were given by several…*".

Extract 22: M&A4, CY

The reasons for the emergence of this new demonstration were given by several factors, especially related to the greatest exponent *of the Catholic Church: the Vatican. It was underharsh criticism from various sectors questioning their acts of corruption, the Protestant Reformation, questioning the Catholic Church with the existence of Mary's virginity and theauthority of the pope, factors that weakened Deeply the power of the clergy.*

Additionally, extract 23 employs the use of connectives to start or join ideas such as in "*Although the Gnossience…"*. This signposting tells readers where they have been in the text and where they are going. By using signposting, writers can assist readers in predicting and summarizing texts and in understanding the relationship among topics and arguments (Johns, 1997).

Extract 23: M&A6, CY

Although the Gnossienne *is not blurred at all, is highly evocative throughout the usage of simplicity in technique and theory, which again broke with all the previously established music rules and helped to design what modernism would be about.*

Nevertheless, in these assignments there is a lack of general introduction even though there is some clear structure with the body and conclusion clearly organised in the complete texts and the reference sections contain mistakes regarding APA style. Finally, the employment of some run-on sentences with also the use of contractions instead of the full verb forms are identified in them.

The following dimension is the one of Coherence (C1). The results obtained place it as the lowest graded dimension along with the Task Requirement (TR) dimension and these extracts intend to illustrate its characteristics within the exposition assignment genre with the use of a cover, an index, tables, paragraphs, references, or signposting among others. The following extracts are both taken from assignments graded 2 out of 6 in the FA scale, this indicates a low performance in the dimension of Coherence. Some examples of this can be seen in Extract 24 with sudden shifts from topics that make the comprehension of the text difficult for the reader, specifically when first talking about "*The Gates of Hell*" to later discussing Rodin's work ethic within the same paragraph without a logical explanation of both ideas. Then, there is a division of paragraphs that indicates a new topic is being introduced, however, this paragraph continues explaining the author's

intention creating an unnecessary defragmentation that affects the organizational structure of the text (Halliday & Hasan, 1976, 1985; Johns, 1997; Jordan, 1999).

Extract 24: M&A1, C1

The Gates of Hell, a monumental sculptural group depicting scenes from Dante's Inferno in high relief. Often lacking a clear conception of his major works, Rodin compensated with hard work and a striving for perfection.

He conceived The Gates with the surmoulage controversy still in mind: "...I had made the St. John to refute [the charges of casting from a model], but it only partially succeeded.

Focusing the attention on Extract 25, this discusses several different ideas within the same paragraph, all of them through an extremely long sentence. An academic text requires certain organizational structure divided into clearly defined paragraphs as well as a logical order. By breaking the text up into shorter sentences, separating it into well-developed paragraphs and providing a clear topic sentence for each one, the text would become more coherent and organized (Bailey, 2011; Swales, 1990; Swales & Feak, 2012).

Extract 25: M&A7, C1

We chose this piece because of the way of that Claude implement the colours, he was not focused on the details or the landscape itself, we considered that he tried to do was to find the combination of colours which he thinks was the best option, and that is the true nature of the impressionism, they are not worry about details, in this case the landscape was established but the flowers, the clouds or the tree itself is depicted as it really is, also that combination of colours gives the impression that the landscape was alive, quite, calmly and transmit you a sensation of tranquility and at the same time it is like telling you that a lot of things happen in there, that the time is passing in a good way.

These findings coincide with Nuzzo and Bove' research (2020) when mentioning that most of the weaknesses found in texts are identified in the areas of organization of ideas or the text itself, the application of genre features and register variation. This algo goes in line with those difficulties identified in writing by teachers since the 1990s such as the logical organization of arguments, the use of genre conventions and also the need to adopt a formal register (Lavinio & Sobrero, 1991; Nuzzo & Bove, 2020; Dafouz, 2021). Furthermore, these features are, not only common in content subjects but also in EFL learner writings (Paquot, 2010).

In the last place, the dimension of Cohesion (C2), is found as the third lowest graded dimension of all five and the following extracts provide examples of the characteristics found in the exposition genre such as using a variety of connectors, collocations, metadiscourse and avoiding run-on expressions. The following extracts were low-graded evidence in the dimension of cohesion from two M&A assignments graded 2 and 3 out of 6 in the FA scale. In the first place, Extract 26 presents a constant repetition of the conjunction *"After this"*. By including other cohesive devices such as pronouns, it-cleft constructions and conjunctions (Halliday & Hasan, 1976, 1985; Hinkel, 2004) a stronger relationship between the ideas and thoughts presented in the text can be established and repetition of words is avoided. Furthermore, other types of linkers are missing and could be added to provide additional support from one idea to the next and clarify the order of events.

Extract 26: M&A5, C2

After this *it came the period of renaissance, when the education and culture was expanded toa certain section of the population, and not only to the royal families.* […]

After this*, it came the illustration when the knowledge was definitely open to the general population. The grown in many disciplines was evident including the music. The worldview had an important change. The main* […]

After this *the history of music could be divided in three main periods; Baroque, Classical period, and latter on Romanticism.*

These results may demonstrate that students are not sufficiently exposed to an EAP course where they could be made aware of the importance of using a constant academic style and academic vocabulary in order to be successful in their academic subjects at HE. Furthermore, students may have not been following the steps occurring throughout the writing process, specially revising for effectiveness and editing for connections and coherence (Flower, 1993). Therefore, it may be inferred that either professors or students are not familiarised with this process and are not giving its corresponding importance as essays had not been thoroughly revised from the beginning of the process. Academic writers seem to have a tendency to adopt a more strongly process-oriented approach when writing by implementing a variety of steps before actually starting to write such as planning ideas, writing a first draft, revision of their draft for content and structure, receiving feedback, editing for connections of ideas, language and coherence (Mazgutova & Kormos, 2015).

Regarding Extract 27, the same need mentioned in the previous extract in terms of transitional words, linkers or cohesive devices is identified, therefore, it could be used to create a more cohesive text and connect different ideas in order to contribute to a smooth flow. This could also benefit the introduction of the three sentences that begin in a similar manner and would also avoid repetition.

Extract 27: M&A6, C2

Impressionism in music is attributed mainly to french composer Claude Debussy, who actually hated the term impressionist and rejected it publicly. Impressionist music is mainly characterized bythe usage of complex harmonic sequences and blurred melodic patterns which can be even described as a lack of melody perse. Impressionism in music can be seen as an extreme development of Romanticism, mainly because of previous romantic composers like Liszt and Wagner who were already playing with complex dissonances and harmonic ornaments that substituted the melody (Encyclopedia Britanica, 2013).

Apart from the previous explanations provided, another one that would explain the low levels of cohesion and coherence could be that because students are focus on including many ideas and concepts in their writings, this may inhibit their organisation skills (Mazgutova & Kormos, 2015). This could be improved by implementing a backtracking technique included in the writing process. As when learners read through their writings a second time, they focus on reviewing their paper and its purpose, the coherence and cohesion of their ideas and reflect on them (Silva, 1993). At the same time, they can also resolve difficulties in lexis, grammar or syntax that had not been seen before.

6.5 EP&S analysis assignment

The last subject of the analysis was EP&S. The results obtained from the EP&S subject contained a total number of n=55 items that were rated among each of the five dimensions as well as their overall. Similarly to the other two subjects, in order to examine the competence of the EP&S assignments, a test for each of the dimension (content, task requirements, comprehensibility, coherence and cohesion) in the FA rating scale and interrater reliability were conducted. SD for each of the dimensions were obtained and included indicating that variation among dimensions was moderate as it was seen in the previous section. Finally, the total mean for each dimension was obtained by considering the mean from each rater indicating its corresponding moderate range between them (see Table 23).

		EP&S1		EP&S2		EP&S3			
	n	M	SD	M	SD	M	SD	Total mean	Range
Content	55	4,9	1,1	4,8	1,1	4,7	1,2	4,8	0,2
Task requirements	55	3,4	1,2	3,3	1,3	3,3	1,3	3,3	0,1
Comprehensibility	55	4,6	1,2	4,4	1,2	4,3	1,3	4,4	0,3
Coherence	55	4,2	1,4	4,1	1,4	4,1	1,4	4,1	0,1
Cohesion	55	3,9	1,5	3,9	1,5	3,8	1,5	3,9	0,1
Overall	55	4,2	1,1	4,1	1,1	4	1,1	4,1	0,2

Table 23. Dimension descriptive statistics for the EP&S subject in FA performance (average score per dimension)

By considering all the quantitative results, this subject is placed as the second highest graded of the three of them with a positive FA overall in agreement among raters (Total mean = 4,1; Range = 0,2). Table 23 shows the content (CT) dimension as the highest graded dimension (Total mean = 4,8; Range = 0,2) followed by comprehensibility (CY) (Total mean = 4,4; Range = 0,3), coherence (C1) in the third place (Total mean = 4,1; Range = 0,1), cohesion (C2) in the fourth place (Total mean = 3,9; Range = 0,1) and finally task requirements (TR) as the lowest graded dimension (Total mean = 3,3; Range = 0,1). Therefore, results show a bigger area of improvement in the dimensions of cohesion and task requirements, than in content, comprehensibility and coherence. For a better understanding of the reasons behind these numbers, these quantitative findings are complemented with learners' written assignments extracts as qualitative results as it is presented next for each one of the five dimensions with their corresponding discussions.

This section of the chapter follows the same order of the FA scale in a similar fashion as the other two previous sections although applied to the specific genre of analysis assignments. The genre of analysis involves applying interpretative methods to the object of analysis to specify the author's purpose, bias or point of view. Therefore, the dimension of Content (CT) is presented first and, following the same procedure as in the other two sections of subjects and genres, extracts are employed to illustrate in a more visual manner characteristic aspects of this dimension along with their corresponding discussion of them. The following extracts are examples of high graded content (5 out of 6) where the information provided is relevant and adequate considering the analysis genre that requires a thorough and critical examination of the topics and issues presented. Considering Extract 28, the information presented there is a clear continuation of previous ideas, this one being the fourth one as it can be noticed by the first sentence "*The fourth antagonism is the new forms of…*", where the content was appropriate for discussing the issue presented, the growth of slums in big cities and a lower control in those areas. This extract supports its argument by adding a citation.

Extract 28: EP&S53, CT

The fourth antagonism is the new forms of *apartheid. This point shows the explosion in the growth of slums in big cities. Even tough in normal society almost everything is controlled,slums are places in a city seen as blank spots, the state control is nonetheless suspended there,they are domains outside the rule of law. It also emphasizes the growing difference betweenclasses in many parts of the world, but it talks about the politization of the working class, such as Hugo Chavez did in Venezuela.*

Extract 29 makes a short summary of the different arguments presented in the whole text, although further details and information would be needed to support the relevance of each concept, and these are further explained in the remaining of the text.

Extract 29: EP&S42, CT

As is mentioned above, there are 4 factors that affect the reproduction of capitalism.
The first is the ecology, because it can always be seen as a form of competition and investment to obtain the best progress. The second, private property, because sometimes people with low resources or little support from research can discover various important points, but they are not recognized, the only ones that can be, are powerful. The third…

This can also be applied to Extract 30 where more details regarding implications are provided in different parts of the text. However, the language used is concise and clear when providing the number of information.

Extract 30: EP&S32, CT

Argued as, Fukuyama himself admitting that the biogenetic interventions and breakthroughs into human nature are the most serious threat to his vision of the End of History. Knowing how is it conformed, organisms are now manipulative objects. Nature is no longer "natural," the reliable "dense" background transforms into a fragile mechanism pointing to a catastrophic direction.

Nevertheless, these assignments showed needs in other dimensions such as grammar, lexis, organization structure and repetition of ideas.

In the second place, the dimension of Task requirement (TR) in the analysis genre was graded as the lowest dimension of the five of them, and the following extracts present characteristics found in this dimension regarding the use of passive voice, subject-specific or specialised lexicon, referring devices, formal, impersonal and objective style, or use of tentative language. By analysing the following extracts, it can be clearly seen that they are good examples of low graded task requirement (graded 1 out of 6) as this dimension has not been fulfilled successfully and the requirement of the task has not been correctly answered in terms of following the genre required, the employment and use of an informal register instead of a formal one, as well as the structure and format requested for these assignments. Some examples of the informal register can be specifically seen in Extract 31 with the constant use of personal pronouns such as "*he*" or "*we*" since the use of them are relatively rare in academic prose (Hinkel, 2004). As a result, the use of the author-evacuated prose with its corresponding absence of first-person pronouns as well as passive voice and muted arguments (Johns, 1997) would be encouraged here instead; this may also contribute to hide the writer's personal attitude (Bailey, 2011). Moreover, the style used in academic environment is formal in an impersonal or objective style (Swales, 1990; Swales & Feak, 2012), although this is not the case in this extract.

Extract 31: EP&S36, TR

he *emphasizes in some factors as ecology, Private Property, New Techno-Scientific Developments, New Forms of Apartheid and* ***he*** *develops each subject deeply but with the exact and necessary points.*

He *mentions that ecology and the environment could live and still stand if* ***we*** *cease to exist and mention some examples such as Chernobyl and what happened.*

In addition, ideas seem not fully developed and explained such as in Extract 32 with the sentence *"Also talk about technology and the assertion of private property in the software domain. Fukuyama theory that human history as struggle between ideologies has concluded."*. In this sentence, the corresponding author's interpretation was missing, and the reader was left with a sense of being completely lost. In terms of register, the vocabulary employed could be improved to fit the academic style desired in this type of assignments.

Extract 32: EP&S36, TR

Also talk about technology and the assertion of private property in the software domain. Fukuyama theory that human history as struggle between ideologies has concluded.

then talk about the freudalism and the and the psychological problems that occur in certain situations and how the human body and mind are not the same after having a shock.

Furthermore, Extract 33 does not include in their metadiscourse the use of hedges or tentative language as a cautious language frequently used in reporting research and making claims (Jordan, 1999; Johns, 1997) in order to avoid absolute statements (Bailey, 2011) for diplomatic and caution reasons (Hyland, 2001, 2008). These hedges, in the shape of epistemic verbs, are necessary to soften claims and therefore, the author does

not appear as being too assertive but initiates a dialogue (Dafouz, 2003). Interestingly enough, Hyland & Milton (1997) showed that L2 writers have a tendency to write academic assignments with a stronger commitment, more authoritative and firmer assertions in comparison to their academic writings in their L1. This is something that can be modified in this extract in order to become more academically appropriate.

Extract 33: EP&S46, TR

Zizek also mentions that disasters catastrophes are part of any radical change and in the future can be used for the benefit, human nature cannot be changed by the same human being in such a way that the thought that the human must not adapt toyour environment if you do not intervene even more to maintain it as it is now, it is the most natural.

Finally, the general structure of those texts was inadequate as they did not have a clear flow of ideas. What is more, even though the assignments had a reference section, these had not been added correctly. Furthermore, texts display features such as colloquial expression, slang, repetition of words or redundancy and also reveal the use of generic and direct statements as well as personal stance. However, those assignments that were highly graded included academic language features, lexical and grammar variety, the employment of modal verbs, evidence of structural planning, logical argumentation, and the use of connective devices. These results confirm that maybe those students with more experience in writing do not need to spend much time thinking and pausing for revision during their task than those less experienced writers who need more time or pausing for planning or revision of their production (Sasaki, 2000).

On this topic, learners may have found themselves in two possible situations when asked to perform a writing task. They may have known the message to be conveyed, but they may have not known how exactly to express it because of their English level, or if they are proficient users, but they do not know what exactly to convey **(**Herraiz-Martinez & Alcón-Soler, 2018). It may be possible that a number of assignments in this study did not obtain a high score on the dimension of task requirements because writers relied on their

knowledge of grammatical structures and limited vocabulary to express their ideas in an academic style because they already had difficulties conveying their message even when writing in their L1. These possibilities are reflected in students' voices expressed through their survey (see Chapter 5) as they referred to having learnt better grammatical structures, lexical devices and organizations structures, among others, after directly focusing on academic writing specifically in genres.

The following dimension of the list is the dimension of Comprehensibility (CY) that was graded the second highest in the rating scale. This dimension is also supported with extracts that present examples of characteristic aspects in this area such as avoiding run-on expressions and using signposting. The upcoming included extracts show evidence of the comprehensibility dimension being graded positively in the FA scale (5 or 6 out of 6). Therefore, the information included is comprehensible as it does not require much effort from the reader to understand the purpose of the text and its ideas. Throughout Extracts 34 and 35, sentences are written in a clear and concise manner, using language with no significant grammar or syntax mistakes that would impede communication or understanding.

Extract 34: EP&S5, CY

In this article I consider that it gives us a wide perspective of how society nowadays is mainly controlled or maybe it's just a new way to see how everything around the world is developed . There has been different ways of control of society such as communism, socialism and capitalism. All of them have involved many violence and historical changes and thanks to all that its not easy to control others with simple arguments.

Extract 35: EP&S9, CY

This, does not diminish relevance to these problems. Rather, it speaks that we should not think that these problems are normal within capitalism and maybe he solution does not lie within fixing the directly. We already consider capitalism as the perfect system that has worked until now, but maybe we should rethink these problems from root of the system in the that we live now.

Some questions as in Extract 36 "*how does globalization repeat what we were taught to avoid throughout history?"* or "*do we really learn about the suffering of people during these tragic episodes of history?*" are addressed to the reader in a simple manner, thus, this makes the ideas understandable for the reader.

Extract 36: EP&S26, CY

*But, **how does globalization repeat what we were taught to avoid throughout history?** I mean, **do we really learn about the suffering of people during these tragic episodes of history?** I don't think so, I sustain my argument under the idea of a utopia, the concept of utopia can be related into ethics but also into religion.*

Nevertheless, all of the three extracts would benefit from addressing needs in terms of accuracy, vocabulary and grammatical structures, coherence and cohesion throughout the entire texts.

Continuing next with the dimension of Coherence (C1), the results obtained from the raters place it in the third position and these extracts intend to illustrate its characteristics within the genre of analysis assignments through the implementation of a cover, an index, tables, paragraphs, references, or signposting among others. The presented extracts have been taken from medium-graded texts in the dimension of coherence, meaning 3 out of 6 in the FA scale. By considering Extract 37, the idea is presented in a coherent and structured manner, easy to be followed by the reader. However, at the beginning of this

extract, the sentence "*According to the movie it's made abundantly clear…*" creates ambiguity when talking about the movie since this had not been mentioned earlier and the reader does not know what is talking about. Thus, by providing more context or an improved introduction, an easier connection of the analysis presented to the movie could be established.

Extract 37: EP&S7, C1

According to the movie it's made abundantly clear *de differences in uprisings that befall Engel and Marx, while one was born a ranchman's son and lived the life of a bourgeois, Marx instead was the son of a Jew family with little to no money causing both to have opposing ideas and images of life. This only changed for Engel when during the industrial revolution he witnessed first-hand the abuse suffered by the workers from the hand of the bourgeois in his father´s textile factory.*

In the meantime, Extract 38 shows a clear and logical progression of ideas with a parallel structure in both parts of the sentences. Nevertheless, by breaking the sentence into shorter ones or separated clauses and connecting them through linkers, the reader would be able to follow the concepts in an easier way.

Extract 38: EP&S31, C1

The slum-dwellers, with low material possessions and deprived of everything, constitute one of the principal horizons of the politics to come, which makes the principal task of this century to politicize - organize and discipline the "de-structured" masses, just like the principal task of the emancipatory politics of the XIX century was to break the monopoly of the bourgeois liberals by way of politicizing the working class.

This is also the case in the last Extract 39 where a run-on sentence is presented (Bailey, 2011) only divided by a comma.

Extract 39: EP&S55, C1

After watching the movie and making some more reasearch We then can seehow in this statement they wrote concepts for the people and the current classes about how they should be treated, which thinking should the proletariat apply to change their current social and economical paradigm and the political and economical proposals the proletariat would use to put themselves into the dominant position.

As a result of this, the extract may appear as not very well-structured, the beginning of the sentence seems incomplete and there seems to be a need for connecting ideas for a stronger overall argument. There are some potential explanations for the low levels found in the areas of task requirements, cohesion and coherence. It may be assumed that learners, after having entered an EME subject that required certain level of English, they may have gained certain confidence in their command of English as it was mentioned in the voices from those students participating in their survey (see Chapter 5). This includes their writing skills and, as a result, students may no longer believe their ideas were lacking in those dimensions.

To finish with all the dimensions, the one of Cohesion (C2), is found as the second lowest graded dimension of all five within the genre of analysis assignments. This dimension includes the use of cohesive devices, conjunctions, linkers, collocations, metadiscourse and avoiding run-on expressions. The following extracts present low-graded evidence in the dimension of cohesion from the EP&S assignments, these were graded 1 out of 6 in the FA scale. This means that the texts are not at all cohesive, connectives are hardly ever used, and ideas are unrelated. Some illustrative examples of this are with the use of substitution or ellipsis that have not been implemented for instance in Extract 40 in the sentence "*They started to investigate about the differences between the different social classes. About the working class, and how they live in poverty and afoul conditions"* to avoid repetition of words such as "*they*" or "*differences/different*" (Halliday & Hasan, 1976, 1985).

Furthermore, in this same extract the sentence "***Which*** *goes back to a corrupt way of doing things, for example exploding workers and paying them a misery. Obviously nothing of these could have been possible without the help of Engels, the English man was powerful and rich* ***which*** *gave them an advantage in so many cases."* once again there is repetition and use of relative clauses (*which*) to join ideas instead of beginning new sentences with cohesive devices that help to join the text for the purpose of obtaining a grammatical and lexical cohesion (Halliday & Hasan, 1976, 1985). This relative clause could have been split into a shorter sentence with a different linking device to introduce each idea separated in order to give its corresponding importance to both of them and to make understanding easier for the reader (Swales, 1990; Swales & Feak, 2012). As it can be seen, general structure is uneven and messy for the reader.

Extract 40: EP&S45, C2

__They__ started to investigate about the __differences__ between the __different__ social classes. About the working class, and how __they__ live in poverty and afoul conditions. __Which__ goes back to a corrupt way of doing things, for example exploding workers and paying them a misery.

Obviously nothing of these could have been possible without the help of Engels, the English man was powerful and rich __which__ gave them an advantage in so many cases.

Continuing with the next Extract 41, the sentence "*They were traying to change the world, end democracy and peomlte comunism. That was their main goal, they wanted to convince …"* has not been organized through the use of passive voice by creating a cohesive chain that connects the end of the first sentence to the beginning of the next one (Hinkel, 2004). Moreover, in the sentence *"Their way of thinking was to use…"* an it-cleft sentence or even *'there'* to function like a nonreferential *'it'*, could have been used in order to avoid repetition and use of pronouns as those type of sentences are common in academic text to project authorial distance and depersonalization (Swales & Feak, 2012; Hinkel, 2004).

Extract 41: EP&S45, C2

They were traying to change the world, end democracy and peomlte comunism. That was their main goal, they wanted to convince *the higher clases of society because the lower clases already wanted a change un the way of the government.*
Their way of thinking was to use *influencia people, to first comvince someone in a powerful posicion.*

In addition to this, Extract 42 shows evidence of lack of cohesion as there are abrupt shifts from concepts in need of useful connections in the shape of conjunctions or linkers to improve the flow of ideas.

Extract 42: EP&S49, C2

We also go back to many years of ancient ways of thinking. An interesting idea they mentioned, is how Catholic Church prevent the temptation of flesh, by making them imagine how that person is going to be in a few years, old and with their wrinkles around all their body. Something similar is being used nowadays, use that idea of fear or of needing something in order to buy a service or certain idea.

Finally, and even though this would fall under a different dimension, the register used in those extract is too informal, for instance with the use of short verb forms instead of full forms and, therefore, do not follow the genre conventions required for this task. Another point to consider is that these assignments show an absence of sources to support their arguments and refer to the information presented in the texts.

6.6 Chapter summary

Throughout this chapter, a presentation of the results from the second corpus of written assignments has been included along with a description and discussion of the

relevant findings observed. These findings on students' written assignments have been based on the implementation of the rating scale that was supported by the analytical framework designed for this research and the comparison of results from three different raters.

By considering this, the beginning of this chapter has included an overview of all the results from the three subjects with a comparison of their means. Then, a review of each individual subject with their corresponding written genre has been presented. First with the help and support of tables comparing the results obtained from the three raters that graded them and then with actual extracts from the written assignments that supported the analysis and discussion of the results in relation with the analytical framework and the rating scale.

As a result, the complete analysis undertaken has contributed to understanding the academic language needs of students' assignments along this thesis. The findings obtained, as presented and discussed earlier, indicate that grammar, lexis, syntax, genre, register, structure and cohesion, even at HE with advanced levels of English among students, are still an area of difficulty among Spanish speaking learners and therefore a support system in the context of EME for those needs is required. The findings in this study identified various areas of difficulty for L2 writers concerning grammatical accuracy, lexical variety, formal academic style, coherence, cohesion, critical argumentation or accurately referencing academic resources. These areas of difficulty are in line with those found in similar studies (Bitchener & Basturkmen, 2006; Evans & Green, 2007; Leki & Carson, 1994). An explanation for this may be that they are due to a still low English language proficiency, a weak writing skill in the L1 or a lack of experience in L2 academic language composition (Kubota, 1998; Al-Badi, 2015).

This chapter provides empirical validation for the effectiveness of the FA rating scale in assessing students' proficiency in academic writing. The areas of improvement vary across the five dimensions of the FA scale although notably, the dimensions of task requirements, coherence and cohesion indicate the biggest area of improvement. Consequently, it is advisable to place particular emphasis on these dimensions, along with the rest, particularly within EME or EAP contexts in order to produce written assignments

that successfully meet the requirements of the task and are more academically coherent and cohesive. As it has been seen, gains in FA are different across subjects and as suggested by Kuiken and Vedder's research (2016), the use of the FA scale has been implemented and tested with different participants, different tasks and other languages rather than Dutch or Italian. Therefore, this study addressed those areas and supported the validity of assessing FA in learners (Bridgeman et al., 2012; Sato, 2012). The comparison of the findings of professors' and students' perspective in relation to specific sections of their surveys on students' academic written needs along with the findings obtained from the written assignments is provided in Chapter 7 to finalise the triangulation method.

Chapter 7: Analysis and discussion of the RQs through triangulation

7.1 Introduction

The purpose of this chapter is to present a comparison of results obtained from teachers' and students' self-reported beliefs on the needs of EME in students writing and the results obtained from the analysis of students' written assignments. All the results were seen separately in the previous three chapters (see Chapters 4, 5 and 6), therefore this section only focuses on those items that had similar questions in both groups of participants supplemented by the writing findings.

Thus, the research questions addressed in this chapter are the same as those of Chapter 4, 5 and 6:

RQ1.1 What are the students' academic written language needs in EME Humanities subjects as seen by professors?

RQ1.2 What are the students' academic written language needs in EME Humanities subjects as seen by students?

RQ1.3: What are the academic written language needs as reflected in these particular students' own writings?

For each of the two surveys, the results are articulated around the categories that make up the surveys, which in turn revolve around a number of topics (see section *Surveys as a research tool, data collection procedures and analysis*). As it was mentioned in Chapter 3 (see Methodology), the information obtained from the surveys has been grouped into five categories from more general to more specific, these being (1) Participants' background (has been used to present the participants along with their background in Chapter 3), (2) Importance of English and confidence in the area, (3) Disciplinary genres, (4) Self-perceived difficulties and needs in academic writing and (5) Possible help and support for academic writing. Each of these categories (four left) are presented in a

comparative fashion between professors and students' answers for their quantitative analysis. This analysis has also been supported with the findings from the written assignments in the previous chapter to finalise the triangulation method. This chapter is accompanied by graphs and tables to ease readers' comprehension and in order to avoid being repetitive, the main similarities and differences are presented in the following sections.

7.2 Importance of English and confidence in the area

The category of Importance of English and confidence in the area contained a total number of n=10 items in students' survey and n=7 in professors' survey with the subcategories of "English competence", "English fondness", "Feeling comfortable teaching content subjects through the use of the English language", "Confidence in English", "Writing in English" and "Command of English".

Within this category, the first area was targeted to both groups of participants to detect whether these groups considered the students' level of English sufficient to be able to follow the classes without difficulties, to which professors agreed with a 68% and students with a 71% (see Figure 45).

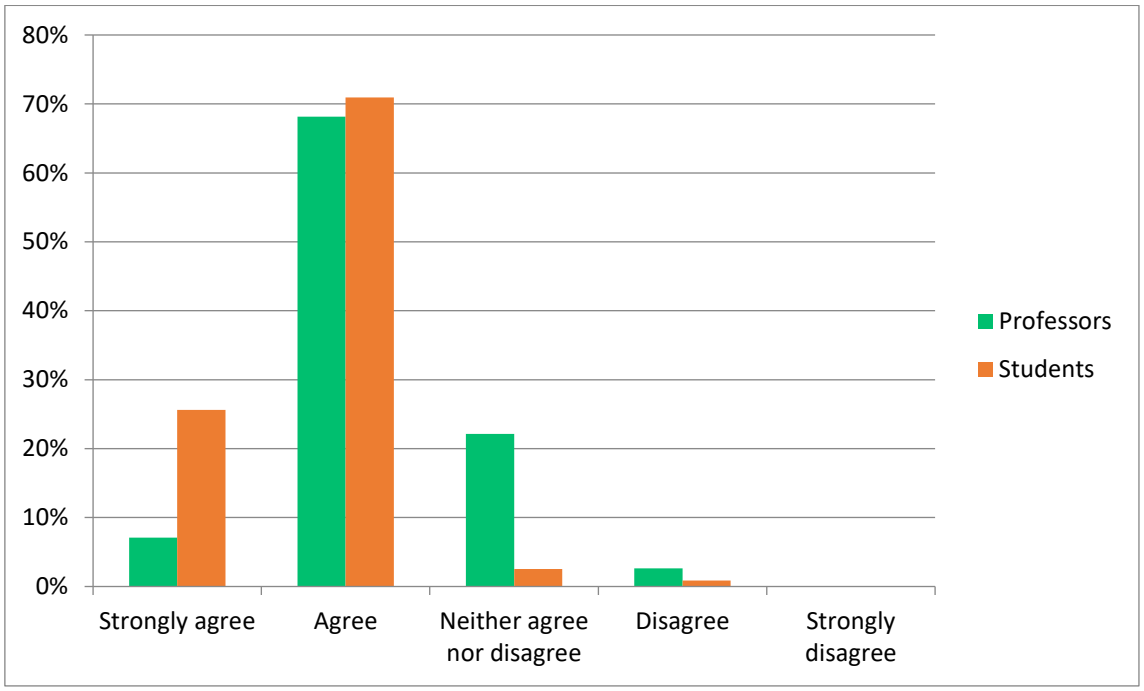


Figure 45. Students' English competence is good enough to follow the classes

Even though the students' responses indicated that they felt confident in that matter, professors' answers, although positive in general, also fell in the option of 'Neither agree nor disagree'. This showed that students had a better perception of their English when participating in class and, therefore, being able to successfully pass the subject, than what their professors felt to be true. These professors, as it was seen in the upcoming category of *Disciplinary genres*, did not consider teaching and improving the level of English of their students part of their duties in these classes. However, they appeared to have the idea that there was still plenty of room for improvement in that area.

Regarding the topic of EME subjects, it is worth mentioning that both groups of participants indicated a clear fondness towards learning content subjects through the use of the English language, with 58% of professors and 68% of students agreeing on this topic (see Figure 46).

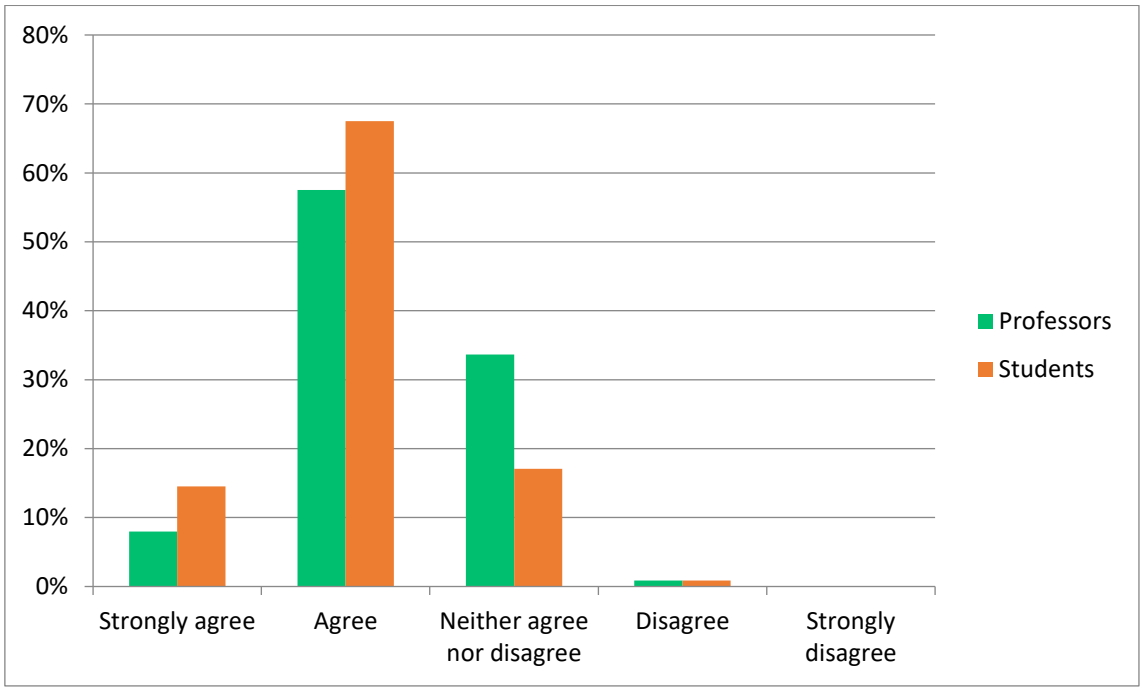


Figure 46. Students feel comfortable learning other subjects in English

The fact that both participants coincided in the option of "Agree" is an indicator of the importance given to the English language in the academic and international world that attracts students' attention. On top of that, this is one of the reasons why the concept of EME was created in the first place (Coleman, 2016; Cosgun & Hasirci, 2017; Dearden, 2014; Sánchez-García, 2018). This is complimented with comments from the professors seen in the previous chapters who claimed their students were required to have a minimum level of B2 in order to be able to take those classes which contributed to their confidence with the language and learning through EME. However, the fact that 34% of professors and 17% of students have a neutral opinion about this was supported by comments from the participants included in the previous chapters indicating that they did not mind learning in English or Spanish, since they already had a B2 level. Therefore, and as it was mentioned in Chapter 2, in order to be successful in EME, a certain level of proficiency in English by both professors (C1) and students (B2) is needed (Aguilar & Rodriguez, 2012; Nashaat Sobhy & Sánchez-García, 2020), although it is not limited to only that. Furthermore, this may reflect the complexity students face when learning a subject in a language that is usually not their L1 (Dafouz & Camacho-Miñano, 2016).

Regarding professors, as shown in Figure 47, the tendency was a similar positive response towards feeling comfortable when teaching content subjects through the use of the English language. On this topic, a considerable proportion of professors (12%) and students (13%) assertively express feeling comfortable. Additionally, a substantial majority, comprising 50% in both groups, also agree with this notion. Notably, a significant percentage of professors (38%) and students (29%) adopt a neutral stance, neither agreeing nor disagreeing. Despite of these generally positive responses, it is crucial to acknowledge that only a minimal total of 8% of professors exhibited negative sentiments about teaching in English.

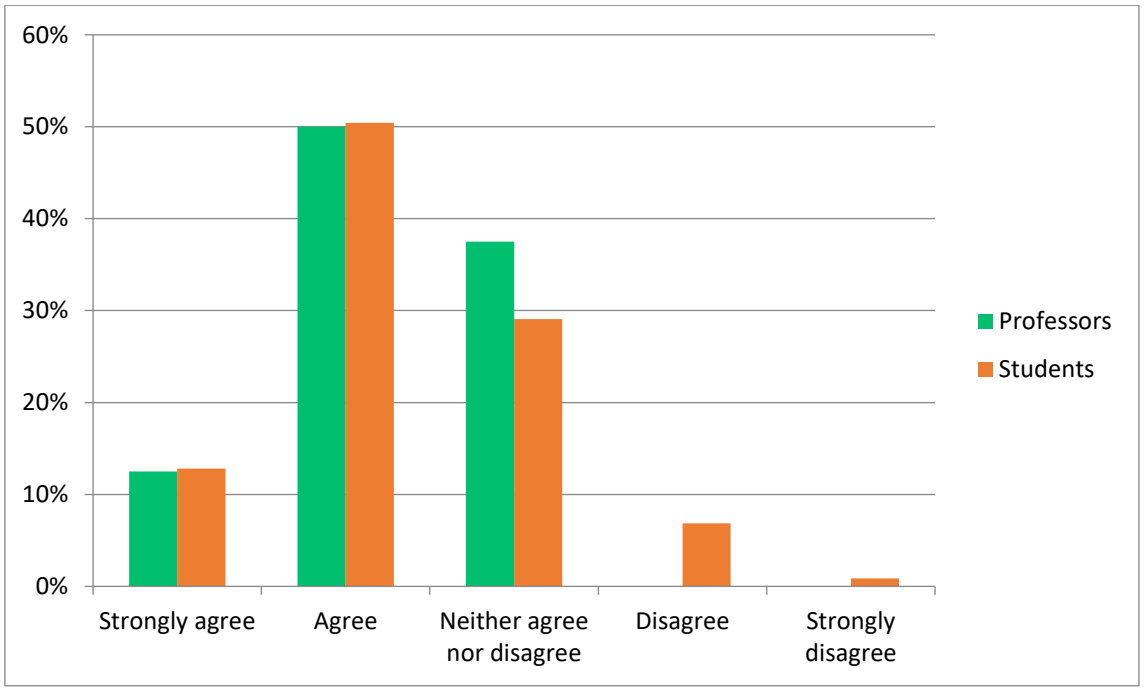


Figure 47. Professors feel comfortable teaching other subjects in English

Both groups of participants agree on professors being comfortable when teaching in English. This may indicate that a minority of the content professors do not necessarily have strong feelings towards teaching in another language that is not their own. This was clearly seen in the professors' voices too. However, the perception of content teachers when asked to teach in English may be that they simply have to translate the content of

their subjects in order to do so and are not aware of the necessary adjustments required in their teaching that need to be implemented. As a result, a complementary voice from another participant states that there is a need for training addressed to teachers.

With respect to the subcategory of Writing in English, the two groups of participants demonstrated remarkably high levels of confidence (74% Professors and 74% Students) when confronted with the task of writing or teaching academic English in the relevant subjects. Moreover, they appeared to align their responses across the other available options, as depicted in Figure 48 below.

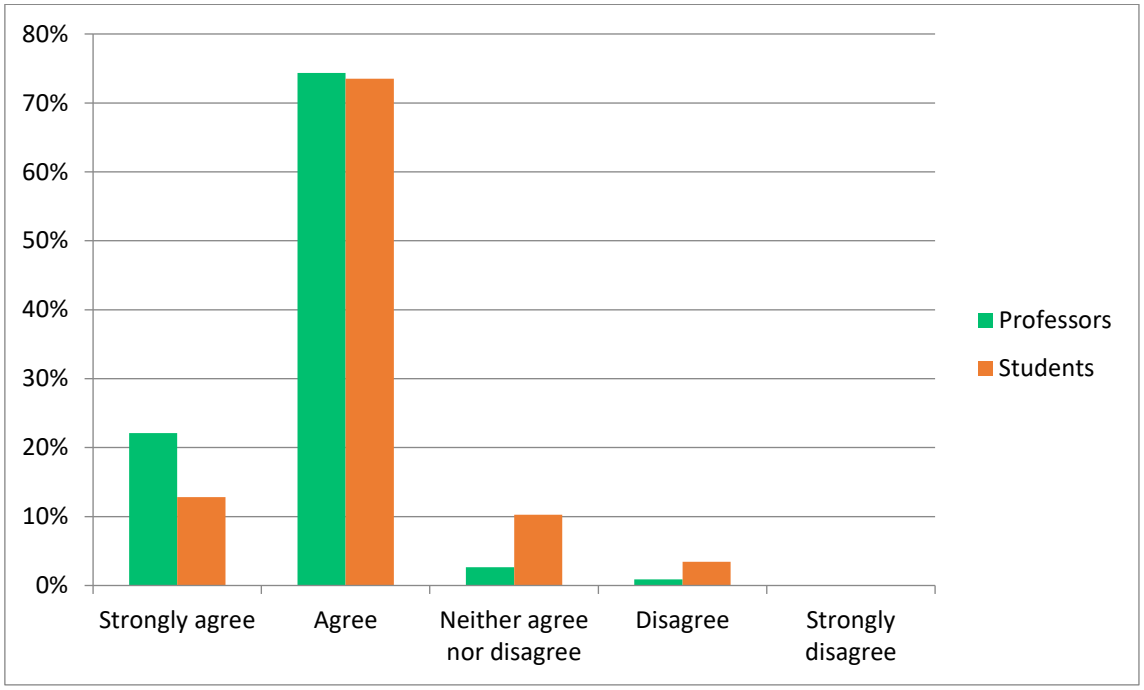


Figure 48. Confidence when teaching/writing academic English

Continuing along the trajectory of writing in English, it became notably intriguing to observe the alignment between the two groups in their recognition of the significance of this skill within the subject. Specifically, 17% of professors and 27% of students staunchly agreed, while 64% of professors and 70% of students expressed agreement.

Furthermore, 19% of professors and 3% of students maintained a neutral stance in this domain, whereas a mere 1% of professors dissented (refer to Figure 49).

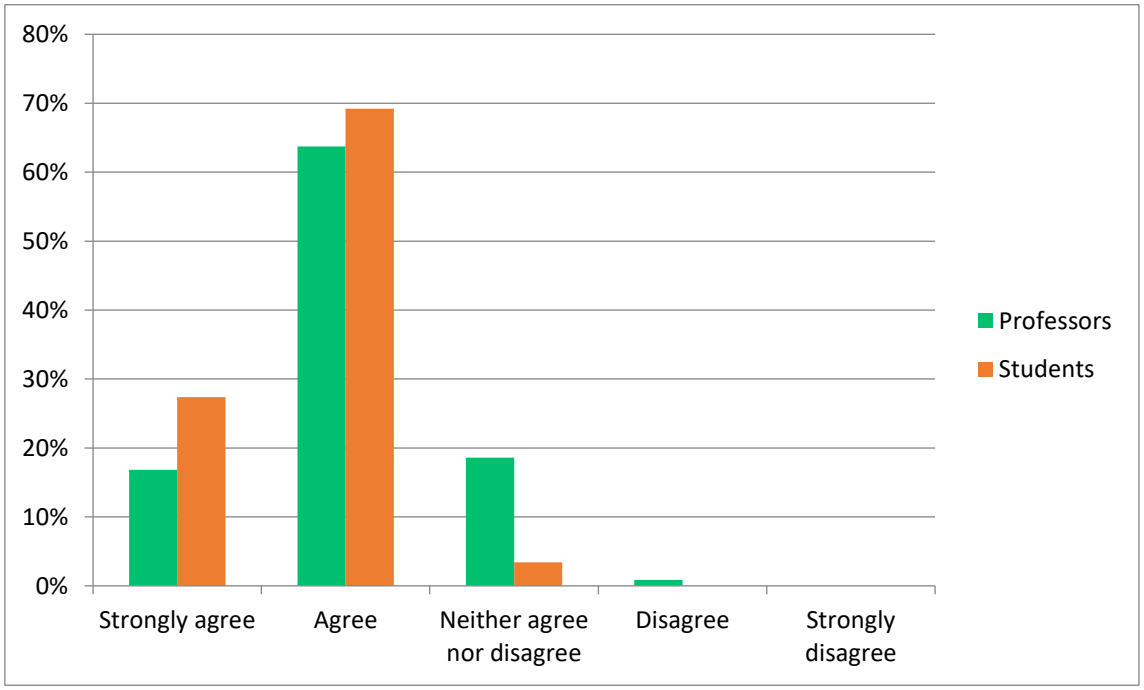


Figure 49. Writing in English is an important part of the subject

The skill of writing in English in those subjects was one of the tools used to assess students in regard to their knowledge of the content with the completion of assignments as seen in the collection and analysis of written assignments in this research. It is worth mentioning that although most teachers and students place great importance on writing (see "Agree" option), there seems to also be a significant part of participants (see "Neither agree nor disagree" option) who challenge this importance. The reasons behind this may be that professors thought of it as a fifty-fifty option because they would also consider oral presentations an important part of their subjects to assess learners about the content.

The following section included two sections that referred to the importance of academic literacy in English and English in general for students' learning and future

employment. The first one, academic literacy (see Figure 50), showed that both groups of participants provided a positive response with only 2% given to the disagree choices.

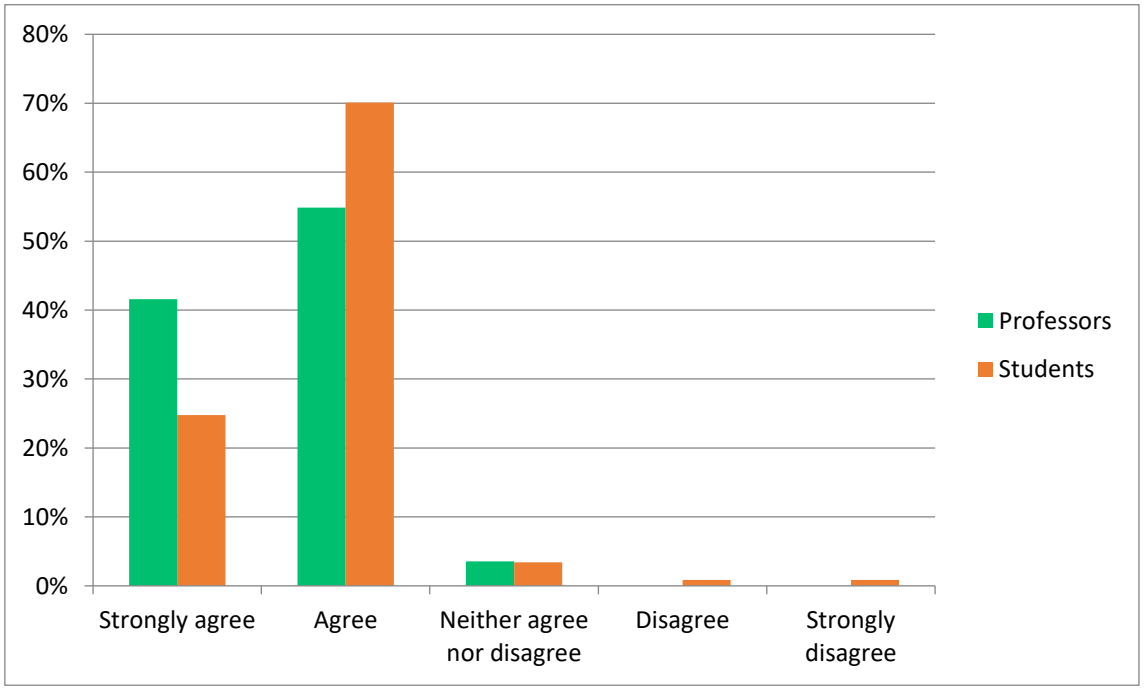


Figure 50. Academic literacy in English plays an important role in students' learning and future employment

In the second one, general English (see Figure 51), similarly to the previous one, both groups of participants provided a positive response with only 1% given to the disagree choices.

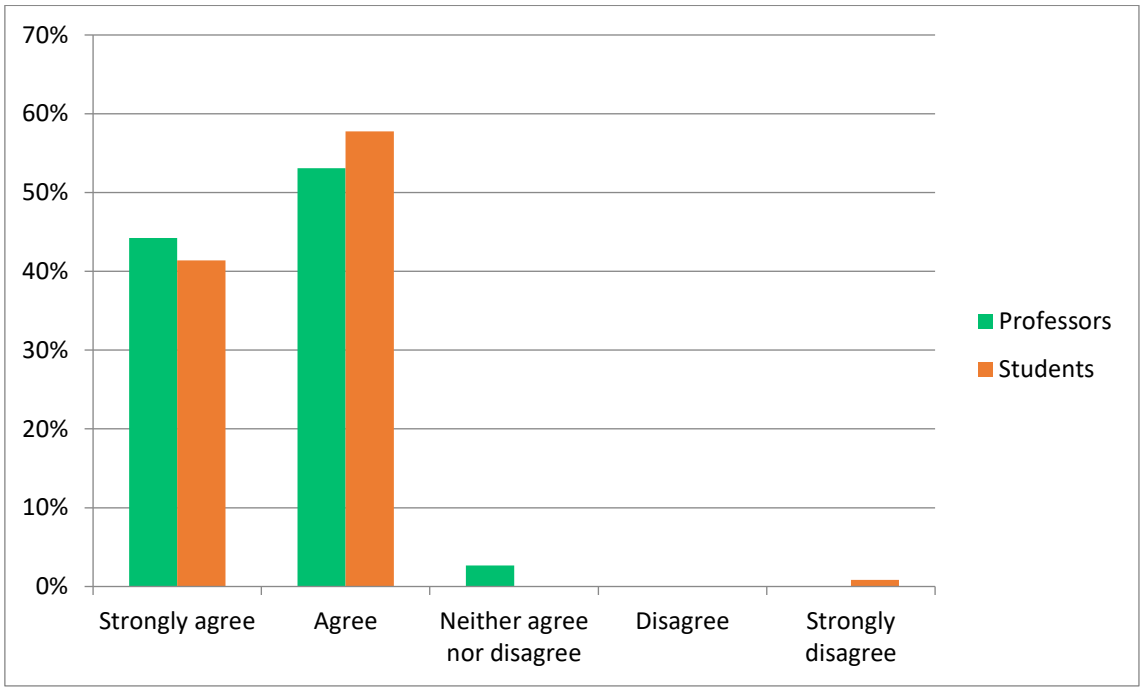


Figure 51. The English language plays a crucial role in students' learning and future employment

Both positive results from both groups of participants indicated that the role English, academic and general, plays in students' current learning and future lives is considerable regarding pursuing further prestigious studies leading to better job opportunities and higher levels of employability. In this area, both groups of participants seem to be aware of this.

7.3 Disciplinary genres

The disciplinary genres category introduces the importance of knowing the different types of text existing or genres used and required in each academic discipline and in those EME subjects. This contributes to raising awareness in both, professors and students, in order to work towards an optimal completion of assignments requested. This category contained a total number of n=3 items in students' survey and n=5 in professors' survey.

First of all, five different categories of genres were included in this section which were Descriptive, Expository, Persuasive, Narrative, Technical and Poetic, with a final open option of including others. The biggest results obtained in these academic text types were, from the highest percentage of responses to the lowest ones, in the professor side were in the first place Persuasive with 90%, in the second place Expository with 86% and in the third place Descriptive with 31%. On the other hand, the highest percentage of responses from students were in the first place Descriptive with 84%, in the second place Expository with 79% and in the third place Technical with 30% (see Figure 52).

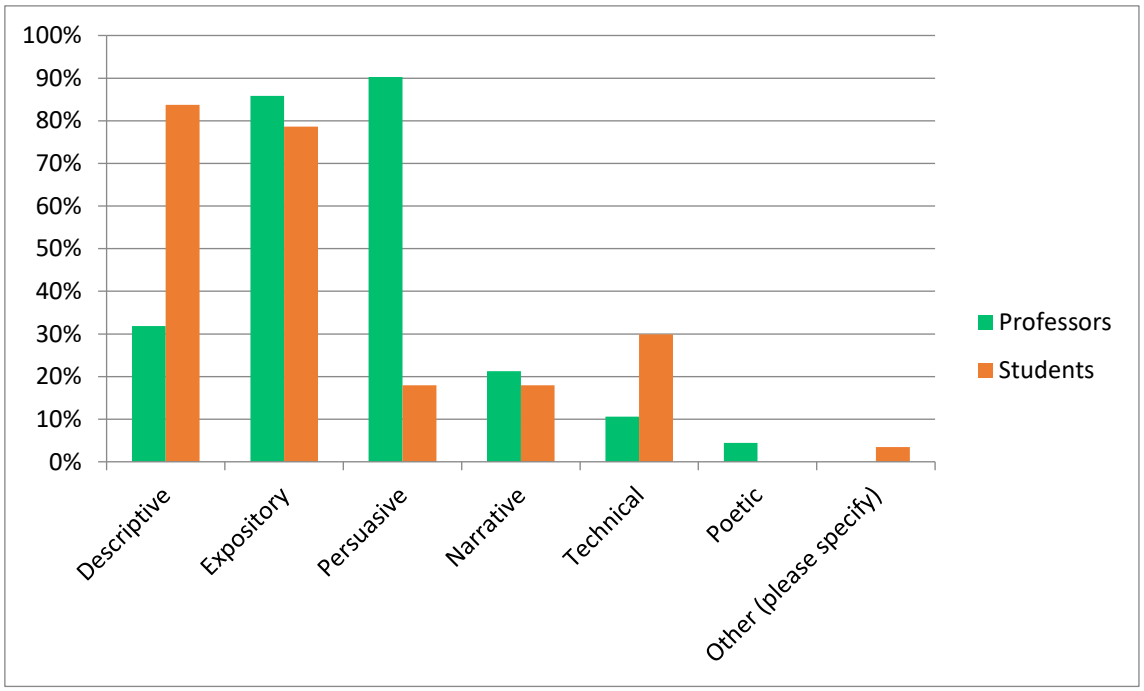


Figure 52. Types of written genres required in your subject

Figure 52 shows that there is one main category with clear agreement between professors and students despite of the percentage difference in their responses. The category designated as *Expository* texts garnered notable attention, while a commendable response was also observed from both groups towards the category of *Descriptive.* However, it is noteworthy that the category that received the most substantial response from professors was *Persuasive,* which did not elicit an equivalent level of interest from the students.

Instead, students showed a greater inclination towards the less popular choice among professors, *Technical*, even though the percentage of interest was not as high. The difference in percentages to those categories may be due to the idea that members of the same group often find themselves in the situation of struggling to recognise similarities in genres in frequently used texts unless they repeat the action of writing similar texts several times in order to establish and master the structure of a specific genre (Hyland, 2008). This is especially seen in the case of students, although content professors may also struggle differentiating disciplinary genres. Furthermore, another interpretation may be that in order to enable students to cope with various genres, it is important to help them acquire the knowledge of the rhetorical context, audience, generic conventions (Bronia, 2005), so they are aware of the needs and structure of a specific text. Despite of this difference, it is worth mentioning that at least both groups seemed to agree on the main genres, *Expository* and *Descriptive* by far. Furthermore, those genres come in agreement with those collected and analysed in this research as *Argumentative, Expositive and Analysis* written assignments.

Continuing in the category of "Genres", it was interesting to know whether they had studied these genres in this particular EME content subject and worked with them. The response to this question, appeared to be negative from both perspectives with a 68% from professors and 74% from students, in contrast with a 32% from professors and a 26% from students in the option of yes (see Figure 53).

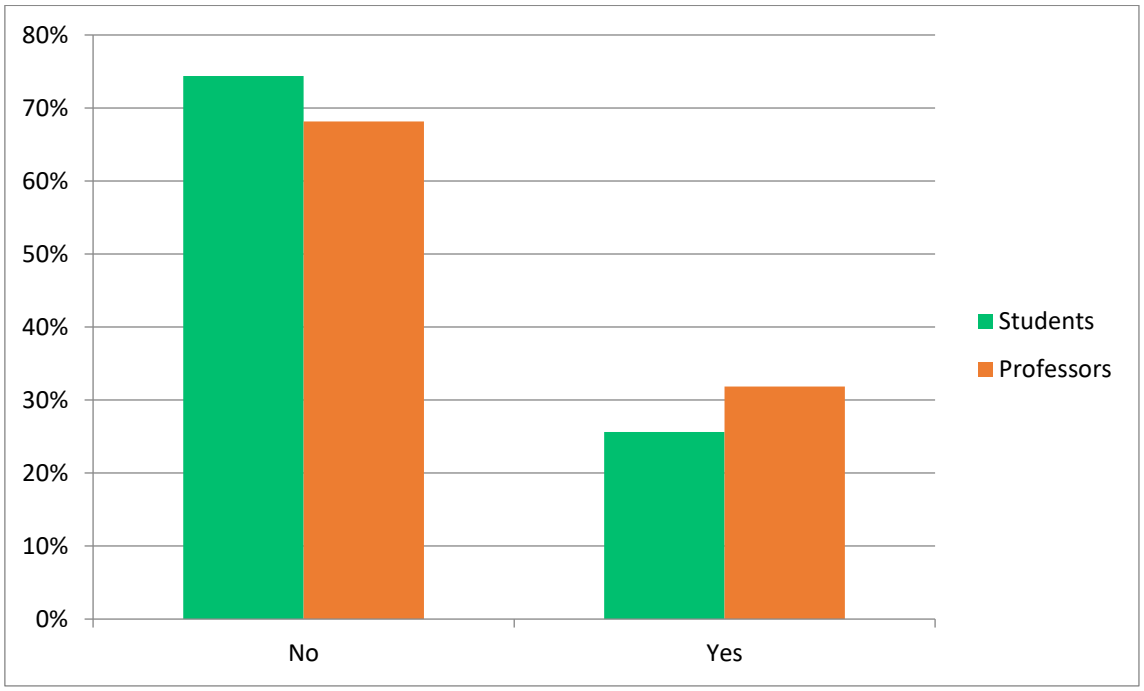


Figure 53. These types of written assignments are studied and worked in class

These numbers seem to be similar to those in the professor survey and therefore support the explanation of content teachers not seeing the instruction of writing in English as part of their responsibilities or duties in EME lessons since, at the same time, they have not been trained on it. Moreover, as it was seen in the analysis of the written assignments, students might have been facing a lack of experience writing these types of genres, for instance through an EAP course, and, therefore, receiving constructive feedback. On top of this, there is the existing pressure they may have been facing to have a positive outcome.

From those percentages of positive responses, the focus was now on whether these professors and students saw a clear improvement in their written assignments because of having studied those genres in class and worked on them alongside their partners and professors. The response was of 92% from professors and 63% from students, in comparison with the 8% from professors and the 37% from students who answered no (see Figure 54).

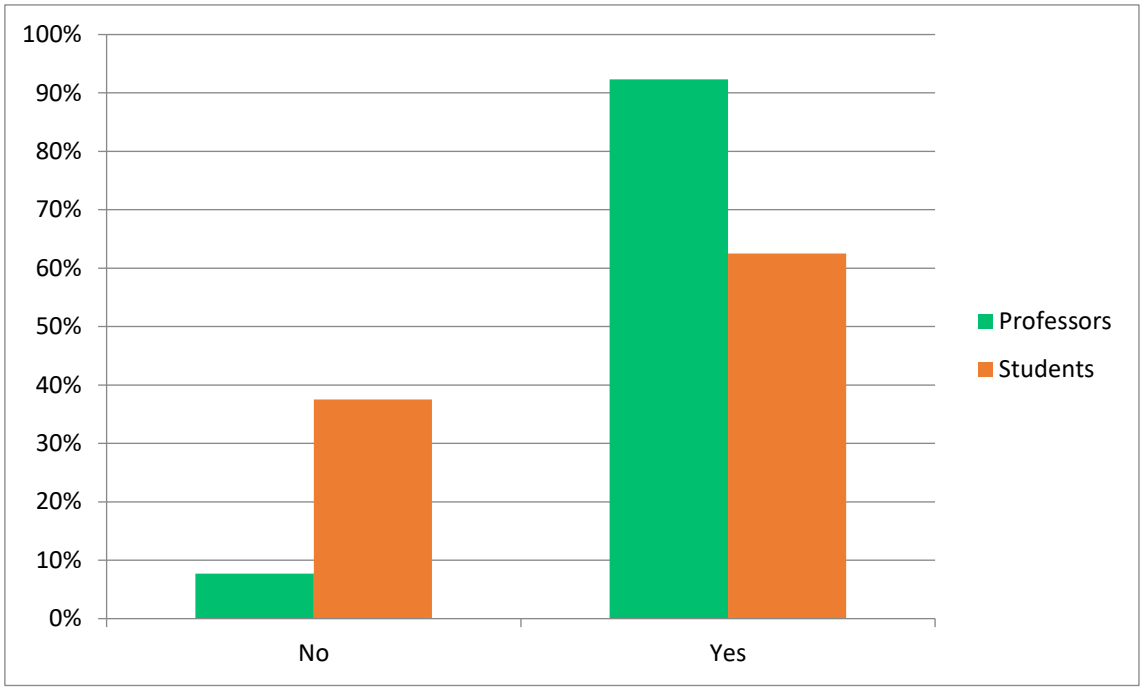


Figure 54. There is an improvement in written assignments because of working and studying genres in class

This response was extremely positive despite the fact that it was only answered by the small group of respondents that acknowledged an actual work on those genres in class in the previous question. According to both groups of participants, written assignments were improved in terms of academic writing after working with them in class. As a result, and after the analysis of the written assignments, it may be possible to suggest that students were not sufficiently exposed to an EAP course to enhance the importance of using a constant academic style for successful results in HE. On top of this, students may have not being taken through the various steps of the writing process such as revising for effectiveness and editing for connections and coherence (Flower, 1993). Thus, assignments did not seem to have gone through a thorough revision from the beginning of the writing process due to professors or students' unfamiliarity.

7.4 Difficulties and needs in academic writing

The fourth category addresses difficulties and needs in academic writing and it considers the perspective of both participants. It focuses on identifying any possible need or difficulty perceived in the written assignments completed for these subjects.

It was important to contrast professors with students' opinion regarding having possible difficulties in their assignments. Professors seemed to show an extremely strong opinion towards finding areas of improvement in their students' work (70%). As it was mentioned in the analysis of professors' survey, this was expected from this group to a certain level. Nevertheless, it was surprising to see that percentage was almost comparable to the students' responses, although at a lower level ('Agree' 67%), with only very few responses that showed certain confidence and no problem in this area (see Figure 55).

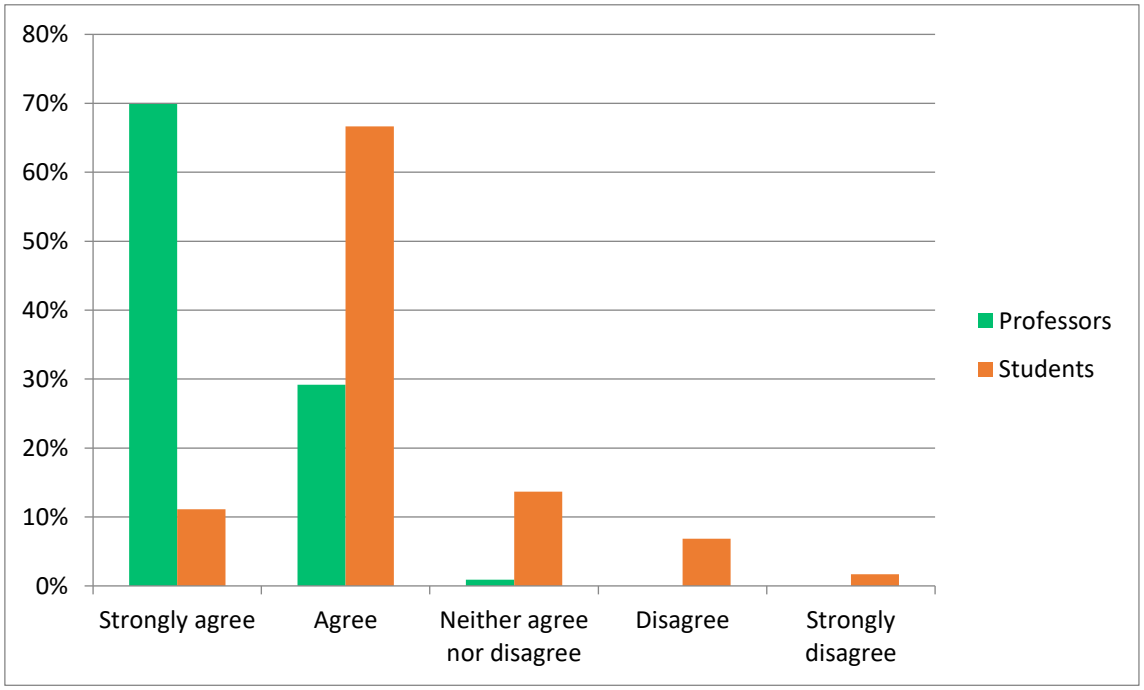


Figure 55. There are needs/difficulties in written assignments

This was interesting to discover since it showed that there seemed to be an area for improvement within EME subjects regarding awareness of writing genres and development of skills for academic writing. This area for improvement was being perceived, not only by professors, but also by learners themselves and it may have been affecting their learning process and work. This was evident and proven by the analysis of the written assignments collected in this research that showed needs for improvement throughout the five analysed dimensions of content, task requirements, comprehensibility, coherence and cohesion. Furthermore, the extracts analysed in the written assignments support the existing tendency among faculty members who perceived students' academic papers as vague, confusing, rhetorically unstructured and overly personal (Johns, 1997). Within this perception, there is also the use of modal verbs, balanced generalizations, correct uses of hedging, exemplification, active and passive voice use and pronouns, among others (Johns, 1997).

After establishing the needs or difficulties both groups agreed to have or find, it was key to clearly identify what those areas of improvement were. By doing so, it would be possible to look for them in the written assignment sample of this research in order to see if they were actually there and also to find possible solutions for those needs. Figure 56 shows that both groups agreed on the two main categories which are the "Choice of voice (formal or informal)" and "Personalization (use of personal pronouns such as 'I', 'you', 'we'…)".

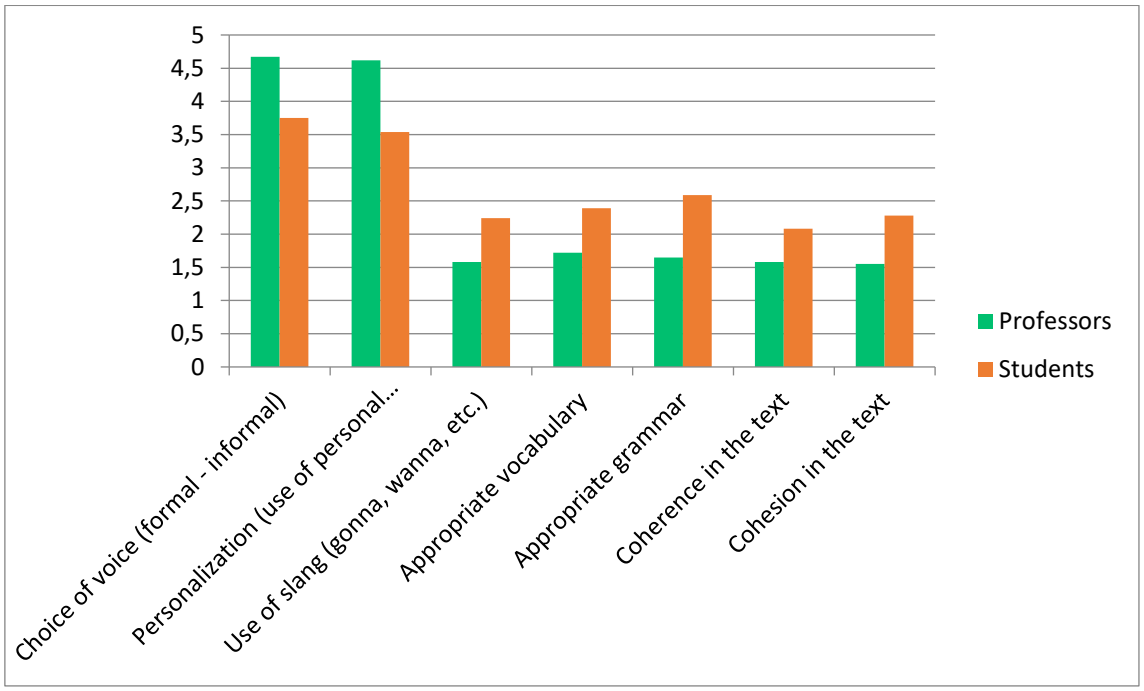


Figure 56. Needs/difficulties in written assignments (1 being the least common and 5 the most common).

The two categories may be included in the area of register, and as it was mentioned in the previous chapter, the lack of register awareness is commonly characteristic of L2 learners as well as the lack of writing practice (Paquot, 2010) combined with a general feeling of lack of preparation for the academic challenges of HE (Zhu, 2004). Therefore, as also supported by the analysis of the written assignments, there seems to be a need for student academic acculturation (Ying Xian Wang & Li Bai, 2021). As seen in Figure 56, the group of professors, as expected due to their constant search for improvement (Belcher, 1990; Fathman & Whalley, 1990; Lasagabaster & Ruiz, 2010), gave more importance in percentage of responses to these categories with 81% to "Choice of voice" and 81% to "Personalization" than the percentage of responses from the students with 54% to "Choice of voice" and 55% to "Personalization". The similar response to those needs by both groups, along with the answers obtained from the participants' comments, indicated that these two items were a recurrent topic in these subjects that were often mentioned and targeted inside and outside of the classroom. However, the comments from participants

showed certain reference to other needs including technical vocabulary, sentences for cohesion and coherence in general.

Those results from professors and students seem to be in consistency with the difficulties identified in the analysis of the writings that fell mainly under the dimension of task requirements. This dimension is one of the lowest graded areas in this research and is undertaken in terms of speech acts, genre or register, a common area of difficulty among Spanish EFL students. However, and even though it was perceived with a lower percentage of responses in Figure 56, the other two dimensions of Coherence and Cohesion were also the two lowest graded areas in the analysis of written assignments through the FA scale.

7.5 Help and support for academic writing

In the last category of "Help and support for academic writing" that contained 4 similar items among participants, these referred to collaboration between departments with the English or EAP professors, other type of support from the English department, possible solutions for the needs seen earlier, and support from the institution regarding academic literacy in English.

This category was led from the need for improvement in EME subjects, therefore, the first item focused on contrasting opinions regarding the kind of help and support both professors and students received from the institution. To begin with, participants were inquired for the level of collaboration they had in their EME subjects from the English or EAP professors. The content professors, as well as students, had a tremendous response (Professors 81% and Students 64%) towards having no collaboration of this sort.

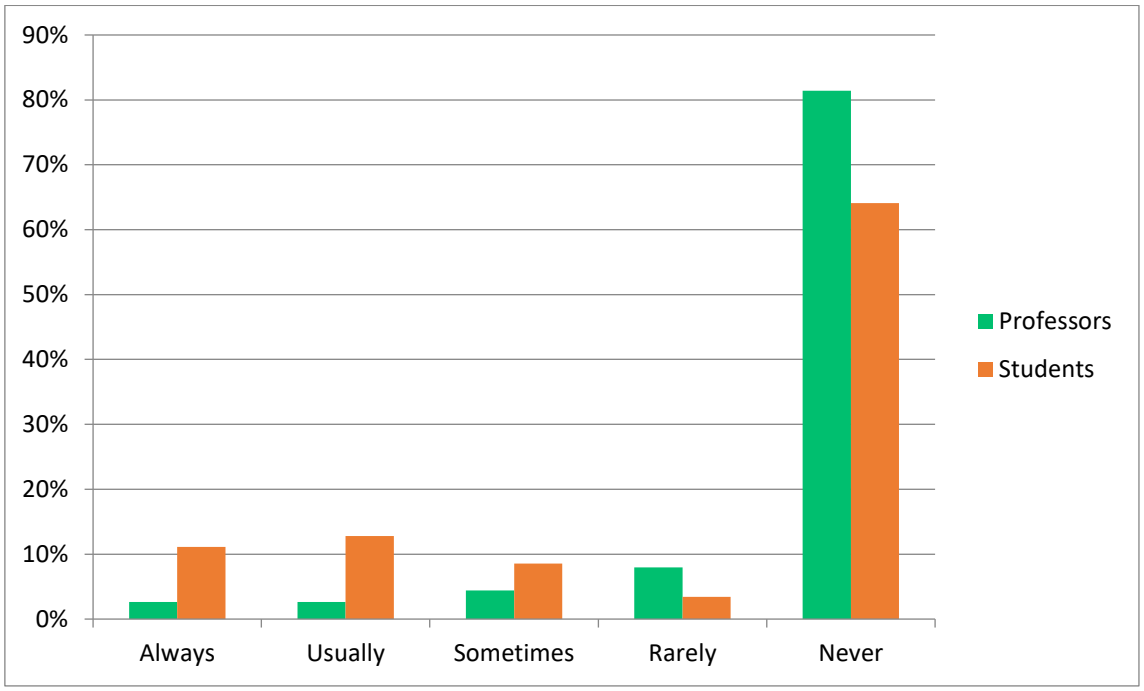


Figure 57. There is a collaboration with the professor of English or EAP during classes

Following this line, it is still important to inquire into lecturer beliefs in order to begin with the policy making process, thus, it was interesting to know whether some kind of support from the English department for EME subjects was provided. Once again, both groups had a strong response towards never receiving any type of help from them in this area (Professors 78% and Students 66%) as seen in Figure 57.

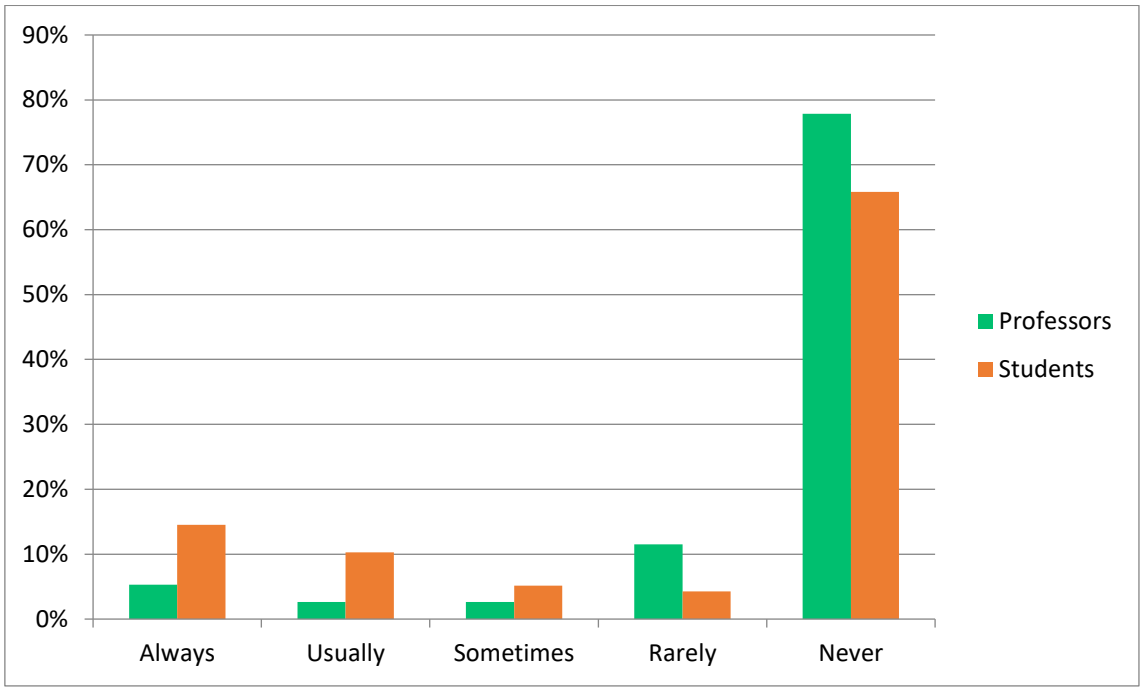


Figure 58. There is support from the English department

To finish, regarding possible solutions for the needs in students' written assignments seen before, Figure 58 shows that 3,9% of professors and 4,5% of students chose professional education programmes on EME. Participation of the English department in your subjects received 4,6% from professors and 4,4% from students. Then 4,7% from professors and 4,3% from students received the option of additional workshops on writing assignments for students. Next, 1,8% from professors and 3,4% from students was given to the option of in-class preparation for writing assignments, and finally, personal tutoring received 1,5% from professors and 2,8% from students (see Figure 59).

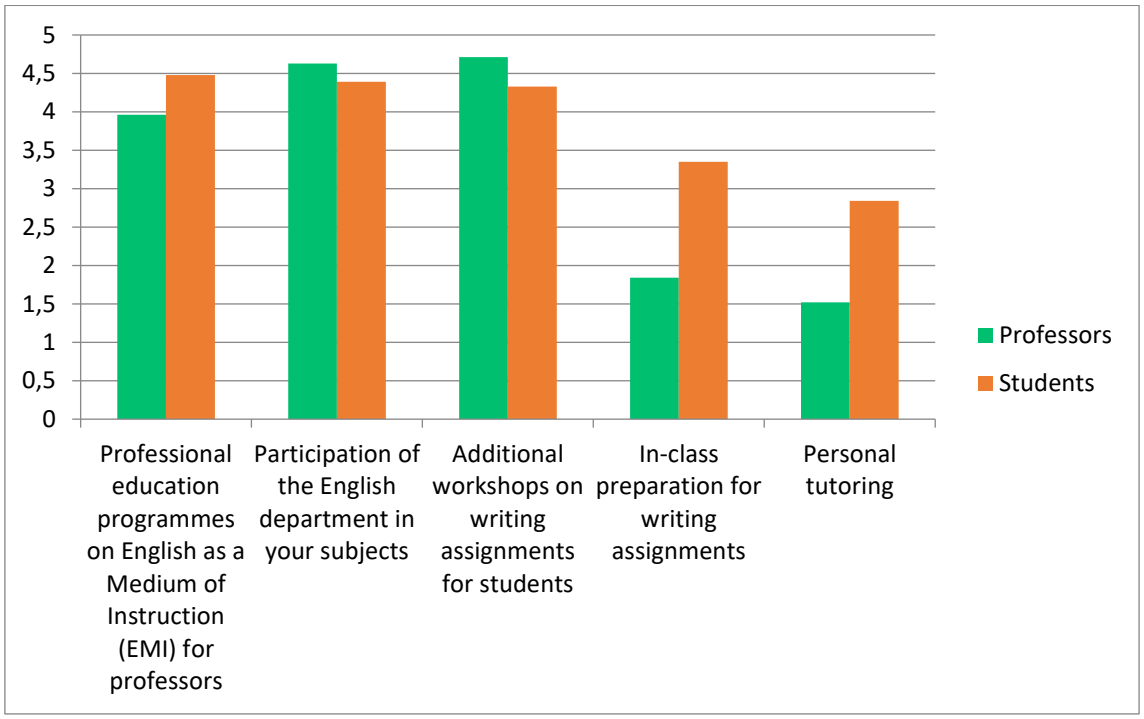


Figure 59. Possible solutions for academic written needs in students' assignments (1 being the least effective and 5 the most effective).

These results showed that there seems to be a tendency towards choosing the use of professional education programmes, workshops and involvement of the English department in these subjects rather than working on those needs inside the class or through tutoring sessions. This tendency, although similar, tends to be more considered by professors than by students.

Moreover, both groups seemed to agree on the fact that the support provided by the institution towards academic literacy in English was not sufficient (Professors 80% and Students 67%) (see Figure 60).

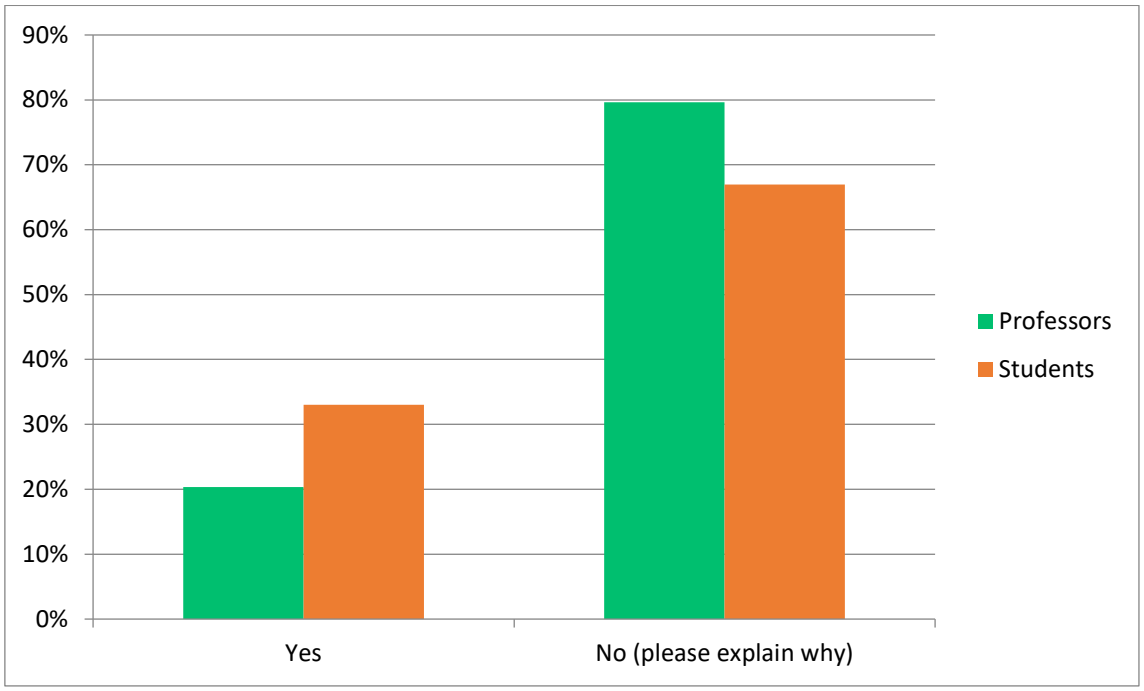


Figure 60. The professional education/support given by the university on academic literacy in English is sufficient

Therefore, through these findings as well as those from the analysis of written assignments, it can be seen that there are still various areas of difficulties among Spanish speaking learners even at HE with advanced levels of English, that would require a support system in the context of EME. This support system would need to guarantee a high English language proficiency, a strong writing skill and practice in L2 academic language composition among students (Kubota, 1998; Al-Badi, 2015).

7.6 Chapter summary

This chapter has presented an analysis of professors' and students' perspectives, focusing on four big categories: Importance of English and confidence in the area (Category 2), Genres (Category 3), Difficulties and needs in academic writing (Category 4) and Help and support for academic writing (Category 5). A comprehensive examination of each category has been provided, involving a comparative evaluation of

survey responses from professors and students, while at the same time they were supported by the findings from the analysis of written assignments. This facilitated the analysis and discussion of the results in a triangulation manner.

Both groups of participants demonstrated a consensus on several key aspects. They agreed that students possessed sufficient English proficiency to engage effectively in their academic coursework. Furthermore, students expressed comfort in learning subjects in English, and professors felt comfortable when teaching subjects in the same language. Additionally, both groups expressed confidence in teaching and writing in academic English. There was unanimity on the significance of writing in English as an integral part of their academic pursuits, with English language skills being crucial for students' learning and future employment prospects.

Nevertheless, a notable point of disagreement among participants was noticed regarding the specific types of written genres required in their respective subjects, although they seemed to incline towards *Expository* and *Descriptive* which seemed to align with those genres analysed in this research, these being *Argumentative, Expositive and Analysis* written assignments. It is noteworthy that participants reported not addressing these genres in their classes, despite both groups acknowledging improvements in their written assignments after working on them in class. This was consistent with having areas of difficulties in written assignments, validated not only by both groups of participants, but also by the analysis of the assignments themselves.

On this topic, both groups identified common challenges in the use of register and personalization, as well as issues related to slang, vocabulary, grammar, coherence and cohesion in the text. These areas of concern corresponded with the dimensions that received the lowest scores in the written assignments: task requirements, coherence, and cohesion.

Moreover, both professors and students indicated a lack of collaboration with the professor of English or EAP, as well as limited support from the English department. However, when considering potential solutions to address academic writing needs, professors leaned towards professional education programmes on EME, greater involvement of the English department in their subjects, and additional writing workshops

for students. Students, while also considering these options, displayed a more balanced interest towards in-class preparation for writing assignments and personal tutoring.

Regardless of these findings, they concluded the support for academic literacy in English was not sufficient. This conclusion aligned with the evidence from the written assignments, which highlighted the necessity of maintaining a high level of English language proficiency, strong writing skills, and practice in L2 composing academic texts through an EAP course.

This concludes the complete analysis of surveys addressed through RQ1.1 and RQ1.2 and written assignments through RQ1.3. This analysis provided valuable insights into the academic written language needs from the perspective of professors and students, and these were further supported by the evidence derived from the evaluation of students' written assignments. In the subsequent chapter, based on these findings, this research will present its final conclusions, along with suggestions for a support system in terms of pedagogical implications. Additionally, it will acknowledge the limitations of this study that are encouraged to be taken into consideration for further investigation in this line.

Chapter 8: Conclusions and pedagogical implications

8.1 Introduction

This chapter aims to conclude the research process of this thesis. It aims to synthesize and comprehensively discuss both quantitative and qualitative data in relation to the previously established RQs, encapsulating the main findings. By summarizing the research outcomes, answers to each one of the RQs are provided. Additionally, a section about the limitations encountered during the course of this study is also included in this chapter. Then, the chapter delves into pedagogical implications, which will be presented with a discussion of possible tools or strategies that could be used in order to improve students' results by considering professors, students and their written assignments. Finally, it concludes by making recommendations for future lines of research and for improving learning outcomes EME in tertiary education. These recommendations revolve around academic literacy in writing, where the main goal is focusing on improving this skill and possible needs regarding this area in FA.

8.2 RQ1.1: What are the students' academic written language needs in EME Humanities subjects as seen by professors?

The research findings to this RQ indicate a diversity of academic written language needs among students in EME Humanities subjects from the perspective of professors. There exists a critical assessment of students' written assignments across several academic writing domains, revealing an inadequate awareness of academic needs or genres in students. In other words, professors seem to be extremely critical with students' own writings since students seem to be lacking the sufficient academic literacy or genre knowledge to perform at the expected levels. Professors acknowledge students' inclination towards learning subject content in English and the advance of writing skills within their disciplines. Overall, professors perceive students to possess a satisfactory proficiency level for engaging with coursework.

Predominant written genres observed in the subjects employed in this research include expository, persuasive, and descriptive, commonly found in Humanities, although specific attention given to these genres during teaching remains limited. This may be due to the fact that many teachers themselves lack clarity on how to integrate the teaching of genre in their pedagogy (Hyland, 2008). In the meantime, a minority of professors integrate these genres into their teaching methodologies, noting considerable improvements in their students' written assignments. However, a larger portion of professors allocate minimal lesson time to specific language instruction or refrain from doing so due to diverse time constraints within their classroom. This shift is a clear indicator that content professors' attitudes towards teaching language is changing and it counters with Airey's research (2012). The reason behind this change may be due to the recurrencies of language needs in this context that through the passing of time still have not been clearly addressed by academic institutions themselves and as a result content professors are the ones adapting as they handle corrections. As a result, this indicates a change in professors' previous refusals based on their expertise limitations regarding the benefits of language instruction within content teaching.

Now, considering difficulties and needs in academic writing specifically, as mentioned there were various areas emphasized by professors that required improvement. The biggest areas for improvement were the use of register and personalisation, along with variety of vocabulary, grammar, coherence and cohesion. As it was seen in the comparison of results, those areas for improvement corresponded with the FA dimensions that received the lowest scores in the analysis of the written assignments, these being task requirements, coherence and cohesion. This gives the idea that students were not aware of the genre requirements and had not been clearly taught what was expected from them. Notably, the lack of institutional support shared in many other contexts, as highlighted by professors, in terms of guidelines on how to teach through EME contribute to these identified deficiencies. This goes hand in hand with professors' limited participation in non-existing professional education programmes to enhance academic literacy in English among students.

8.3 RQ1.2: What are the students' academic written language needs in EME Humanities subjects as seen by students?

The findings of this research have indicated diverse academic written language needs among students in EME Humanities subjects, as perceived from the students' viewpoint. To begin with, these students exhibit a lack of awareness concerning the required genres and their specific features, therefore, there seems to be a connection between students' academic performance and genre awareness. In other words, if students are familiarized with the different existing genres and know what is expected in them, their academic literacy is likely to be improved and seen in their written assignments. It is relevant to keep in mind that these students are undergoing a process of academic adaptation and adjustments in the educational programme due to the implementation of EME in their institution.

Students express their enthusiasm for learning content subjects through English, acknowledging the relevance this language holds in their various disciplines, understanding of their assignment expectations, along with the importance of literacy in English and the English language play in their learning and future employability. Even though they perceive both their own and their professors' language skills as competent, they also acknowledge the necessity for a higher English proficiency level to navigate their subjects in an effective manner.

The written genres identified as the ones being used in class by these participants were descriptive, expository and technical, although they also indicate an incongruity in their awareness of the required genres. In other words, those gernes were not in line with those used in their content subjects and identified by their professors. On this topic, students report a significant improvement in their written assignments after actively working on them during their classes. This reported opinion also coincides with professors' view on the matter. Nevertheless, students exhibit a lack of awareness regarding the diverse range of genres necessary within their subjects (Berkenkotter & Hucking, 1995). This impacts their ability to conform to prescribed standards, styles, registers, consistency throughout the entire writing while also taking into consideration the easy understanding for the audience among many other features (Swales & Feak, 2012).

In terms of academic writing challenges, the difficulties mentioned by students were found within register, personalization, and grammar as the main areas. These challenges were indicated by the participants despite the fact that they acknowledge a high command of the English language and refer to the lack of genre awareness. In addition, they mentioned an absence of support in terms of having a clear guidance in this new EME context regarding course expectations and language use. These students are undergoing a process of academic adaptation and adjustments in this new paradigm that is slowly being implemented at their institution. This absence of support highlights the existing division between content and language that tends to leave language unattended resulting into negatively affecting students' results and their genre awareness.

8.4 RQ1.3: What are the academic written language needs as reflected in these particular students' own writings?

The findings of this research have revealed comprehensive academic written language needs among students' written assignments in EME Humanities subjects, as reflected in these particular students' own writings. These needs primarily revolve around areas such as grammar, lexis, syntax, genre, register, structure, and cohesion. Therefore, L2 writers encounter challenges when maintaining grammatical accuracy, also in terms of lexical variety, formal academic style, coherence, cohesion, critical argumentation or accurately referencing academic resources. These challenges are in line with other prior studies by Bitchener and Basturkmen (2006), Evans and Green (2007), and Leki and Carson (1994) that also highlighted similar academic writing difficulties among L2 writers in EME, EAP and CLIL.

The underlying reasons contributing to these needs stem from various factors including lower proficiency in the English language, weak writing skills in the writers' native language (L1), or limited experience in composing academic texts in the L2 (Kubota, 1998; Al-Badi, 2015). Additionally, the potential influence of the writers' native language on their L2 writing may be a contributing factor as it has been seen that this transfer of cultural writing style may affect negatively the levels of syntaxis and as a result coherence

and cohesion skills (Neff et al., 2004). This influence may also stem from a limited mental lexicon from students or simply a pragmatic choice from the writer (Palloti, 2009).

Finally, the analysis of the written assignments conducted through the employment of the adjusted FA rating scale, contributed to the validation of its effectiveness in terms of assessing students' proficiency in academic writing. Results obtained from this analysis showed differences across the five FA dimensions with those of task requirements, coherence and cohesion being the ones with the biggest area for substantial improvement. These dimensions are at the same time in line with those identified by the participants and are indicators of the fact that a support system in the context of EME for those needs is required. An example of this support system would consist of creating and developing mandatory and supporting professional education programmes available for professors in order to be able to lead with language needs inside the classroom and enhance academic literacy in English among students. Additionally, content teachers designing classroom activities in collaboration with language teachers or the language department to highlight the importance of the language inside the classroom and its impact in their subjects would be of high relevance in this context. This support system would need to officially derive from the institution approval while providing the necessary standpoint to the corresponding departments.

In relation to the FA rating scale, certain modifications were implemented to the initial FA rating scale with respect to the subdivision of the coherence and cohesion dimension into two distinct facets, thereby facilitating their independent assessment. Additionally, the academic attributes delineated in the analytical framework of academic writing categories, presented in the theoretical framework of this research, were incorporated into each of these dimensions. This adjustment was made to render the evaluation genre-specific, aligning it with the requisites and appropriateness essential for this study, notwithstanding its potential applicability to further investigations within the field of Science or other related disciplines.

8.5 Limitations of this study

The collection of data from three different sources led to certain limitations that were faced during the whole process and that need to be considered for further research.

Due to the nature of this study that only collected samples from a single institution (ITESM) undergoing EME that is extremely context-specific, the results obtained may not be transferable to the entire country or other contexts but to very limited similar scenarios. However, these findings offer valuable insights into this specific context and may prove beneficial when it comes to understanding similar situations in other universities in the context of Mexico and other Spanish-speaking countries, including Spain, where the background and education of students are similar to those involved in this research.

Regarding the participants involved in this research, it would have been ideal to have the same students involved in the completion of the written assignments to also answer the student online survey. Nevertheless, this was not the case since the collection of assignments took place in 2019 before the consideration of using surveys as one of the methods. Therefore, a different group of students participated in the completion of the online student survey in 2020. While this presented a different perspective on students' academic written needs for EME content subjects, a concurrent participation could have offered a clearer comparison and a more comprehensive understanding of students' needs.

On a similar topic, and something to consider for further lines of research would be that the written assignments scores obtained from the FA rating scale could have been compared to the results professors had given to their students in class. Nevertheless, this option was considered later during this research after those professors were no longer involved in the institution and this comparison was not possible.

Within the area of FA raters, despite the fact that three raters completed training sessions and interrater reliability was acceptable, there is always a risk of subjectivity and rater variation affecting the findings. Therefore, the possibility of more rigorous training sessions or even considering using a bigger number of raters should be kept in mind for future research.

In terms of the written assignments, the study' limitation resides in the narrow scope of genres completed by students in the shape of argumentative, expository and analytical essays. This limited the research from the perspective of the writings as they belonged to those genres only in particular. Therefore, many other genres were left aside when looking into students' needs in Humanities that could have provided light in other areas of study and genre theories.

In regard to the online surveys, their design included open-ended questions that received minimal participation or provided short answers maybe due to the fact that they required more time and effort to be answered than those with options set from where participants could choose. Even though the idea of including these questions was to have more room to clarify or answer questions with more details, it is true that most of the participants, especially in the survey for students, gave vague answers in order to avoid writing, since the surveys were designed so participants could not simply skip the questions without providing an answer. Regardless of this, some of the participants provided full-detailed responses with plenty of insight in the open-ended questions which were included in the study as qualitative data and resulted extremely useful as well as enriching.

Moreover, during the completion of the surveys, both groups of participants were given an item requesting the genres they were using in class. This item included different genres from where participants could choose, however, these participants may have not been aware of the existing differences among genres and therefore their answers may have not indicated a realistic vision of them as there was no detailed explanation of each one of them.

The analytical framework included in Chapter 3 may have presented a relatively simplistic or limited view of the many features available within academic writing. As a results, it would be interesting to research which genres are the most used in various subjects or branches of study and which discourse varieties should be included under the label "academic writing". Clearly, much more work would need to be done to specify implications of a certain analysis at any other genre, subject, level or even institution.

8.6 Pedagogical implications

The research outcomes yield a wide variety of pedagogical implications inferred from the answers obtained through the RQs.

To begin with, and from the teachers' perspectives, the writing needs highlighted in their students may translate into a need for a specific EME policy development. This study identified a lack of explicit support structures and guidance for professors in addressing the requirements of EME regarding teaching strategies to explicit include writing tips or genres in their syllabus. This reflected an inadequacy in institutional support for English academic literacy that might not be necessarily taking place only in EME but also in Spanish-medium education. Proposed solutions encompass the implementation of EME-focused professional education programmes for professors, increased participation of the English department in content subjects, and additional workshops on writing assignments for students involved in those disciplines. Furthermore, this study has revealed that the integration of content and language is being conceptualised as difficult and professors seem to be seeing themselves as responsible for making the necessary adaptations in order to facilitate student learning in EME as it was also seen in Dafouz et al. (2016). Therefore, the degree to which the needs to be addressed in terms of training and support in EME seem to be unclear and not effectively incorporated into programme aims. As a result, even content professors who feel their English proficiency is adequate to teach in EME, would benefit from greater awareness of and training in language and writing practices.

Similarly to the professors' perspective, and supporting their implications, the conclusions obtained from students' perspectives, as well as the analysis of the written assignments, highlighted the absence of support from language instructors and institutions among Spanish-speaking learners in EME, advocating solutions such as fostering professor training through professional education programmes in the EME context that would shade some light on the needs and adjustments required. Another possibility is the involvement of the English department in content subjects through departmental collaboration in terms of language needs and academic literacy in English using the categories presented in the theoretical framework of this research. Finally, additional writing workshops that could contribute to improve the skill of writing and

clear guidance on genre development offered through the Language Centre or the Language department.

Finally, the construct and development of the adjusted FA rating scale in EME lessons that highlighted those difficulties seems to be particularly useful, as it might help better understand an area of research and intervention that requires careful attention with regard to university students' needs (Nuzzo & Bove, 2020). It seems worth it to implement it and to deepen into its study and development among professors and students, specially with the teaching of the FA scale as a training and user-friendly tool for writing tasks by easily following its descriptors as raters did in this research.

Therefore, the slow implementation of EME in this context seems to be in need of a revision to push new structures implemented in other countries such as professors, along with policy makers, implementing new methodologies, teaching techniques, organizational structure and the language department that are exemplified next.

In order to accomplish those, during class, and in order to improve student writing competency or performance, a series of techniques such as written exercises, readings, listening or pair or group conversations, among others, need to be used in constant combination with the employment of rubrics for the marking procedure set by the teacher as a guidance for students to follow (Neff, et al., 2007). In addition, formulating instructional approaches to academic language is necessary not just for achievement in the domains traditionally associated with language in Humanities (e.g., literature study, English language arts) but most likely also for achievement in Science such as math, chemistry, and other areas where all-purpose academic language forms the core of content-area-specific language. Designing those instructions for academic and discipline specific language, however, requires having a convergent view of what academic language involves, how it should be conceptualized, where its boundaries are, and how it might be assessed (Snow & Uccelli, 2009: 114). In this case, the analytical framework designed for this research might be beneficial.

On the subject of reading, writing is directly linked to the ability of reading, therefore, learners should be encouraged to read academic papers in the L2 with specific focus on organisation, language use, coherence and cohesion, in order to see real samples, acquire

more vocabulary and grammar that would benefit their structure (Mazgutova, 2020). Extensive reading aids L2 writers with syntactic structure development, lexical expansion, and familiarity with academic writing techniques. It also contributes to their motivation in writing as they may see unknown structures that could now adapt to their own writing (Al-Badi, 2015). In fact, as Hinkel (2004) pointed out, L2 writers seem to find assistance in reading academic materials to improve their techniques in developing their ideas and language appropriately, which is also supported by Mu and Carrington (2007) and Mazgutova, (2020).

Moreover, genre awareness proves vital in text organization and message clarity, an area where many educators lack implementation knowledge (Hyland, 2008). Integrating genre teaching into writing strategies stages mentioned by Flower (1993) during the writing process of planning, generating ideas into words, designing for the reader and revising for effectiveness, or particularly at the planning stage, emerges as a critical step. Failure to connect students with discipline-specific genres and registers early in EME fosters difficulties in academic writing (Dafouz & Camacho-Miñano, 2016; Hellekjaer & Wilkinson, 2003) within the areas of coherence, cohesion and task requirements as it was clearly seen in the outcomes of this study. Student assignments can significantly improve by employing writing strategies from the writing process for their lexical, grammatical and syntactic development, as well as improvements in academic style, register, coherence and cohesion. This coupled with constructive feedback from teachers and exposure to diverse academic reading materials could positively contribute to increasing the levels of task requirements, coherence and cohesion dimension in the FA scale.

On this topic, as Chang and Swales (1999) mentioned, an explicit instruction in advanced academic writing and genre is required, specially in EME context in order to obtain better results. In addition, exposure to a variety of genres and academic tasks for promoting development in writing is advisable (Herraiz-Martinez & Alcón-Soler, 2019). In fact, this is supported by Dafouz (2021a) who emphasised the many benefits an explicit teaching of genres has for academic literacy to both students and teachers. Thus, raising genre awareness in different academic contexts in HE among students and professors, apart from continuing working on the traditional grammar and vocabulary teaching approaches is something to develop in this context (Salaberri-Ramiro & Sánchez-Pérez, 2015a,

2015b). As a result, the need to incorporate new methodologies in EME to incorporate writing features in content courses is evident. On this topic, the process of internationalization of the institution also seems to be in need of a revision to push new structures implemented in other countries to keep an updated academic offer, educational model and trained faculty members.

On a similar vein, the pedagogical implication of including a mandatory EAP course to support students as a strategy in the EME context (Dafouz, 2021a) is clear, or at least to include some parts of this course within those EME subjects. The results in this study demonstrate that students were not sufficiently exposed to an EAP course where they could have been aware of the importance of using a constant academic style and academic vocabulary in order to be successful in their academic subjects at HE.

It seems as only rarely are the linguistic expectations of academic tasks made explicit to students (Schleppegrell, 2001), despite the fact that students' academic performance is judged considering these expectations, academic language constitutes an arcane challenge for many and some explicit teaching about it might be useful either in class or through the implementation of a genre-based course or an EAP course specifically for EME programmes or subjects. These courses could be taken as a mandatory subject, with or without credits, prior students enter this type of studies. These types of courses are promising, yet their design and effectiveness at EME are still in need of further study, and careful planning needs to be put into creating them. In this case, Burns and Joyce's study (1997) present a series of steps to follow for the design of a genre-based course through a collaboration between content and language professors. Nevertheless, how to make the linguistic expectations explicit to students, at what level of precision, and how to further develop sociolinguistic and stylistic awareness skills to improve academic-language performance in the classroom are still open research questions (Snow & Uccelli, 2009: 128). Another strategy to improve learners' writing skills could be to encourage a constant and sustained collaboration between language teachers and disciplinary teachers in order to guarantee a smooth teaching and learning process for both professors and students (Sánchez-García, 2020). In this case, as it was seen in Valcke and Wilkinson' (2017) research, a 'train-the-trainer' professional development programme proposed in the ECOSTAR project could be developed and applied.

Finally, this study brings out the question of whether the B2 level (CEFR) commonly required as threshold for students to enrol in EME courses is actually an accurate indicator of what they really need to successfully engage in the learning of an academic discipline in a L2. It may be the case that general language proficiency should also be supplemented with notions of domain-specific language or at least certain academic skills and discourse. This type of language, however, is not usually covered in the general English courses offered in lower levels of education, not included in most of the accreditation exams that students take. Thus, questions regarding the real language needs of students joining EME programmes require further investigation (Dafouz, 2020).

In spite of students having certified a B2 English level upon university entrance, students' mixed ability made teaching more complex. Concurrently, research by Dafouz (2020) suggested that according to content teachers, some previous exposure to the content subject (for example in lower levels of education) had a more positive effect on students' academic performance than higher levels of general English proficiency. It was also suggested that students generally lacked subject-specific language in English to follow the explanations and to resolve problems adequately.

As it has been seen, the context of EME and new methodological strategies that include the importance of the use of language seem to promote the development of learners' writing competence. Nevertheless, a structured and cleared implementation of those strategies and policies mentioned above are still in need to be implemented across disciplines and institutions. These policies need to be at the same time in line with those from the EU demands that promote EU multinational and multilingual citizenship through ensuring inclusive and equitable quality education and promote lifelong learning opportunities for all as part of the 17 sustainable development goals of the United Nations[14] and the OECD[15].

[14] United Nations (https://sdgs.un.org/goals , accessed 16 November 2023)

[15] Organization for Economic Co-operation and Development (OECD) - Better policies for better lives (https://www.oecd.org/dac/sustainable-development-goals.htm , accessed 16 November 2023)

8.7 Directions for future research

A number of questions are still kept for further research in the future that are presented next.

First of all, in the realm of teaching training and development within EME, future research could delve into presenting a learning space and clearer learning objectives through an effective language employed by the teacher (Marton et al., 2004). This effective language can translate into the use of examples, stories, context or personal experiences facilitated by teachers to guide learners toward learning objectives. Thus, emphasis should also be placed on interventions by teachers to positively influence the construction of written assignments in the classroom, as indicated by Kunioshi et al. (2016). Some examples of proper instruction to incentive learning objectives in EME were mentioned in various research such as supporting presentations with visual aids, giving materials before lectures to students or encouraging students to ask questions during and after class (Airey & Linder, 2009).

Additionally, the contribution with further studies focusing on the development of effective teaching skills in English within the EME context and an understanding of students' needs during English-language learning could further contribute to pedagogical advancements. On this matter, in a study (Ball & Lindsay, 2013) a certain lack of support in HE was mentioned as pedagogical skills have not been required at this level for a successful university career. As noted, attention to these skills is becoming more relevant and as a result there is a growing awareness of the need to develop them in EME. These researchers also mentioned a course offered in Spain called "Classroom Practice and English-Medium Pedagogy" that has not been spread widely in HE institutions and it would be worth to follow in future lines of research.

Moreover, as it was mentioned in the earlier section of *Limitations of this study*, this research focused on the Spanish-speaking country of Mexico. Although it provides insights relevant to Spanish-speaking contexts when considering the needs of their students, the particular needs and distinctive features that may not occur in other Spanish-speaking countries such as Spain must be taken into consideration. On top of that, this research was using only one specific setting in the country of Mexico and therefore

generalisations to all EMPs clearly cannot be drawn. As a result, further research into perceptions of professors and students on EMPs would be beneficial in gaining a deeper understanding of the required needs in other countries and institutions around the world that would allow to compare results from where to extract common conclusions.

Furthermore, the adapted FA rating scale in this study was employed for three Humanities genres, its applicability in the area of Science or other genres beyond the scope of expository, persuasive, or descriptive writing, are still to be tested for effectiveness or adjustments in further research.

Another option would be exploring how professors might incorporate new media, particularly AI, into their teaching methodologies within the EME context is an area suitable for investigation. Therefore, understanding how students can benefit from these tools for the development of their writing skills could significantly enhance teaching practices within EME settings.

Finally, two possible propositions emerge. Initially, a similar study to the present one could be conducted, although with modifications to the methodology. Consequently, instead of employing a triangulation approach, an experimental design would be implemented. Secondly, a parallel study mirroring the present one but within the realm of Science disciplines could be formulated. This would enable an exploration of potential distinctions in the teaching and learning of writing, should such instruction took place, and its impact on student comprehension.

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Appendices

Appendix A: Content letter previous to online professor survey

Dear Professor,

I am an English professor and currently a student of the PhD in English Linguistics at the Complutense University of Madrid (Spain).

For my doctoral thesis, I chose to investigate the academic language needs in students' written assignments for subjects taught through the English language (English Medium Instruction). The English Medium Instruction (EMI) approach has become more and more popular over the years at university levels, and it consists of teaching a subject in a foreign language, e.g. teaching History in English in Mexican universities. In particular, my aims are to analyse the perspectives of professors, students and their written assignments regarding academic language needs in writing such as overuse of personal pronouns (I, you, we…), use of slang (gonna, wanna…), lack of passive voice ("We selected the following paintings" vs. "The following paintings were selected"), text coherence and cohesion, choice of register (formal, informal), vocabulary, grammar, among others.
In order to investigate this, I have designed this questionnaire. This contains 30 questions regarding teaching background, current teaching and English writing experience, etc. It will take about 10 minutes to complete the questionnaire and it will be of great help for research purposes.

I have invited you to fill out this questionnaire because I am interested in investigating the needs of students in order to obtain better results from students in a near future. It is important to mention that the following questionnaire is completely anonymous and what is said is regarded as strictly confidential and will be held securely until the research is finished. The questionnaire does not collect any personally identifiable information. At all times there will be no possibility of you as individuals being linked with the data.
No data will be accessed by anyone other than me. No data will be able to be linked back to any individual taking part in the questionnaire. I will use these data in my doctoral thesis.

The completion of this survey is voluntary and participants can withdraw at any point without consequences. By clicking on "next" you agree to the terms and conditions of this research.

Who should I contact for further information?

If you have any questions or require more information about this study, please contact me using the following contact details:

Sara Gozálvez
Department of English Studies: Linguistics and Literature
Faculty of Philology
Universidad Complutense de Madrid (UCM)
sgozalve@ucm.es
Thank you for reading this information sheet and for taking part in this research.

Appendix B: Content letter previous to online student survey

Dear Professor,

I am an English professor and currently a student of the PhD in English Linguistics at the Complutense University of Madrid (Spain).

For my doctoral thesis, I chose to investigate the academic language needs in students' written assignments for subjects taught through the English language (English Medium Instruction). The English Medium Instruction (EMI) approach has become more and more popular over the years at university levels, and it consists of teaching a subject in a foreign language, e.g. teaching History in English in Mexican universities. In particular, my aims are to analyse the perspectives of professors, students and their written assignments regarding academic language needs in writing such as overuse of personal pronouns (I, you, we…), use of slang (gonna, wanna…), lack of passive voice ("We selected the following paintings" vs. "The following paintings were selected"), text coherence and cohesion, choice of register (formal, informal), vocabulary, grammar, among others.
In order to investigate this, I have designed this questionnaire. This contains 30 questions regarding teaching background, current teaching and English writing experience, etc. It will take about 10 minutes to complete the questionnaire and it will be of great help for research purposes.

I have invited you to fill out this questionnaire because I am interested in investigating the needs of students in order to obtain better results from students in a near future. It is important to mention that the following questionnaire is completely anonymous and what is said is regarded as strictly confidential and will be held securely until the research is finished. The questionnaire does not collect any personally identifiable information. At all times there will be no possibility of you as individuals being linked with the data.
No data will be accessed by anyone other than me. No data will be able to be linked back to any individual taking part in the questionnaire. I will use these data in my doctoral thesis.

The completion of this survey is voluntary and participants can withdraw at any point without consequences. By clicking on "next" you agree to the terms and conditions of this research.

Who should I contact for further information?

If you have any questions or require more information about this study, please contact me using the following contact details:

Sara Gozálvez

Department of English Studies: Linguistics and Literature
Faculty of Philology
Universidad Complutense de Madrid (UCM)
sgozalve@ucm.es
Thank you for reading this information sheet and for taking part in this research.

Appendix C: Survey for professors

1. What's your age?

- 25-34
- 35-44
- 45-54
- 55-64

2. What gender are you?

- Male
- Female

3. What is your native language(s)?

4. What is your education level?

- BA
- MA
- PhD

5. Do you have an English certification to attest your proficiency level?

- Yes
- No

6. If your answer to question 5 is yes, choose the appropriate level from the following options:

- B1
- B2
- C1
- C2
- None of these

Other (please specify)

7. Do you teach all your subjects in English?

- No
- Yes, which ones?

8. How many years have you been teaching in English?

- 0-5
- 6-10
- 11-15
- 16-20
- 21 and more

9. Do you have a certification to teach English?

- No
- Yes (please specify):

10. What is the medium of instruction in your department?

- Students learn all subjects in Spanish
- Students learn all subjects in English
- Students learn some subjects in Spanish and some in English

11. When teaching subjects in English, there is a collaboration with the professor of English or English for Academic Purposes (EAP) somehow.

- Always
- Usually
- Sometimes
- Rarely
- Never

12. When teaching subjects in English, I have support from the English department.

- Always
- Usually
- Sometimes
- Rarely
- Never

13. If you have any support from the English language department, please give details about what it consists of. For example, preparation of lessons together, teach together...

14. According to my experience, students enjoy learning other subjects in English.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Further comments

15. I enjoy teaching other subjects in English.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Further comments

16. I am confident that I can teach academic writing in English.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Further comments

17. I think writing in English is an important part of my subjects.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Further comments

18. I think academic literacy in English plays an important role in students' learning and future employment.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Further comments

19. I think the English language plays an important role in students' learning and future employment.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Further comments

20. I feel the students' English competence is good enough to follow my classes.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Further comments

21. I find deficiencies in students' written assignments.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Further comments

22. What type of written genres are required in your subject?

- Descriptive
- Expository
- Persuasive
- Narrative
- Technical
- Poetic
- Other (please specify)

23. Please grade the previous written genres in terms of their importance for your subject (1 being the least important and 5 the most important).

	1	2	3	4	5
Descriptive					
Expository					
Persuasive					
Narrative					
Technical					
Poetic					

Other (please specify)

24. Based on the previous question, are these types of written genres studied and practiced in your class?

- No
- Yes, how and how often?

25. If your answer to the previous question was yes, these types of written genres are worked on in your class because...

- it is part of the syllabus requirements.
- I personally acknowledge the need to do so.
- Other (please specify)

26. If your answer to question 24 was 'yes', do you think there is an improvement in the students' written assignments because of it?

- No
- Yes, please specify in what aspects

27. Please grade the following needs in written assignments found in your students' work (1 being the least common and 5 the most common).

	1	2	3	4	5
Choice of voice (formal - informal)					
Personalization (use of pronouns 'I', 'you')					
Use of slang (gonna, wanna, etc.)					
Appropriate vocabulary					
Appropriate grammar					
Coherence in the text					

Cohesion in the text	○	○	○	○	○

Other (please specify) _____

28. Please grade the following solutions for those needs seen before (1 being the least common and 5 the most common).

	1	2	3	4	5
Professional education programmes on EMI for professors	○	○	○	○	○
Participation of the English department in your subjects	○	○	○	○	○
Additional workshop on writing assignments for students	○	○	○	○	○
In-class preparation for writing assignments	○	○	○	○	○

	1	2	3	4	5
Personal tutoring	○	○	○	○	○

Other (please specify) _____

29. How many professional education programs have you participated in order to be able to teach academic literacy in English?

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6 or more None
- ○ None

30. In your opinion, is the professional education given by your university on English as a Medium of Instruction (EMI) sufficient?

- Yes
- No (please explain why)

Appendix D: Survey for students

1. What is your age?

- under 18
- 18 - 20
- 21 - 25
- 25 or older

2. What gender are you?

- Male
- Female

3. What is your native language(s)?

4. How long have you been learning English?

- Less than 1 year
- 1-2 years
- 3-4 years
- 5-6 years
- More than 6 years

5. How long have you been studying IN English?

- Less than 1 year
- 1-2 years
- 3-4 years
- 5-6 years
- More than 6 years

6. Was your level of English assessed before entering a subject taught in English?

- Yes
- No

7. If your answer to the previous questions was 'yes', how was the level of English assessed before entering that subject taught in English?

- I passed one of the language exams (e.g. IELTS, TOEFL, IGCSE, Cambridge)
- My high school diploma is evidence of my level in English
- I took the Cambridge Level Placement Exam (EUC) when entering this university.
- The level was not assessed
- Other (please specify)

8. What is your proficiency level of English now?

	Elementary proficiency	Limited working proficiency	Professional working proficiency	Full professional proficiency	Native or bilingual proficiency
Speaking					
Reading					
Writing					
Listening					

9. Why did you decide to study in a language that is not your native language?

To improve my language skills	○	○	○	○	○
To enhance my knowledge of a subject in English	○	○	○	○	○
To take part in a specialized course not available in my native language	○	○	○	○	○
To enhance employment opportunities	○	○	○	○	○
To enhance the value of my degree	○	○	○	○	○
To experience a challenge and increase my self-confidence in English	○	○	○	○	○
Other	○	○	○	○	○

10. Are all the subjects in your studies in English?

- ○ Yes
- ○ No

11. Regarding subjects taught in English and academic writing, do you have the collaboration of an English language teacher in your subjects?

- ○ Always
- ○ Usually
- ○ Sometimes
- ○ Rarely
- ○ Never

Further comments

12. Regarding academic writing in English, I have extra support from the department or the university.

- ○ Always
- ○ Usually
- ○ Sometimes
- ○ Rarely
- ○ Never

13. If you have any support from the language department or the university please give details of what it consists of. For example, language classes, tutoring sessions...

14. I enjoy learning in English.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

15. According to your perceptions, professors enjoy teaching subjects in English.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

16. I am confident that I can write in academic English.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Further comments

17. I think writing in English is an important part of the subject.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Further comments

18. I find difficulties when writing in academic English for those subjects.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Further comments

19. Please grade the following difficulties in written assignments you may have when writing in academic English in your EMI subjects (1 being no problem at all and 5 having many difficulties).

	1	2	3	4	5
Choice of voice (formal - informal)					
Personalization (use of personal pronouns 'I', 'you', 'we'...)					
Use of slang (gonna, wanna. etc.)					
Appropriate vocabulary					
Appropriate grammar					
Others					

Further comments

20. What kind of feedback on written academic English is given by your professors?

21. I know what is expected in an academic written assignment before doing it.

- Strongly agree
- Agree
- Neither agree nor
- disagree Disagree
- Strongly disagree

22. What type of written assignments are required in your subject?

- Descriptive
- Expository
- Persuasive
- Narrative
- Technical
- Poetic
- Other (please specify)

23. Based on the previous question, are these type of written assignments studied and worked in your class?

- No
- Yes, how and how often?

24. If your answer to the previous question was 'yes', do you think there is an improvement in your assignment because of it?

- No
- Yes, please specify in what aspects

25. I think academic literacy in English language plays an important role in my learning and future employment.

- Strongly agree Agree
- Neither agree nor
- disagree Disagree

- Strongly disagree

Further comments

26. I think the English language plays an important role in my learning and future employment.

- Strongly agree Agree
- Neither agree nor
- disagree Disagree
- Strongly disagree

Further comments

27. I feel my English competence is good enough to follow my classes.

- Strongly agree
- Agree
- Neither agree nor
- disagree Disagree
- Strongly disagree

28. I feel the professor's English competence is good enough to teach my class.

- Strongly agree
- Agree
- Neither agree nor
- disagree Disagree
- Strongly disagree

29. Please grade the following solutions for those needs seen before (1 being the least effective and 5 the most effective).

	1	2	3	4	5
Professional education programmes on English as a Medium of Instruction (EMI) for professors					
Participation of the English department in your subjects					
Additional workshops on writing assignments for students					

In-class preparation for writing assignment	○	○	○	○	○
	1	2	3	4	5
Personal tutoring	○	○	○	○	○

Other (please specify)

30. In your opinion, if there is any support given by your university on academic writing, do you think it is sufficient?

○ Yes

○ No (please explain why)

31. Please write anything else that you would like to share about learning with EMI or your experience with it.

NEW QUESTION

Appendix E: Original rating scale for Functional Adequacy

Content: Is the number of information units provided in the text adequate and relevant?

1	2	3	4	5	6
The number of ideas is *not at all adequate* and insufficient and the ideas are unrelated to each other.	The number of ideas is *scarcely adequate* and the ideas lack consistency.	The number of ideas is *somewhat adequate*, even though they are not very consistent.	The number of ideas is *adequate* and they are sufficiently consistent.	The number of ideas is *very adequate* and they are very consistent to each other.	The number of ideas is *extremely adequate* and they are very consistent to each other.

Task requirements: Have the task requirements been fulfilled successfully (e.g. genre, speech acts, register)?

1	2	3	4	5	6
None of the questions and the requirements of the task have been answered.	*Some (less than half)* of the questions and the requirements of the task have been answered.	*Approximately half* of the questions and requirements of the task have been answered.	*Most (more than half)* of the questions and the requirements of the task have been answered.	*Almost all* the questions and the requirements of the task have been answered.	*All* the questions and the requirements of the task have been answered.

Comprehensibility: How much effort is required to understand text purpose and ideas?

1	2	3	4	5	6
The text is *not at all comprehensible* Ideas and purposes are unclearly stated and the efforts of the reader to understand the text are ineffective.	The text is *scarcely comprehensible*. Its purposes are not clearly stated and the reader struggles to understand the ideas of the writer. The reader has to guess most of the ideas and purposes.	The text is *somewhat comprehensible*. Some sentences are hard to understand at a first reading. A second reading helps to clarify the purposes of the text and the ideas conveyed, but some doubts persist.	The text is *comprehensible*. Only a few sentences are unclear but are understood, without too much effort, after a second reading.	The text is *easily comprehensible* and reads smoothly. Comprehensibility is not an issue.	The text is *very easily comprehensible* and highly readable. The ideas and the purpose are clearly stated.

Coherence: Is the text coherent (e.g. organization, structure, topics)?

1	2	3	4	5	6
The text is *not at all coherent*. Unrelated progressions and coherence breaks are very common. The writer does not use any anaphoric device.	The text is *scarcely coherent*. The writer often uses unrelated progressions; when coherence is achieved, it is often done through repetitions. Only a few anaphoric devices are used. There are some coherence breaks.	The text is *somewhat coherent*. Unrelated progressions and/or repetitions are frequent. More than two sentences in a row can have the same subject (even when the subject is understood). Some anaphoric	The text is *coherent*. Unrelated progressions are somewhat rare, but the writer sometimes relies on repetitions to achieve coherence. A sufficient number of anaphoric devices is	The text is *very coherent*: when the writer introduces a new topic, it is usually done by using connectives or connective phrases. Repetitions are very infrequent. Anaphoric devices are numerous.	The writer ensures *extreme coherence* by integrating new ideas in the text with connectives or connective phrases. Anaphoric devices are used regularly. There are few incidences of unrelated progressions and no coherence breaks.

devices are used. There can be a few coherence breaks.	used. There may be some coherence breaks.	There are no coherence breaks.	

Cohesion: Is the text cohesive (e.g. cohesive devices, conjunctions, linkers)?

1	2	3	4	5	6
The text is *not at all cohesive*. Connectives are hardly ever used and ideas are unrelated.	The text is *not very cohesive*. Ideas are not well linked by connectives, which are rarely used.	The text is *somewhat cohesive*. Some connectives are used, but they are mostly conjunctions. text is *somewhat cohesive*. Some connectives are used, but they are mostly conjunctions.	The text is *cohesive*. The writer makes good use of connectives, sometimes not limiting this to conjunctions. makes good use of connectives, sometimes not limiting this to conjunctions.	The text is *very cohesive* and ideas are well linked by adverbial and/or verbal connectives.	The structure of the text is *extremely cohesive*, thanks to a skillful use of connectives (especially linking chunks, verbal constructions and adverbials), often used to describe relationships between ideas.

Kuiken & Vedder (2017)

Appendix F: Adapted rating scale for Functional Adequacy

Content: Is the number of information units provided in the text adequate and relevant?

1	2	3	4	5	6
The number of ideas is *not at all adequate* and insufficient and the ideas are unrelated to each other.	The number of ideas is *scarcely adequate* and the ideas lack consistency.	The number of ideas is *somewhat adequate*, even though they are not very consistent.	The number of ideas is *adequate* and they are sufficiently consistent.	The number of ideas is *very adequate* and they are very consistent to each other.	The number of ideas is *extremely adequate* and they are very consistent to each other.

Task requirements: Have the task requirements been fulfilled successfully (e.g. genre, speech acts, register)? Use of referring devices, formal, impersonal and objective style, passive voice and tentative language.

1	2	3	4	5	6
None of the questions and the requirements of the task have been answered.	*Some (less than half)* of the questions and the requirements of the task have been answered.	*Approximately half* of the questions and requirements of the task have been answered.	*Most (more than half)* of the questions and the requirements of the task have been answered.	*Almost all* the questions and the requirements of the task have been answered.	*All* the questions and the requirements of the task have been answered.

Comprehensibility: How much effort is required to understand text purpose and ideas? Use of signposting and avoid run-on expressions.

1	2	3	4	5	6
The text is *not at all comprehensible* Ideas and purposes are unclearly stated and the efforts of the reader to understand the text are ineffective.	The text is *scarcely comprehensible*. Its purposes are not clearly stated and the reader struggles to understand the ideas of the writer. The reader has to guess most of the ideas and	The text is *somewhat comprehensible*. Some sentences are hard to understand at a first reading. A second reading helps to clarify the purposes of the text and the ideas conveyed, but some doubts	The text is *comprehensible*. Only a few sentences are unclear but are understood, without too much effort, after a second reading.	The text is *easily comprehensible* and reads smoothly. Comprehensibility is not an issue.	The text is *very easily comprehensible* and highly readable. The ideas and the purpose are clearly stated.

Coherence: Is the text coherent (e.g. organization, structure, topics)? Use of signposting and references.

1	2	3	4	5	6
The text is *not at all coherent*. Unrelated progressions and coherence breaks are very common. The writer does not use any anaphoric device.	The text is *scarcely coherent*. The writer often uses unrelated progressions; when coherence is achieved, it is often done through repetitions. Only a few anaphoric devices are used. There are some coherence breaks.	The text is *somewhat coherent*. Unrelated progressions and/or repetitions are frequent. More than two sentences in a row can have the same subject (even when the subject is understood).	The text is *coherent*. Unrelated progressions are somewhat rare, but the writer sometimes relies on repetitions to achieve coherence. A sufficient number of anaphoric	The text is *very coherent*: when the writer introduces a new topic, it is usually done by using connectives or connective phrases. Repetitions are very infrequent. Anaphoric devices are	The writer ensures *extreme coherence* by integrating new ideas in the text with connectives or connective phrases. Anaphoric devices are used regularly. There are few incidences of unrelated progressions and no coherence

		Some anaphoric devices are used. There can be a few coherence breaks.	devices is used. There may be some coherence breaks.	numerous. There are no coherence breaks.	breaks.

Cohesion: Is the text cohesive (e.g. cohesive devices, conjunctions, linkers)? Use of metadiscourse, collocations and avoid run-on expressions.

1	2	3	4	5	6
The text is *not at all cohesive*. Connectives are hardly ever used and ideas are unrelated.	The text is *not very cohesive*. Ideas are not well linked by connectives, which are rarely used.	The text is *somewhat cohesive*. Some connectives are used, but they are mostly conjunctions. text is *somewhat cohesive*. Some connectives are used, but they are mostly conjunctions.	The text is *cohesive*. The writer makes good use of connectives, sometimes not limiting this to conjunctions. makes good use of connectives, sometimes not limiting this to conjunctions.	The text is *very cohesive* and ideas are well linked by adverbial and/or verbal connectives.	The structure of the text is *extremely cohesive*, thanks to a skillful use of connectives (especially linking chunks, verbal constructions and adverbials), often used to describe relationships between ideas.

Adapted from Kuiken and Vedder (2017)

Appendix G: Written assignments corpus

For the complete corpus of written assignments divided by subject (M&S, M&A and EP&S) please click on the following link: https://drive.google.com/drive/folders/1uG-H9r6czhFDd9PNryAraPQOfvxhPLIF?usp=drive_link