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A case study of corpus-informed ESP language learning materials for EMI psychology students at the University of Padova

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Introduction

The aim of this study is to address one of the major obstacles of successful English-Medium Instruction in higher education, namely a limited command of both general and subject-specific English on the part of students. Several studies have indeed shown that, although English is now the most studied foreign language in Europe and people start learning it from an increasingly young age (Eurydice, 2017), students do not always reach the independent-user language level that is expected of them before moving on to university and so they often find themselves struggling to participate in courses and degree programmes that are entirely taught in English (Airey and Linder, 2006; Costa and Coleman, 2013; Guarda and Helm, 2016; Gundermann, 2014; Tzoannopoulou, 2017; Zegers, 2008). This is especially the case of southern European countries, where the introduction of EMI is relatively recent and people tend to have lower levels of English proficiency compared to the rest of Europe (Education First, 2019; Wächter and Maiworm, 2002; 2008; 2015). The situation is made even worse by the fact that the English language tends to be considered as a medium only and is very rarely focused upon in the EMI classroom (Wilkinson, 2017), which means that students are normally left to deal with complicated language issues on their own. Not only might this make it more difficult for them to improve their own linguistic competences, but it could also discourage them to the point of giving up their English-taught course or degree programme of choice and deciding to pursue different academic and career paths (Al-Bakri, 2013).

Therefore, intending to find a way to support students throughout their EMI experience and prevent them from falling behind academically or even changing degree plans due to their language weaknesses, the present study suggests bringing EMI practices closer to the ideal of content and language integration already promoted by CLIL theories in primary and secondary education. It seems indeed that devoting some time to the teaching of some subject-specific terminology, language forms and conventions might turn out to be extremely helpful for EMI students, especially considering the high level of complexity of university courses in terms of both content and language learning objectives (Wilkinson and Zegers, 2008). More specifically, university students are not

only expected to acquire a set of complex domain-specific knowledge, skills and values, but they also need to master the highly specialised language used by the academic and professional community they wish to join (Crosthwaite and Cheung, 2019; Weyreter and Viebrock, 2014). To determine whether such a suggestion is feasible in higher education, a case study was carried out at a northern Italian university, in which a group of students attending an English-taught psychology degree programme was provided with language training in the form of terminology and phraseology exercises specific to their discipline of study. The findings of this case study will be discussed in detail in the fourth and last chapter of this dissertation, but before that, three chapters will be devoted to introducing EMI, highlighting what makes it different from CLIL, analysing the linguistic challenges it places on both teachers and students and investigating how some corpus linguistics approaches may be used to help students develop their ESP knowledge and feel more confident and prepared when studying academic subjects through English.

More specifically, the first chapter will provide an overview of the theoretical underpinning, historical background and geographical spread of both CLIL and EMI, focusing especially on the peculiar traits that make it possible to distinguish between these two teaching approaches and on the role played by the European Union in their promotion across the continent. Among other things, it will be explained how, starting from the early 1990s, several European institutions began to promote the implementation of CLIL in Member States' schools for improving European citizens' competence in other languages of the Union and facilitating the much longed-for process of European integration (Marsh, 2012). The Bologna Process will also be widely discussed, since it fostered the creation of a borderless and democratic European Higher Education Area and played a fundamental role in making English the common lingua franca of European universities, thus making EMI practices a reality (Smit and Dafouz, 2012). In addition, the findings of two Eurydice reports (2006; 2017) and three ACA studies (Wächter and Maiworm, 2002; 2008; 2015) will be analysed to provide an accurate picture of how CLIL and EMI have become popular at different times in different countries. The advantages and disadvantages of these teaching approaches will also be covered before directing the focus to the Italian context and the University of Padova in particular. It will be pointed out that, even though English-medium education in Italy is still in its infancy, the number of Italian higher education institutions offering EMI courses and programmes has increased

rapidly in recent years, especially in the northern regions (Guarda and Helm, 2016). Nevertheless, it will be mentioned that students' and teachers' inadequate English language competence still remains an obstacle to the success of this kind of programme in Italian universities (Costa and Coleman, 2013; Pulcini and Campagna, 2015).

In the second chapter, then, a more detailed analysis of the challenges that EMI teachers and students have to face due to the switching of the language of instruction will be carried out. On the one hand, it will be taken into consideration that EMI teachers need more time for preparing their presentations and classroom materials and that they are concerned about not being able to express themselves clearly and accurately in English, about making less use of expressive strategies that have an important role in promoting their students' interest and attention, and about interacting with them less frequently and less spontaneously (Airey, 2011; Costa, 2017; Vinke, 1995). On the other hand, it will be explored how EMI students' linguistic difficulties in terms of listening, reading, speaking and writing skills might impair their learning, decrease their participation in classroom activities, and undermine their motivation and linguistic self-confidence (Ackerley, 2017a; Airey and Linder, 2006; Studer and Konstantinidou, 2015). Afterwards, the importance of offering both language and methodology training to EMI teachers as well as providing some form of language support to EMI students will be discussed. In particular, several reasons will be provided for including the teaching of some language issues into the EMI syllabus, which would help students internalise the specialised terminology, discourse rules and frames of reference relevant to their subject field (Northedge, 2002). In order to overcome EMI teachers' reluctance to teach English during lectures, a suggestion will be made that consists in fostering strategic collaborations between content teachers and language teachers (Carroll, 2015; Lasagabaster, 2018).

In the third chapter, the main focus will be on corpora and corpus analysis programmes, specifically on how these tools can be applied in an EMI context to help students in their acquisition of ESP, thus easing the difficulties of studying in a foreign language. The first half of the chapter will be more theoretical, as it will provide a detailed description of what a corpus is and how it can be investigated through some specialist software programmes for language analysis purposes, together with a definition of data-driven learning and an analysis of its benefits and drawbacks. Conversely, the second half of the chapter will be more practical, since it will report several examples of different

affordances of corpora for language teaching purposes. In particular, it will be discussed how specialised corpora can be used to create lists of terms and phrases that are more representative of the language used in different specialised contexts and that could either inform the contents and materials of ESP lessons or guide ESP students in their own discovery of the specialised language of their discipline of study through direct corpus consultation (Arnó-Macià, 2012; Gavioli, 2005; Gollin-Kies et al., 2015). In addition, it will be mentioned how specialised corpora can improve the students' writing skills by familiarising them with subject-specific lexicogrammatical features, discourse structures and genre conventions (Charles, 2012; Lee and Swales, 2006; Maher and Milligan, 2019). Similarly, the potential benefits of specialised corpus analysis for the students' speaking skills will be investigated, even though this is still an under-researched area (Brown and Lewis, 2003; Cho and Yoon, 2013; Staples, 2019).

In the end, the fourth chapter will focus on the case study. First of all, the main objectives it attempts to achieve will be stated, namely illustrating one way of bringing the language component of EMI classes into focus and investigating whether EMI students would appreciate being provided with subject-specific language training. Then, all the steps that were taken to carry out this case study will be discussed in detail. In particular, the chapter will cover the search for a suitable English-taught course for the case study, the compilation and investigation of a corpus of course materials, the development of the activities to be offered to the students and the creation of a questionnaire to collect their feedback on those activities. The scores obtained by the students in each one of the three online sessions of activities as well as the answers they gave on the feedback questionnaire will then be carefully analysed and the results will be used to formulate a class profile and to provide the reader with valuable insights into the students' perceived usefulness of this kind of activities and their willingness to continue to work on improving their English language skills through additional language training. Furthermore, a distinction will be made between Italian students and students from other countries, since the data collected will reveal that the former seem to be more interested in including language training in the syllabus of their English-taught courses compared to the latter. Finally, some suggestions will be made to develop a form of language support for EMI students that might be more easily adjustable to meet the needs of students with different linguistic backgrounds, language learning experiences and levels of English.

CHAPTER 1

Internationalisation and English Medium Instruction

1.1 The importance of speaking English nowadays

As years go by, the world seems to be getting smaller and smaller, not because it is shrinking in size, but because it is becoming increasingly interconnected (Dreher, Gaston and Martens, 2008). One of the main effects of globalisation is indeed the “broadening, deepening and speeding up of world-wide interconnectedness in all aspects of life” (Held et al., 2000: 14). In particular, since advances in technology have made it possible to compress space and accelerate time (Jusdanis, 1996), travelling abroad, getting in touch with people from other countries and sharing ideas, cultural products and material goods have become much easier and cheaper compared to the past. This has resulted in a considerable growth in international contacts, which has consequently increased the need for a common language for mutual understanding (Crystal, 2003). When it comes to deciding which language is the most suitable for the job, English seems to be the obvious choice due to its global spread.

Nowadays, an ever-increasing number of people from all over the world can indeed speak English either as their first, second or foreign language (Crystal, 2004). The patterns of language acquisition and the domains in which English is used vary from one country to another. In this regard, Kachru’s model of world Englishes (1985) gives an accurate picture of how English has taken root differently in different parts of the world over the years, by identifying three concentric circles: the inner circle, the outer circle (or extended circle) and the expanding circle. The inner circle includes countries such as the UK, the USA, Canada, Australia and New Zealand, where English is the mother tongue of most of the population and is automatically used in all domains (ibid.). On the contrary, the outer circle comprises countries such as India, Singapore and Kenya to name a few, where English is learnt as a second language as a result of the period of colonisation by Great Britain. Even after gaining independence from their colonisers, they continue to use English to communicate in many official domains, while local languages are relegated to

the domestic domain (ibid.). Finally, the expanding circle embraces an ever-increasing number of countries, including Italy, where English is learnt as a foreign language and is used for international communication only (ibid.). All in all, non-native speakers of English now widely outnumber native speakers (Graddol, 2006).

It can therefore be said that English has now achieved the status of *lingua franca* or, in other words, it has become the preferred medium of international communication, which is used also between people whose mother tongue is not English (Mackenzie, 2014). This phenomenon has triggered a heated debate among scholars, who have ended up taking opposite sides on the matter. On the one hand, the spread of English is considered as a new form of imperialism, which Phillipson calls ‘linguistic imperialism’ (1992; 2009). In other words, Phillipson (1992) believes that Anglophone nations, particularly the United Kingdom and the United States of America, which have become increasingly powerful over the last few centuries, have promoted English language teaching throughout the world to maintain their supremacy and perpetuate North-South inequalities. In this scenario, the English language is then used to empower those countries who are already powerful and leave the disadvantaged further behind (Guo and Beckett, 2007). Those who speak a non-standard variety of English or who do not speak English at all are indeed not always guaranteed equal rights and opportunities in terms of political representation, economic redistribution as well as linguistic and cultural recognition (Piller, 2016).

Consequently, people tend to feel a great pressure on themselves to adopt this new dominant language, since they believe that English will improve their chances of having a good education, finding a profitable job and achieving higher standards of living (Crystal, 2000). However, in some cases, the longing for English goes hand in hand with people’s native language being perceived as a symbol of backwardness and inferiority and causing them feelings of shame and lack of self-confidence (ibid.). For this reason, some may decide not to use their native language anymore, thus putting it at risk of extinction. Initially, there might be a first stage of folklorisation, in which the dominated language gives way to the dominant language in public domains only, just as has happened in those countries belonging to the outer circle (Fishman, 1987). In the end, however, the dominated language is doomed to disappear completely (ibid.). This phenomenon affects not only minority languages, but also languages that have millions

of speakers, such as some European languages, on which English has already left its mark because of their constant borrowing of lexis and syntactic patterns from English (Anderman and Rogers, 2005). This is the reason why English is also seen as a homogenising tool of globalisation and an impending threat to the world linguistic diversity (Phillipson, 1998). According to UNESCO estimates, there are indeed between 6,000 and 7,000 languages in the world today and approximately 2,500 of them are endangered (Moseley, 2010). Although it is true that the spread of English is not the only reason why these languages are dying, it is still an important one (Crystal, 2000).

On the other hand, the spread of English is considered as a force for good and an essential tool for surviving in our contemporary globalised world. The adoption of English as the international lingua franca has indeed played a fundamental role in facilitating communication beyond borders as well as international cooperation in several domains (Crystal, 2003). For example, it is worth mentioning its key role as working language in many international organisations, which bring representatives of different nations together to find solutions to the world's most critical challenges (Melitz, 2018). Translating documents into the native language of all members and providing them with interpreters during meetings would be prohibitively expensive (*ibid.*), so most organisations feel compelled to choose a limited number of official languages, and English is almost always one of them. Similarly, English has become the official language of civil aviation and marine in order to avoid communication problems between pilots and air traffic controllers as well as among ship captains that may lead to serious accidents (*ibid.*). In addition, the English language has been proven to boost international trade, since it helps to overcome those linguistic barriers that usually hinder business transactions, so it has become a basic prerequisite to be able to work in any company that decides to open up to new markets and to cooperate with foreign business partners (Ku and Zussman, 2010). Furthermore, it fosters the spread of knowledge and the sharing of ideas and research findings, since it is the main language in which books and academic journals are written and ranks first on the list of the most commonly used languages on the Internet, which is now the most popular source of information (Melitz, 2018; Popova and Beavitt, 2017).

Therefore, there is no doubt that the English language has now become an invaluable tool and that learning it can open the door to many life-changing opportunities,

but this does not mean that other languages should be put aside. Conversely, if English is learnt additively rather than subtractively, it will enrich every person's linguistic repertoire (Crystal, 2000), since they will all have at least two languages at their disposal, one for expressing their own national identity and cultural heritage and one for communicating cross-nationally (House, 2003). This is precisely the hoped-for outcome of those English language teachers who certainly do not want to cause any detriment to their students' native language proficiency, but who also feel responsible for preparing them for the real world beyond the classroom, where English is a must-know language. Their aim is therefore to help their students to master English so that they can really use it for communicating successfully with people from other countries. In order to do so, teachers are always on the hunt for the most effective teaching approaches and one has attracted their attention lately because of its widespread implementation and its much-debated benefits and drawbacks. It is a dual-focused teaching approach that basically consists in using a language other than the students' mother tongue – English, in this case – to teach non-language subjects (Dalton-Puffer, 2007; Georgiou, 2012), as will be further explained in the following sections.

1.2 Adopting English as medium of instruction: CLIL and CEIL

The idea of using a foreign language as a medium of instruction is not new, since the oldest traces of this practice date back to more than 5,000 years ago in ancient Rome, where Roman children were taught by Greek teachers (Mehisto et al., 2008; Pérez-Cañado, 2012). However, only in the 1990s did this educational approach really start to spread in all continents, becoming especially popular across Europe (Georgiou, 2012). At that time, particularly after the Maastricht Treaty of 1992 and the subsequent establishment of the European Union in 1993, interventions by European institutions in the field of education and language teaching, which had always fallen within the competence of Member States, increased significantly (Marsh, 2012). As a matter of fact, improving European citizens' competence in other languages of the European Union had become a priority, since it would have facilitated the much longed-for process of European integration, which was high on the political agenda of the newly founded Union (Hermans, 1997). More specifically, the hoped-for outcome was that European citizens

could “acquire and keep up their ability to communicate in at least two community languages in addition to their mother tongue” (European Commission, 1995: 44).

Hence, in the light of this unifying goal, it is no surprise that the European Union decided to provide more pronounced suggestions and policy guidance to its Member States for improving and innovating foreign language teaching (Marsh, 2012). Although it is not the purpose of this study to list all the actions taken by the European Union in this connection, at least the most important ones will be mentioned hereinafter to give the readership a general idea of the role played by this geo-political entity in the promotion of language learning and, more specifically, language learning through the aforementioned teaching approach. Between 1990 and 1996, the Council of Europe held a series of expert workshops under the project “Language Learning for European Citizenship” and established the LINGUA programme to investigate the matter and fund any project that would seem to take a step in the right direction towards the promotion of multilingualism in Europe (Marsh, 2002; 2012). Among other things, interest was shown for earlier learning of foreign languages, the development of communicative skills, the setting up of mobility programmes, such as the Leonardo Da Vinci and the Socrates programmes, major improvements in teacher training, the use of technology and the implementation of innovative and effective teaching methods, such as the teaching of non-language subjects through a foreign language (Marsh, 2012).

Up until then, the practice of teaching through the medium of more than one language had always gone under the name of ‘bilingual education’ in Europe and it had mainly been applied in those schools located in environments characterised by special linguistic features, such as border regions and bilingual or trilingual areas (Marsh, 2012). It was therefore perceived as something special, peripheral, experimental or exotic (Beardsmore, 1993). However, when the European Union started to push for the implementation of this bilingual approach in all mainstream schools, it appeared clear that this term was not appropriate anymore (ibid.). As a matter of fact, it implies that the learners will eventually become bilingual or that they will gain at least near-equal capabilities in two languages, but this result can rarely be achieved in ordinary government-supported schools because of the lesser extent of immersion in the target language (Marsh, 2002). Usually, only some of the teaching in ordinary schools can be carried out in the foreign language and just for a limited period of time (Marsh, 2012).

Furthermore, if the students' mother tongue is the dominant language of the area in which they live, they will have fewer opportunities to use the studied language outside of the classroom compared to those who live in bilingual or trilingual areas (Marsh, 2002). The learning goal is then to achieve a functional rather than a native-like competence in the target language (ibid.).

Consequently, it was around 1994 that representatives of the European Platform for Dutch Education and the University of Jyväskylä (Finland), in conjunction with other stakeholders, coined a new term, 'Content and Language Integrated Learning' or CLIL (ibid.), whose equivalents can also be found in other languages, such as French (EMILE or Enseignement d'une Matière par l'Intégration d'une Langue Etrangère) and Spanish (AICLE or Adquisición Integrada de Contenidos y Lengua Extranjera). The term was formally recognised in 1996, when it was first introduced to the European Commission (Marsh, 2012). In the following years, the same organisations that coined the term CLIL started to offer support and resources to all the pioneering teachers who wanted to implement CLIL in their schools, in exchange for the possibility to collect their experiences and use them as case studies (ibid.). Great support for CLIL research and development was also offered by the European Centre for Modern Languages, which held the first workshop on CLIL in 1997 (Marsh, Bognar, Coyle and Takala, 1998). In the same year, the European Commission convened a think tank to discuss proposals for future studies and concrete action plans to raise public awareness about the benefits of CLIL and to encourage its implementation across Europe (Marsh, 2012). In particular, the necessity to provide CLIL training for teachers and to produce suitable teaching materials and textbooks emerged (ibid.), since successful CLIL practice requires more than simply switching from one language to another (Coyle, Hood and Marsh, 2010).

CLIL teachers are indeed asked to engage in the adoption of a totally unique teaching approach, in which "both language and content are conceptualised on a continuum without an implied preference for either" (Coyle, 2007:545). In other words, the target language and the content subject are taught together and are dealt with as a whole (Wolff, 2003). This means that the target language is not the only direct object of study, unlike in traditional language classes, but it shares the spotlight with the content subject, or better still, it is focused upon whenever it is necessary for understanding the content subject (Dalton-Puffer, Nikula and Smit, 2010; Wolff, 2003). This enables CLIL

students to learn to use the target language and use the target language to learn at the same time (Marsh, 2006). In this way, this teaching approach guarantees relevance and immediacy of purpose, which are very important nowadays considering the fact that there are fewer and fewer students who are willing to ‘learn now for use later’ (Marsh, 2012). Furthermore, the integration of language and content promoted by CLIL can better prepare students for the challenges of the global era because, like other forms of curricular integration, it reflects the complexity and interconnectedness of our contemporary world (Marsh, 2006). It also gives students the chance to learn how to communicate and collaborate with their peers, and it improves their creativity, critical thinking and problem-solving skills (Marsh, 2012).

It is precisely this dual nature of language, as both content and medium, that distinguishes CLIL from Canadian immersion programmes and North American bilingual education programmes, which are generally thought of as the predecessors of CLIL (Pérez-Cañado, 2012). These programmes, which originated in the 1960s and have spread rapidly since then, have shown a preference for offering an experiential approach to learning, which focuses on meaning rather than form and promotes genuine interaction in the target language rather than grammar analysis (Pérez-Vidal, 2007). As a result of participating in these programmes, students showed considerable improvements in their receptive skills, but they also had weaknesses in their grammatical competence and vocabulary knowledge, which affected their productive skills (Pérez-Cañado, 2012). On the contrary, CLIL is a more balanced teaching approach that makes room for both communicative content-learning tasks and explicit analysis of language forms (Pérez-Vidal, 2007). This combination seems to be particularly effective and motivating because it gives learners the chance to use the foreign language for authentic communication, and it also occasionally makes them notice the language they are using (Dalton-Puffer, 2007), which is essential for turning input into intake, thus allowing language learning to occur (Saville-Troike, 2006). For this reason, CLIL can be described as the ultimate developmental stage of communicative language teaching and task-based learning (Georgiou, 2012).

However, it should also be acknowledged that when teachers actually implement CLIL in the classroom, the theory does not always match the practice (Bruton, 2011; 2013), since teaching both content and language simultaneously might turn out to be

harder than they originally thought it would be (Cammarata and Tedick, 2012). In particular, two main variables of CLIL that tend to stray from the true essence of this approach have been identified: in some cases, content-specific language aspects are taught separately in order to make it easy to understand the content conveyed through the foreign language, while in other cases, the content is taught in the students' mother tongue first and then again in the foreign language (Bruton, 2011; 2013). The reason for these choices is that, if the language used is not suitable for the students' level or the content taught is too difficult and unfamiliar, students will not be able to follow the lesson. Teaching through a foreign language might then make it difficult for them to assimilate the content and might also hinder their language development (Coonan, 2007). Therefore, CLIL teachers might want to opt for adjusting the CLIL approach in a way that seems more appropriate to them.

CLIL programmes across Europe differ greatly from each other in several other aspects, not only in their higher or lower degree of integration of content and language. For instance, they are different in terms of the duration and intensity of the programme, the age and linguistic level of its participants, the choice of the content subject taught and the foreign language used as medium of instruction (Bruton, 2011; 2013; Coyle, 2007). Teachers have indeed systematically adapted CLIL to meet the needs of their students as well as the specific curricula requirements of their educational setting. The term CLIL has then become an 'umbrella term', which includes all the implementation varieties that have been generated so far (Georgiou, 2012). However, the flexibility and transferability of CLIL across contexts, which are some of the characteristics that have made this teaching approach popular in the first place, are likely to increase the risk of misapplication (ibid.). Some teachers might feel confused about how to apply the CLIL method correctly, since there are no specific guidelines to follow (ibid.). Consequently, the CLIL experience might turn out to be just a "time-consuming, ineffective, and frustrating experience" (Georgiou, 2012: 497-498), which will discourage teachers from attempting to use the same method again.

This is the reason why several researchers (Costa and D'Angelo, 2011; Dalton-Puffer and Nikula, 2006; Georgiou, 2012) have highlighted the need to identify and clearly state what the main principles of CLIL are that should always be retained. It seems that the most agreed-upon principle is that any CLIL programme should always try to

equally focus on both content and language (Georgiou, 2012). More specific guidelines also state that content teachers' foreign language level should be at least B2 according to the *Common European Framework of Reference for Languages* (Council of Europe, 2018) and that at least three-quarters of the lesson should be given in that foreign language (Costa and D'Angelo, 2011). Furthermore, a CLIL course should consist of at least 20-25 hours of lessons and the teaching approach should be interactive and student-centred, so frontal lessons should be avoided whenever possible (ibid.). In addition, cooperation between content teachers and language teachers is encouraged as long as it does not simply consist in a translating activity carried out by language teachers (ibid.). For instance, language teachers can be extremely valuable in evaluating the linguistic difficulties of the content subject and preparing glossaries and parallel exercises that content teachers might want to use with their students (ibid.).

Taking into consideration all its several implementation varieties, it can generally be said that CLIL has become very popular across Europe, as shown by Eurydice reports (2006; 2017), which is a network that collects, analyses and publishes information on European education systems. In 2006, the vast majority of European countries had already implemented CLIL in at least some of their schools, apart from Cyprus, Denmark, Greece, Iceland, Liechtenstein, Lithuania and Portugal. In addition, Luxembourg and Malta had decided to apply this teaching approach systematically in all their schools (Eurydice, 2006). In the following decade, the number of countries that do not provide CLIL decreased, including just Bosnia-Herzegovina, Greece, Iceland and Turkey, whereas the number of countries in which CLIL was made available in all schools at some stage tripled, including Austria, Cyprus, Italy, Liechtenstein, Luxembourg and Malta (Eurydice, 2017). Furthermore, Eurydice's estimates have highlighted a preference for adopting CLIL at primary, lower secondary and upper secondary levels of education (ibid.). Finally, Eurydice data have shown that English is the predominant language used as medium of instruction in CLIL programmes, followed by French, German and Spanish (ibid.). Therefore, even though the European Union promoted the adoption of CLIL to foster multilingualism, this innovative approach was mainly used to spread the English language instead. For this reason, CLIL is also usually referred to as CEIL or Content and English Integrated Learning (Dalton-Puffer, Nikula and Smit, 2010).

1.3 English-medium instruction at university level: ICLHE and EMI

The field of tertiary education should be analysed separately from that of primary and secondary education because of its distinctive characteristics (Smit and Dafouz, 2012), especially its greater degree of autonomy, its non-compulsory nature and its special role as both object and agent of globalisation (Scott, 1998). Even though universities had to undergo some changes in order to better respond to the challenges of globalisation, they have also been decisive in making the world even more globalised (Marginson and van der Wende, 2007). In particular, higher education institutions facilitate the movement of people across borders for studying, training and working reasons, since they are responsible for imparting higher-level knowledge and skills to their students and for fostering their participation in mobility programmes, thus making them more desirable on the global labour market (World Bank, 2002). It is indeed common practice for countries to compete for attracting and retaining the best prepared graduates from all over the world, since knowledge has now become a key factor to the social and economic development of a nation (ibid.).

After realising that they were decisive in providing people and, on a larger scale, even countries with a competitive advantage over the others, it did not take long for universities to start capitalising knowledge (World Bank, 2002). In other words, higher education has gradually turned into a commodity, which is proven by the fact that some states wanted to include it in the sectors covered by the General Agreement on Trade in Services in the 1990s, whose main aim was that of removing barriers to the trade of services among its contracting parties (Dimova et al., 2015). Consequently, universities have quickly turned into industries and brands, investing higher amounts of money coming from both public and private funds to improve and advertise their educational offer in an attempt to attract a larger number of domestic and foreign students, who have started to be seen as customers (Coleman, 2006). Over time, however, the market of higher education has become highly competitive, since supply has started to exceed demand due to a general ageing trend of the world's population (ibid.). In addition, students have become more open to the idea of studying abroad as long as they are offered a better education, which means that universities have to compete not only at a national level, but also at an international one (ibid.). Worldwide university rankings have then become popular as an effective tool to inform student choice.

According to Marginson and van der Wende, “worldwide rankings norm higher education as a single global market of essentially similar institutions able to be arranged in a ‘league table’ for comparative purposes” (2007: 55). Generally speaking, comparison among universities might be based on just one parameter, such as in the Shanghai Jiao Tong University (SJTU) rankings, in which only data concerning university research performance are taken into consideration, or on a multitude of parameters, such as in the Times Higher rankings, which consider also the reputation of the institution and its level of internationalisation, among other things (ibid.). In any case, it appears clear that university rankings cannot be considered objective, since it is their authors who choose which parameters to apply according to what they personally believe constitutes university quality (Van Dyke, 2005). However, they still have an important role in influencing both students and institutions (Marginson and van der Wende, 2007). Proof of this can be found in the fact that several universities have made some changes to their institutional policies to optimise their position in the rankings (ibid.).

In particular, as far as the parameter regarding internationalisation is concerned, it appears clear that effective and long-lasting change in this area tends to start from the ‘organisational culture’ of higher education institutions (Bartell, 2003), which can be defined as a set of shared values and deep-rooted patterns of behaviour forming the identity of each institution (Coman and Bonciu, 2016; Peterson and Spencer, 1990). In other words, universities are now making internationalisation part of their mission, which will then inform the planning of projects, the allocation of resources and the renewal of policies (Davies, 1992). Some of the strategies adopted to foster the international profile of universities include, for example, the use of technology to enable academics to collaborate with foreign colleagues on international research projects and to allow students to join virtual classrooms, where they can interact with peers and professors from all over the world (Bartell, 2003; Gumport and Sporn, 1999). Furthermore, an important role is played by the participation in mobility programmes, which facilitate the interchange of students and faculty members, thus enriching the university environment with cultural diversity (Bartell, 2003). Finally, changes within the curriculum and in language policies are necessary to ensure that the content taught includes also international matters and that the national language is not the only medium of instruction used (ibid.).

In order to build a multilingual learning environment, some universities have tried to adopt a teaching approach that goes by the name of 'Integrating Content and Language at Higher Education' or ICLHE, which can be described as the counterpart of CLIL at university level. This label was coined during the first conference on the topic held in Maastricht in 2003, whose participants came from a wide range of countries in Europe and beyond (Wilkinson, 2004). As the name suggests, ICLHE aims to integrate content teaching with language teaching, like CLIL does, so that students can gain knowledge and competence in both areas, but these two teaching approaches somehow differ from one another (Smit and Dafouz, 2012). In particular, while CLIL was typically considered as a bottom-up approach at the primary and secondary levels of education, ICLHE established itself as a top-down approach for tertiary education (Costa, 2009). In other words, while one is primarily driven by students' needs, parents' pressure and teachers' initiatives, the other usually depends on the policies adopted by institutions and governments.

Furthermore, ICLHE courses are generally characterised by a higher level of complexity compared to CLIL classes, especially in terms of content and language learning objectives (Smit and Dafouz, 2012; Wilkinson and Zegers, 2008). As far as content is concerned, university students are normally faced with a body of knowledge in a specific discipline of their choice that changes quite rapidly, since it is still being constructed by the members of the disciplinary community (Wilkinson and Zegers, 2008). Therefore, they are exposed to several ideas of experts in the field, whose opinions may also differ, and are expected to come up with their own critical point of view, so that one day they will manage to contribute to such a disciplinary community themselves (*ibid.*). In order to do so, however, they are required to learn the specialised language in which the knowledge of that discipline is construed (Lemke, 1990). Since the disciplinary communities they wish to be part of expand well beyond the borders of nations and language communities, they feel the need to develop also advanced subject-specific communication skills in other languages more keenly compared to primary and secondary school students (Smit and Dafouz, 2012).

However, similarly to the trend that was previously identified in primary and secondary education, not all foreign languages are considered equally important in tertiary education. Conversely, higher education institutions seem to show an inevitable

preference for the English language (Coleman, 2013), which is now considered as the default language of advanced education (Brumfit, 2004) and the necessary tool for successful internationalisation (van der Walt, 2013). In order to respond to this trend, a plethora of new terms was then coined, such as English-Language-Taught Degree Programmes (ELTDP), which was then shortened to English-Taught Programmes (ETP), English-Medium Education in Multilingual University Settings (EMEMUS), English-Medium Teaching (EMT), and English-Medium Instruction (EMI), which has got the better of the other terms and has been used predominantly since the mid-1990s (Wilkinson, 2017). In most cases, EMI seems to be a more accurate and appropriate label than ICLHE precisely because it expresses clearly that the language we are referring to when talking about using a foreign language as a medium of instruction at university level is English (Wilkinson, 2004). In addition, it does not refer to the integration of content and language, a process that is at the heart of the CLIL practice at primary and secondary schools, but which does not usually occur at the tertiary level of education, as the label ICLHE seems to indicate (Smit and Dafouz, 2012).

One of the reasons why content teaching often prevails over language teaching in EMI contexts is that English is now the most studied foreign language in Europe and students are learning it from a younger age, sometimes out of choice and sometimes because it is a mandatory part of their curriculum. According to Eurydice's latest report (2017), the vast majority of European students (79.4% in 2014) start to learn English at primary school, between the ages of 6 and 8, and almost all of them study it at secondary school (97.3% at lower secondary school and 85.2% at upper secondary school in 2014). Therefore, by the time they finish compulsory education, they are expected to reach independent-user level in English. Consequently, university professors tend not to feel responsible for their students' language development and they prefer to focus on content teaching only (Smit and Dafouz, 2012), even though their choice may be motivated by other factors, as will be discussed in the next chapter. The foreign language is then used with the mere function of medium in EMI and it is only very rarely focused upon (*ibid.*). That being so, the adoption of English rather than other languages as the vehicular language of higher-level education seems to be the most practical, unproblematic, time- and cost-effective choice (Coleman, 2013), since no particular measures should be taken in order to familiarise the students with the foreign language. However, students do not

always reach the language level that is expected of them before moving on to higher education and so they might find themselves struggling to follow a lesson that is completely carried out in English, as will be further explained in the following sections.

Generally speaking, EMI programmes bring with them several advantages for higher education institutions, which are not only linguistic in nature. From an economic point of view, for example, they make it easier for universities to recruit both domestic and international students (Hellekjaer and Westergaard, 2003; Wächter and Maiworm, 2008), preferably the most talented ones, who will benefit the university itself and also the country, if they decide to stay after graduation (Fabricius et al., 2016). The former are attracted by the chance to improve their international competences without even having to leave their country and are flattered by the promise of developing skills that would make them fit for both national and global labour market (Wilkinson, 2004; 2013). The latter, who are normally discouraged by having to follow courses and take exams in the official language of the foreign university of their interest, especially if it is a language that is not commonly taught at school in their home country, are reassured by the availability of EMI programmes (Coleman, 2006; Wächter and Maiworm, 2008). If the enrolment rate of tuition fee-paying students increases, university income will rise accordingly (*ibid.*). Truth to be told, in some cases, when the home market is too small or already saturated, recruiting foreign students is not only an additional source of profit, but also the one and only way for universities to keep running (Wilkinson, 2013).

For this reason, the financial aspect is surely one of the most important motives that drive universities towards the implementation of EMI programmes (Wilkinson, 2013), but it is not the only one. The adoption of English as a medium of instruction is also considered worthwhile because it enhances the reputation and prestige of universities both at home and abroad and makes them achieve a higher position in international university rankings (Wilkinson, 2004). It enables them to hire the best teachers worldwide, thus improving their teaching standards and making their educational offer more appealing to potential students (Coleman, 2013). In addition, it increases university participation rate in international exchange programmes, such as the Erasmus Plus and the Erasmus Mundus programmes, since it makes possible to better prepare outgoing students for the upcoming experience abroad and to offer English-taught courses that may be of interest to incoming students (Coleman, 2006; 2013). Furthermore, universities are

facilitated in establishing their reputation as researching institutions and gathering research funds, since a good command of English makes it possible for professors and researchers to publish their findings on the most renowned journals, thus reaching also a wider readership (ibid.).

Looking at the other side of the coin, however, EMI programmes could also have detrimental effects on higher education institutions and their stakeholders. Some scholars (Lasagabaster, 2015; Wilkinson, 2017), for instance, argue that the Englishisation of higher education should be held responsible for the impoverishment of the educational potential of universities and their unsuccessful attainment of multilingualism. Even though universities with an international outlook aim to design “study programs that bring together, support and take nourishment from the knowledge, cultural practices, life experiences and linguistic resources of students and staff from diverse backgrounds” (Fabricius et al., 2016: 592), the predominant use of English as a “one-size-fits-all lingua franca” (ibid.: 584) is currently leading towards linguistic uniformity and is not helping students to increase their awareness and understanding of cultural differences. Proof of this can be found, for example, by looking at the influence that this language policy has over the choice of literature used in teaching. It has been noticed that when a course is taught entirely in English, the literature used is also in English only, thus precluding students from the chance of getting to know other research traditions, including that of their own country (ibid.). All local references are generally removed from the curriculum for the sake of creating universal programmes, but this turns out to be a form of ‘cultural suppression’, which simply consists in taking references that are localised elsewhere instead of local ones (ibid.).

Furthermore, other scholars (Mauranen, 2010; Motta, 2017; Wilkinson, 2013 and 2017) are concerned about the fact that the adoption of English as medium of instruction at university level might cause problems of domain loss and elitism. In other words, they claim that excluding the national language of a country from higher education might put that same language at risk of losing its vitality in academic areas, consequently impoverishing also the culture of that speech community and its identity (Motta, 2017). Every speech act is indeed an act of identity (Le Page and Tabouret-Keller, 1985), since every time we speak, we reaffirm our belonging to a certain social group, whose members share a common linguistic and cultural heritage (Kramsch, 1998; Pellegrino Aveni, 2005;

Weeks, 1990). Therefore, if students learn the specialised language of their discipline of choice (e.g. science, medicine, law, etc.) in English only, they might find it difficult to talk about that discipline in their own mother tongue, whose expressive potential and lexical richness will then be reduced (Motta, 2017). This may encourage the brain-drain phenomenon, which entails a loss of knowledge and expertise for the whole country, or it might also cause an increase in the gap between the English-speaking intellectual class and the rest of the population, since the latter will not be able to have access to knowledge and research findings (ibid.). This gap is then perpetuated over time by English-taught programmes, since they preclude students of lower-class families, who tend not to have a high command of English, from gaining a higher education qualification and climbing the social ladder (Wilkinson, 2017). English will then become a marker of social privilege (Coleman, 2006).

1.4 The spread of EMI programmes within the European context

In response to the international marketisation of higher education, Europe opted for the creation of a borderless and democratic European Higher Education Area or EHEA (Coleman, 2006: 3), where countries with different academic traditions could work together to promote the foundation of a harmonised, cooperative and highly competitive “Europe of knowledge” (Allegre et al., 1998). The main principles that have been serving as a guide for the realisation of this project were first stated in the Sorbonne Declaration, which was signed in 1998 by the ministers of four countries, namely France, Germany, Italy and the United Kingdom (EHEA, 2016a). More specifically, the declaration gave the ministers a chance to articulate and put in writing a desire shared by many to develop a common frame of reference for European universities, which would have facilitated external recognition and enhanced the mobility of both students and teachers across the continent (Allegre et al., 1998). Thorough guidelines were then provided by the Bologna Declaration in 1999, which has had a larger following, since up to 29 countries decided to formally express their voluntarily engagement in the creation of the EHEA by signing the declaration: Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania,

Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom (EHEA, 2016b).



Figure 1. Sorbonne Declaration signatories (1998) (EHEA, 2016a).



Figure 2. Bologna Declaration signatories (1999) (EHEA, 2016b).

Among other things, the Bologna Declaration suggested the adoption of an easily readable and comparable degree structure characterised by two main cycles, undergraduate and graduate (European Ministers of Education, 1999). In addition, it recommended the development and implementation of some useful tools, such as the European Credit Transfer and Accumulation System (ECTS) and the Diploma Supplement (*ibid.*). The former is a common credit system that makes it possible to measure how much learning has taken place during a course of study according to the learning outcomes achieved and the workload required (European Commission, 2015), while the latter is a document that accompanies a national higher education diploma and offers a standardised description of the studies completed by its holder (European Commission, n.d.). Both of them play a very important role for the international recognition of academic qualifications and mobility periods spent abroad, thus making it possible for students and graduates to move easily from one country to another for studying, training or working reasons (European Ministers of Education, 1999). Furthermore, the Bologna Declaration pushed for establishing common criteria for

determining quality assurance requirements for university programmes and for introducing a necessary European dimension into higher education curricula (ibid.).

In order to apply the Bologna Declaration recommendations, all signatory countries needed to make some changes to their national higher education systems for increasing their level of compatibility and comparability with other universities across Europe (EHEA, 2007). Even though there was some resistance on their part at the beginning, since they legitimately preferred to prioritise the traditions and interests of their national institutions, all of them agreed in the end to stop competing with each other and joined forces to strengthen Europe as a whole (EHEA, 2015). They were indeed able to recognise that being part of a larger community with shared higher education principles and policies could have also helped them individually to face the new challenges of globalisation (ibid.). As a matter of fact, it would have been impossible for them alone to compete with the giants of the global market of higher education, such as the USA and China (Dimova et al., 2015). In addition, their students could have benefited from a better-quality education and more accessible exchange programmes, which could have improved their employability prospects both in their home country and abroad (EHEA, 2007). Furthermore, cooperation among European universities was expected to foster the “development and strengthening of stable, peaceful and democratic societies” (European Ministers of Education, 1999: 1).

Consequently, other countries decided to become part of the EHEA, namely Albania, Andorra, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Croatia, Cyprus, Georgia, Holy See, Kazakhstan, Liechtenstein, Moldova, Montenegro, North Macedonia, Russia, Serbia, Turkey, and Ukraine. Nowadays, the EHEA has 49 full members, including all the aforementioned countries and the European Commission, 8 consultative members (the Council of Europe, the United Nations Educational, Scientific and Cultural Organization, the European University Association, the European Association of Institutions of Higher Education, the European Students’ Union, the European Association for Quality Assurance in Higher Education, Education International, and Business Europe) and several partners (EHEA, 2019). Since 1999, they have met up every two or three years in order to check the progress made so far and schedule what to do next (ibid.). During these follow-up conferences, they have decided, for example, to turn the two-cycle structure of European universities into a three-cycle system (Bachelor’s,

Master's and Doctorate degrees) and to promote student-centred pedagogies and lifelong learning (EHEA, 2007; 2015). Furthermore, they have tried to reduce those social and economic obstacles that might prevent students from participating in and completing higher education at all levels (ibid.).



Figure 3. Current full members of the European Higher Education Area (EHEA, 2019).

All these major changes in the field of tertiary education brought along by what has been called “the Bologna Process” resulted in the need for new language policies, which basically consisted in the adoption of English as the common lingua franca of European universities (Smit and Dafouz, 2012). This decision seemed indeed to be in line not only with the ongoing Europeanisation of higher education institutions, since it enabled universities to harmonise their language policies, but also with the massive Englishisation trend of contemporary globalised societies (ibid.). In addition, the adoption of a common language appeared to be particularly useful in the light of the increased international mobility of students and teachers (ibid.). Consequently, from 1999 onwards, universities have started to offer a larger number of programmes that were entirely or just partially taught through the medium of the English language (Wächter and Maiworm, 2002). For this reason, Smit and Dafouz (2012) have claimed that, even though the

Bologna Declaration never explicitly mentions language-related issues, it is responsible for having made English-medium education a reality.

Just a few years after the Bologna Declaration, between 2001 and 2002, the Academic Cooperation Association (ACA) in collaboration with the Gesellschaft für Empirische Studien (GES) carried out the first large-scale study aiming to map and analyse the provision of EMI programmes in European universities (Wächter and Maiworm, 2002). The data used were mainly collected by means of questionnaires, which were sent to 1,558 higher education institutions in 19 member countries of the European Union and 3 of the countries belonging to the European Free Trade Association or EFTA (ibid.). The study included also the Czech Republic, Hungary, Poland and Slovakia, since they were just about to become members of the European Union. Conversely, countries like Ireland and the United Kingdom were excluded from the study because English is the “natural” or “domestic” language of their universities. Similarly, also Luxembourg and Liechtenstein were not taken into consideration because their higher education institutions were offering degree programmes of shorter duration compared to the other surveyed countries (less than three years at undergraduate level and one year at postgraduate level) (ibid.). More than half of the addressees (52.7%) responded to the questionnaires, but just 30% stated that they were offering programmes entirely or partially (at least 25% of the programme) taught in English (ibid.).

Furthermore, the study revealed that the provision of EMI programmes was extremely unevenly spread across Europe and noted a marked North-South divide (Wächter and Maiworm, 2002). In order to rank the countries surveyed by degree of familiarity with the practice of English-medium instruction, three indicators were taken into consideration, namely the proportion of institutions offering EMI programmes measured against the overall number of responding institutions in that country, the proportion of EMI programmes among all degree programmes on offer and the total number of students enrolled in those programmes (ibid.). According to the data collected, Northern and Central European countries were the leading providers of EMI programmes at the beginning of the new millennium, especially Finland, the Netherlands and Germany, whereas Southern European countries such as Greece, Italy and Spain occupied the lowest positions in the ranking. The only country without a single EMI programme was Portugal (ibid.). Generally speaking, however, the average proportion of EMI

programmes ranged between 2% and 4% only and the number of students enrolled in those programmes accounted for less than 1% of all university students (ibid.). Therefore, it can be said that EMI programmes were still relatively new and not yet widely implemented across Europe, but one in five institutions that were not offering EMI programmes at the time of the study expressed its intention to implement them soon (ibid.).

The second ACA study, which was prepared between 2006 and 2008, noticed a considerable increase in the provision of EMI programmes, which were starting to become a standard feature of the European higher education landscape (Wächter and Maiworm, 2008). This time, as a result of the territorial enlargement of the European Union, the geographical coverage of the study was expanded, and questionnaires were sent to 2,218 institutions in 27 EU countries, 3 EFTA countries and Turkey (ibid.). However, only recognised institutions that had been considered eligible to participate in the Erasmus programme were taken into consideration, and only programmes that were taught entirely in English and in which English was not the object of study were included in the statistics (ibid.). Even though a smaller proportion of institutions (38.4%) completed the questionnaires, around half of them (47%) stated that EMI programmes were part of their educational offer (ibid.). The data collected also confirmed the existence of a North-South divide. Northern and Central European countries were indeed able to hold on to the top positions in the rankings, but with small adjustments, since Finland and the Netherlands swapped the top two places, whereas Southern European countries were still lagging behind. Cyprus was the only exception, since it managed to occupy third place in the ranking despite its southern geographical location (ibid.). Overall, the average proportion of EMI programmes ranged between 2% and 7% of all degree programmes available in the countries surveyed, and the number of students enrolled in those programmes accounted for 2.1% of the student population (ibid.). Therefore, the 2008 ACA study concluded that “even when allowing for differences in the approach and coverage of the two studies, it can safely be concluded that the provision of English-taught programmes has at least tripled since 2002” (Wächter and Maiworm, 2008: 10).

This growing trend continued even in the following years, as shown by the third and most recent ACA study, which was published in 2015 (Wächter and Maiworm, 2015). This time, 2,637 higher education institutions in 28 EU countries, 3 EFTA countries and

Turkey were asked to participate in the survey and 43.8% returned the submitted questionnaires, a higher proportion compared to 2008, but still lower than 2002 (ibid.). Furthermore, unlike the previous studies, the countries surveyed were grouped into six regions: Nordic, Central-West, Central-East, Baltic, South-West and South-East Europe. A comparison by region confirmed once again the existence of a North-South divide (ibid.). More specifically, data showed that 61% of the responding institutions in the Nordic region offered Bachelor's and/or Master's programmes completely taught in English, which made up 20% of all degree programmes on offer there. This means that more than 5% of the whole university student population in Nordic countries was regularly taught in English (ibid.). On the contrary, less than 20% of the responding institutions in Southern Europe offered EMI programmes, which accounted for less than 3% of all university programmes offered there. Therefore, less than 1% of university students in those areas were studying in English (ibid.). In addition, the study highlighted an unprecedented increase in English-taught programmes in Central East Europe and the Baltic states, especially in Hungary and Lithuania (ibid.). On average, 38.7% of Baltic universities and 19.9% of universities in the Central East region were reported to offer EMI programmes, thus gaining third and fourth position respectively, right after universities in Central West Europe (see Figure 4). Once again, the provision of EMI programmes has tripled since the 2008 study (Wächter and Maiworm, 2015).

Indicators for the quantitative importance of ETPs – by region (%)

	Region						Total
	Nordic	Baltic	Central West Europe	Central East Europe	South West Europe	South East Europe	
Proportion of higher education institutions offering ETPs	60.6	38.7	44.5	19.9	17.2	18.3	26.9
Proportion of study programmes fully provided in English	19.9	10.3	9.9	5.0	2.8	2.1	5.7
Proportion of students enrolled in ETPs in the academic year 2013/14	5.3	1.7	2.2	1.0	0.5	0.8	1.3

Figure 4. English-taught programmes in different regions of Europe (Wächter and Maiworm, 2015).

What did not change over the years is the profile of those higher education institutions that are more likely to offer degree programmes in English. According to the data collected by ACA studies from 2001 to 2015, they are usually old, large and public institutions with a comprehensive range of subject areas (Wächter and Maiworm, 2002; 2008; 2015). They also tend to be actively involved in international exchange programmes and to offer advanced degrees, such as Master's and Doctorate degrees (ibid.). It has been noticed that the vast majority of EMI programmes (68% in 2002 and 80% in 2008 and 2015) are postgraduate programmes. Only in Baltic and East-European countries, the number of English-taught programmes is higher at the undergraduate level, but it is an exception to the rule (Wächter and Maiworm, 2015). The main subject areas that tend to be taught in English are business and management studies, engineering and social sciences (Wächter and Maiworm, 2002; 2008; 2015). Both domestic and international students can participate in EMI programmes, but data have shown that more than half of the participants (60% in 2002, 65% in 2008 and 54% in 2015) come from outside the country (ibid.). In addition, the proportion of international students tends to be higher in Nordic and Central-West countries than in Baltic and South-East countries (Wächter and Maiworm, 2015). However, regardless of where they come from, students are generally asked to prove their English language proficiency by taking a test in order to be admitted to the courses. Over the years, the number of institutions where a language test constitutes a mandatory entry requirement has greatly increased, going from 66% in 2002 to 88% in 2015 (Wächter and Maiworm, 2002; 2015). In spite of this, heterogeneity in the command of English is still considered as one of the main difficulties that affect the running of EMI programmes (Wächter and Maiworm, 2015), as will be further explained in the following chapter.

1.5 English-medium instruction with a focus on the Italian context

Italy is a south-west European country with more than 60 million inhabitants (ISTAT, 2017). The official language of the country is Italian, a Romance language that has its roots in the XIV century Florentine dialect, which in turn was descended from Latin (Coluzzi, 2004). Nevertheless, several other languages are spoken across the peninsula, so many that Italy's linguistic landscape has been described as the richest and most

diversified in Western Europe (ibid.: 4). More specifically, Law No. 482 of 1999 recognises and protects twelve minority languages, namely French, Provençal, Franco-Provençal, German, Ladin, Friulian, Slovene, Sardinian, Catalan, Albanian, Greek and Croatian. However, these minority languages are spoken in small areas only and by less than 5% of the whole Italian population (ibid.). Conversely, more than half of Italians (around 52%) can speak regional dialects, whose use stretches from the north to the south of the country (ibid.). Due to their low status, however, regional dialects tend to be relegated to the domestic domain only, where they are used predominantly or in conjunction with the Italian language (ibid.). Coluzzi (2004) has identified between six and twenty-two Italian dialects, but he has also acknowledged that there might be even more, since it is difficult to give a precise number because most of them do not have a standardised form and tend to change slightly or significantly from one village to another and from one generation to the next.

Several scholars (Coluzzi, 2004; Pulcini and Campagna, 2015) believe that Italy's regional dialects should rather be considered as parallel varieties of the Italian language, since they are also the direct offspring of Latin. Italy's tradition of multilingualism dates back to the time of the Roman Empire, when people living in different regions of the territories conquered by the Romans started to develop different ways of speaking Latin due to their diverse linguistic origins (Tosi, 2004). This linguistic diversity has then been perpetuated over time because of the political fragmentation of the country, and so different varieties of Latin have gradually turned into a plurality of regional dialects that are still currently spoken across Italy (ibid.). Only in 1861, the year of Italy's unification, one of those dialects, namely the Tuscan or rather the Florentine one, was recognised as the country's official language, since it had already become to be known as the national language of culture thanks to the works of famous writers, such as Dante, Petrarca, Boccaccio and Macchiavelli (ibid.). It is therefore a surprise that in a country characterised by such a high degree of linguistic diversity and which already has experience of adopting a common language, the learning of English turns out to be so arduous and demanding. As Costa and Coleman (2013) have pointed out in their study, Italy is indeed lagging behind other European countries in terms of its people's English language proficiency. In order to catch up with the rest of Europe, the Italian government has then made some changes to its educational systems (Pulcini and Campagna, 2015),

for instance, by introducing the teaching of English at primary school and increasing the implementation of CLIL and EMI programmes at the secondary and tertiary level of education (Costa and Coleman, 2013). Despite its efforts, English is still not commonly used in Italy for communicating outside of the school environment (Guarda and Helm, 2017).

As far as tertiary education is concerned, the practice of English-medium instruction started to be implemented in the 1990s as a form of modernisation and Europeanisation of Italian universities (Pulcini and Campagna, 2015). By the end of the 20th century, most of them were already century-old universities and started to feel the need to be abreast with the times and in a position to better prepare students for the new challenges of globalisation (ibid.). The most significant changes undergone by Italian universities at the time were fostered by the Bologna Process, which has been discussed in the previous section. In particular, most of the Bologna Process recommendations were implemented by means of two national reforms of Italy's higher education system (Ministerial Decree No. 509 of 1999 and Ministerial Decree No. 270 of 2004), which introduced the "3+2" structure of degree programmes on a general basis, consisting in a three-year Bachelor's degree with a total workload of 180 ECTS and a two-year Master's degree with a total workload of 120 ECTS (Cammelli et al., 2011). Only some faculties kept a single-cycle structure, such as Law (5 years) and Medicine (6 years). In addition, after the second-cycle degree, graduates can go on to a Doctorate degree, which tends to be more selective, since there is a limited number of places (Costa, 2017). This structural reorganisation resulted in an increase in the amount and variety of degree programmes on offer as well as in the number of enrolled students at all levels, but especially at the Bachelor's level (Cammelli et al., 2011). Furthermore, it is worth mentioning Law 240 of 2010, most commonly referred to as Legge Gelmini, which aimed to promote cooperation among national and international universities, foster the mobility of both teachers and students and increase the implementation of study programmes in English (Costa and Coleman, 2013).

Even though English-medium education in Italy is still in its infancy, the number of Italian higher education institutions offering EMI programmes has increased rapidly in recent years (Guarda and Helm, 2016). Proof of this can be found, for instance, in the previously analysed studies by the Academic Cooperation Association (Wächter and

Maiworm 2002; 2008; 2015). Even if all three of them have grouped Italy with other Southern European countries that were considered far behind Northern and Central European countries in the provision of EMI programmes, a comparison of Italy's figures across the years shows that the country has improved greatly in this field (ibid.). In 2002, only 7 out of 44 institutions participating in the survey stated that they provided study programmes in English, whereas the number increased up to 41 out of 53 institutions in 2015. Similarly, the number of EMI programmes on offer in Italian universities rose from 11 programmes addressed to approximately 671 students in 2002 to 307 programmes addressed to 10,500 students in 2015 (ibid.). This considerable growth has made it possible for Italy to outdo other Southern European countries, such as France, Greece, Portugal and Spain, and gain twentieth position in the overall ranking (Wächter and Maiworm, 2015). This upward-moving trend has not stopped yet, since at the time of writing (academic year 2019/2020), the latest estimates are about 439 English-taught programmes in 61 Italian universities (Universitaly, 2019). However, a North-South divide has been observed also within Italy, since the majority of universities offering EMI programmes are located in the northern regions probably because they tend to be wealthier and are more likely to have international links (Costa and Coleman, 2013). Furthermore, they are most frequently implemented in private universities, at the Master's level and within the faculties of Economics and Engineering, similarly to the European trend (Costa, 2017; Costa and Coleman, 2013).

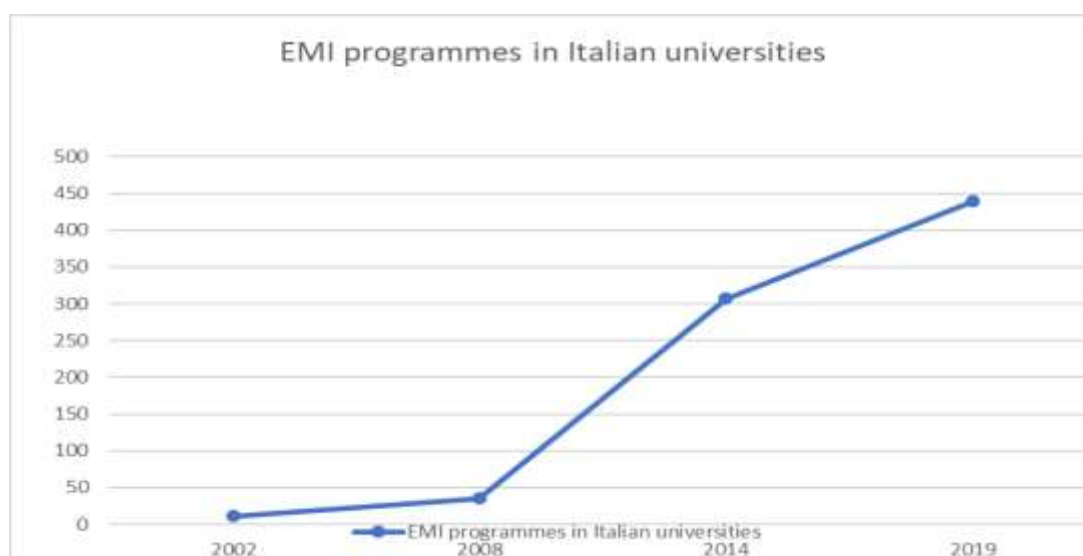


Figure 5. The growth of EMI programmes in Italian universities from 2002 to 2019 (data collected from Universitaly, 2019; Wächter and Maiworm 2002; 2008; 2015).

According to Costa and Coleman's 2013 study, Italian universities that offer English-taught programmes do so mainly because they can improve their international profile (32%), attract a larger number of foreign students (21%) and make Italian students fit for the global market (24%). Only small interest was shown in the beneficial effects of these programmes on improving students' English language proficiency (8%) and promoting interculturality (5%). The little importance paid to the language aspect of this type of teaching is probably the reason why in most cases the language level of both students and teachers participating in these programmes is not properly checked beforehand (ibid.). As a matter of fact, less than half of the responding universities (around 46%) require students to take a language test to prove that they will be able to follow the lessons in English (ibid.). Similarly, even if 99% of Italy's university professors are L1 Italian speakers who have little or no experience of teaching a content subject through English (Costa, 2017), only 15% of the responding institutions provide language courses for teachers and a mere 8% offers methodological training (Costa and Coleman, 2013). Consequently, it is precisely the lack of students' and teachers' English language competence that turns out to be the main obstacle to a successful implementation of EMI programmes in Italy (Costa and Coleman, 2013; Pulcini and Campagna, 2015), an issue which will be addressed in the second chapter. A second problem is the lack of appropriate teaching methodologies, as shown by the prevalence of formal and less interactive lectures, which are characterised by an asymmetrical relationship between lecturer and students (Costa, 2017; Costa and Coleman, 2013). In order to be effective, EMI lessons should not be based on a top-down approach of knowledge transmission, but on collaborative learning and co-construction of knowledge (Guarda and Helm, 2017). In addition, they should focus more on language forms, as the CLIL approach does, since "in a context like the Italian one an approach based on integrating content and language in higher education [...] would be more adequate to guarantee high-quality learning and academic standards" (Pulcini and Campagna, 2015: 72).

One of the first Italian universities that attempted not only to offer a larger number of EMI programmes, but also to adopt an English-only language policy is the Politecnico di Milano, a prestigious public university in the north-west of the country (Molino and Campagna, 2014). In February 2012, the Rector of the Politecnico di Milano announced a three-year strategic plan to increase the internationalisation of the institution, according

to which all Master's and Doctorate programmes of the Politecnico were expected to be taught entirely in English by the academic year 2014/2015 (Pulcini and Campagna, 2015). The faculty members did not welcome the news and signed an opposing petition that was submitted to the Regional Administrative Court (TAR) of Lombardy (ibid.). Their appeal was admitted in March 2013, which means that the English-only formula was officially rejected on the following grounds (ibid.). In the first place, according to the appointed court, this language policy could violate the university professors' right to freedom of teaching guaranteed by Article 33 of the Italian Constitution. Secondly, the judges thought that it could foster linguistic discrimination in the hiring process, since academics without a good command of the English language could not aspire to teach at the higher level of tertiary education. Lastly, it could belittle the value of the Italian language, which has been stated to be the official language of courses and examinations in Italy according to Royal Decree No. 152 of 1933, by excluding it from the field of tertiary education completely (Pulcini and Campagna, 2015). Similarly, also the Accademia della Crusca, a prestigious institution devoted to the study and promotion of Italian, condemned the language policy proposed by the Politecnico di Milano as an extreme language policy (Molino and Campagna, 2014). They stated that the exclusive and mandatory use of English in higher education could cause problems of both domain and content loss, thus impoverishing the Italian language and impairing the learning process (ibid.). Therefore, they suggested a solution similar to the Parallel Language Use policy of the Nordic countries, which conceptualise internationalisation in terms of English prevalence rather than dominance (Pulcini and Campagna, 2015). In other words, Nordic countries aim to preserve their national language while at the same time fostering the spread of English. However, regardless of which language policy Italian universities decide to adopt, a carefully conceived language-in-education planning is needed, which should consider also potential obstacles to its application, expected outcomes and consequences (Molino and Campagna, 2014).

1.6 Internationalisation and English-medium teaching at the University of Padova

The University of Padova was officially founded in 1222, when a group of professors and students from the University of Bologna decided to move to the north-eastern city of

Padova, which was already an important cultural centre at the time. They wanted to create a new university environment there, characterised by greater academic freedom, as stated by what has later become this university's motto: "Universa Universis Patavina Libertas" (Università degli Studi di Padova, 2019d). The University of Padova is now one of the biggest and most prestigious universities in Italy with around 64,000 students enrolled in a wide range of degree programmes, which are organised in 8 Schools and 32 Departments (Università degli Studi di Padova, 2019c). In the national ranking by CENSIS (2019), it occupies second place among the largest Italian public universities, that is those with more than 40,000 students, thanks to the quality of the support and services it offers to its students, the availability of structures, the use of technologies and its level of internationalisation. As far as this latter parameter is concerned, it should be noticed that the University of Padova has made internationalisation its priority (Dalziel, 2017) and has committed itself to fostering domestic participation in exchange programmes, recruiting a larger number of foreign academics and students and encouraging cooperation with other European and international universities for study and research activities, as can be seen from Article 1 of its Statutes (2014):

"L'Università promuove lo sviluppo dell'internazionalizzazione anche favorendo la mobilità dei docenti, del personale tecnico amministrativo e degli studenti e la composizione internazionale del proprio corpo docente e studentesco. Incentiva programmi integrati di studio e iniziative di cooperazione interuniversitaria per attività di studio e di ricerca."¹

In order to pursue its internationalisation goals, the University of Padova has also recently started to offer both individual courses and entire degree programmes in English. In the academic year 2009/2010, when the practice of English-medium instruction was first introduced at this university, only a few individual courses were available in English (Guarda and Helm, 2016). Conversely, in the current academic year 2019/2020, its educational offer includes hundreds of individual English-taught courses as well as 2 Bachelor's and 23 Master's programmes run entirely in English (Università degli Studi di Padova, 2019a). These figures have doubled compared to 2015, when Guarda and Helm's study spotted only 1 Bachelor's and 11 Master's programmes in English. The

¹ "The University promotes the development of internationalisation by fostering the mobility of lecturers, administrative staff and students and the international make up of its academic staff and students. It encourages integrated study programmes and cooperation between universities for study and research activities" (Dalziel, 2017: 2).

increase of English-taught Doctorate programmes is slightly less significant, from 20 in 2015 to 22 in 2019, three of which are jointly run with other international and European universities. In addition, this year the University of Padova offers, for the first time, a 6-year single-cycle degree programme in Medicine and Surgery whose courses are taught entirely in English (*ibid.*). Furthermore, the university has also recently started to provide some MOOCs or Massive Open Online Courses, which are taught in English precisely because they aim to reach a larger number of students from different geographical areas (Università degli Studi di Padova, 2019b). In general, the subject fields with the highest number of EMI courses are those of science, economics and engineering, as in other European and Italian universities (Università degli Studi di Padova, 2019a).

However, it should be noticed that the vast majority of lecturers at the University of Padova are L1 Italian speakers, who usually have little or no experience with the teaching of content subjects through English, as occurs in most Italian universities (Costa and Coleman, 2013; Guarda and Helm, 2016). Therefore, as soon as the university communicated its decision to offer EMI courses, a considerable number of lecturers began to get worried that their foreign language competence would be inadequate and would affect the quality of their teaching, so they contacted the University Language Centre looking for EMI support (Dalziel, 2017). However, due to the novelty and rapidity of EMI implementation, the Language Centre did not have any specific courses yet that could prepare them both linguistically and methodologically for the new teaching experience they were about to begin (*ibid.*). Unlike the general trend observed by Costa and Coleman in other national institutions (2013), the Language Centre decided to respond to the lecturers' requests and started to organise an experimental 30-hour course entitled "Content Teaching in English" that was to be carried out in the academic year 2011/2012 (*ibid.*). The following year, since the number of lecturers who wanted to participate in the course was enormous, the University Administration opted to expand and strengthen the quality of EMI support by financing the LEAP (Learning English for Academic Purposes) Project (Guarda and Helm, 2016). Both the Language Centre and the International Relations Office collaborated on the project, investigating the experiences and concerns of this university's pioneering EMI lecturers and coming up with training courses that could meet their needs (*ibid.*).

Although different course options were made available (a two-week summer course in Dublin, a nine-day summer school in Venice, a blended course combining face-to-face and online teaching for a period of five months and up to five individual sessions), what they did have in common was that all of them covered both language and teaching methodology (Dalziel, 2017). An analysis of lecturers' expectations of the LEAP course revealed that many of them wished not only to improve their English skills, especially in terms of pronunciation, fluency, grammar and vocabulary, but also to learn more effective and engaging teaching methodologies (Guarda and Helm, 2017). It has indeed been proven that having to teach in a foreign language might affect the lecturer's didactic skills "in the sense that they are less flexible in conveying the contents of the lecture material, resulting in long monologues, a lack of rapport with students, humour and interaction" (Klaassen and De Graaff, 2001: 282). Nevertheless, there was some initial hostility on the part of a few lecturers who thought that "it was not the Language Centre's job to teach them how to teach" (Dalziel, 2017: 140), but at the end of the course the majority of the participants stated that it had changed the way they considered English-medium instruction and had provided them with some useful teaching strategies (Guarda and Helm, 2017). Some of them even tried to apply these strategies in the classroom, by making the lesson less monologic and more interactive. For instance, they encouraged students to participate in the lesson by commenting on the content or asking more questions and they tried to engage them in group work and research projects (*ibid.*). As a result of the positive feedback from lecturers and their need for additional training, the Language Centre decided to keep providing EMI support mainly in the form of a 30-hour face-to-face course (Dalziel, 2017).

Another source of concern that should be addressed is the English language proficiency of the students attending English-taught courses and programmes at the University of Padova (Ackerley, 2017a). Generally speaking, a predominance of native or highly fluent speakers of Italian has to be expected in this kind of courses, since more than 95% of those enrolled in the University of Padova are Italian students (Università degli Studi di Padova, 2018a). Although the number of regularly enrolled international students is gradually increasing, from 2,380 in the academic year 2015/2016 to 2,532 in the academic year 2017/2018 (*ibid.*), they are still a minority. Similarly, the number of incoming exchange students is also rising, from 1,063 in the academic year 2015/2016 to

1,464 in the academic year 2017/2018 (Università degli Studi di Padova, 2018b), thus helping to make the university environment more diversified and multilingual, but still at a slow pace. Given these figures and considering that the English language proficiency of Italian students tends to be lower than that of international and exchange students, as shown by the most recent ACA study (2015), it is then reasonable to expect that adopting English as the language of instruction might turn out to be an obstacle to successful learning. Theoretically, EMI courses can be extremely beneficial to students, since they give them a chance to improve their English language skills and better prepare themselves for studying abroad and starting an international career after graduation (Ackerley, 2017a). However, if students do not have a sufficient level of English to cope adequately with the language demands of this type of courses, all these advantages are wiped out (ibid.), as will be further explained in the second chapter.

CHAPTER 2

English Medium Instruction and language proficiency

2.1 Is EMI teachers' and students' level of English good enough?

According to several scholars (Dearden, 2015; Galloway et al., 2017; Simpson, 2019), a good command of English on the part of both teachers and students is fundamental for the successful implementation of EMI courses and programmes at university level. However, as mentioned in the previous chapter, it is quite common for the English language proficiency of both parties not to measure up to the task, which makes the practice of EMI more demanding. Generally speaking, this phenomenon is particularly accentuated in Southern European countries, such as Greece (Tzoannopoulou, 2017), Italy (Guarda and Helm, 2016) and Spain (Dafouz, 2011), where English-medium education is still a relatively new practice (Wächter and Maiworm, 2002; 2008; 2015) and people tend to have lower levels of English language competence compared to the rest of Europe (Education First, 2019). This does not mean, however, that teachers and students in Northern and Central European countries do not regard English-medium teaching and learning as challenging tasks at all. On the contrary, they still find themselves struggling to cope with EMI, even if to a lesser extent, despite their higher proficiency in English, since they are still asked to carry out and follow a lesson in a language that is not their mother tongue (Airey, 2011; Airey and Linder, 2006). It can then be deduced that the quality of teaching and learning is always affected by the switching of the language of instruction, although it should be expected that the greater the mastery of English, the easier it becomes to participate successfully in EMI courses (Galloway et al., 2017; Guarda and Helm, 2016; Wilkinson, 2017). In order to make English-medium education more effective and accessible to everyone, it is therefore important to investigate the linguistic challenges that EMI teachers and students have to face inside and outside of the classroom, as this second chapter aims to do. In this way, it could be possible to develop specific tools and strategies to help them overcome language-related obstacles and achieve academic success.

2.1.1 Teachers' language proficiency

A significant shortage of linguistically qualified EMI teachers has been identified by the Oxford Centre for Research and Development in English Medium Instruction in conjunction with the British Council (Dearden, 2015). More specifically, between 2013 and 2014, Oxford researchers asked British Council staff in 60 countries around the world to consult with other local stakeholders in the field of education, such as university professors and policy makers, and complete a questionnaire about the implementation of EMI practice in their country of residence and work (ibid.). After investigating this area, more than 83% of the British Council respondents claimed, among other things, that several content teachers in the countries surveyed were lacking the appropriate language skills to teach their subject effectively through the medium of English (ibid.). They found that the absence of a clearly stated language level requirement for EMI teachers had indeed enabled even less English-proficient teachers to switch the language of instruction from their L1 to English, encouraged by those policy makers whose aspirations to economic growth, internationalisation and prestige have made them lose sight of the linguistic requirements that need to be met for EMI to be successful (ibid.). However, it should be noticed that only in some non-European countries, such as Ethiopia, India and Indonesia, the EMI teachers' language level was occasionally thought to be so basic that it could completely impede the teaching of an academic subject (Dearden, 2015). In addition, even in these less proficient countries, the younger generation of teachers seemed to be more at ease with English compared to their predecessors (ibid.), which makes EMI supporters feel confident about the future of this teaching approach.

Having to teach a subject in a foreign language always makes the teaching task more arduous because of the greater cognitive demands it places on the teachers (Vinke, 1995). However, it is more likely for teachers who are not highly proficient in that foreign language to feel limited and unfit for the job, especially if they also do not have much experience of teaching in a language other than their mother tongue (Airey, 2011). Furthermore, feeling pushed or forced to teach in English because of new university language policies aiming to promote the internationalisation of the institution makes things even worse, since in some cases teachers tend to agree to using English in the classroom because they think they do not have any other choice, not because they feel ready (Ashcraft, 2008; Carroll, 2015; Costa and Coleman, 2013). In addition, some

teachers have complained that they were given very short notice before their first experience with EMI and that they were not offered any specific training (Airey, 2011; Costa and Coleman, 2013). As a result, it is no surprise that they have reported feeling nervous the first time they had to teach their subject in English (Airey, 2011). Working with an unfamiliar language might indeed threaten their confidence as well as their sense of competence and authoritativeness because they might feel unable to show their full range of academic and professional skills (Carroll, 2015). In addition, EMI teachers have noticed that preparing themselves for the lesson usually requires more time and greater effort because, for instance, they might need to look up some terms and phrases in the dictionary in order to translate or adapt their teaching materials (Airey, 2011; Costa, 2017; Vinke, 1995). They might also have to organise their presentations more tightly because of their reduced ability to improvise in a foreign language (*ibid.*). Actually, some teachers are so frightened of having to deal with the unexpected during an English-taught lecture that they over-prepare by planning every minute of it beforehand (Carroll, 2015). However, over-planning can discourage students to participate in the lesson, as they might feel a sense of being just passive listeners who are not allowed to interrupt the flow of their teacher's speech (*ibid.*)

Despite their willingness to deal with the increased workload and preparation time required by EMI, several teachers feel that adopting English as medium of instruction might still cause a decrease in the quality of their teaching performance (Klaassen and De Graaff, 2001; Vinke, 1995). For instance, some of them have noticed that they tend to speak more slowly when presenting content in English and are worried that this might result in a decrease in the amount of subject matters covered during their course, even though researchers have found that such a decrease is not particularly significant (Thøgersen and Airey, 2011; Vinke, 1995). Their slower speech rate might be caused by fluency problems, since teachers tend to hesitate, make false starts and use filler phrases to a greater extent when they are not using their native language because they need more time to find the right words to express their ideas (Airey, 2011). Otherwise, this could also be seen as an intentional attempt to adjust their rate of delivery to the students and their language levels, as accommodation is not unusual in pedagogical settings and can have positive effects on students' comprehension (Thøgersen and Airey, 2011). In addition, teachers are afraid of expressing themselves less clearly and less accurately in

English, thus making the content more superficial and hindering the students' ability to understand and process the information presented (Vinke, 1995). This assumption turns out to be true in some cases, as it has been noticed that not only do they use fewer words in English, thus creating shorter and less elaborated presentations, but they also try to avoid complex sentence structures as well as words that are difficult to pronounce, replacing them by simpler ones (*ibid.*). Furthermore, they tend to use fewer discourse structuring devices, such as discourse markers, and are less inclined to present the same concepts in different ways, for instance by rephrasing or summarising them, using synonyms and giving examples, which are all important explanation strategies (*ibid.*). Many of them are also especially concerned about having a non-native accent and intonation, and even though this might actually turn out to be an obstacle to lecture comprehension in some cases (Carroll, 2015; Hellekjær, 2010; Tzoannopoulou, 2017), it is not unusual for students to find it helpful and reassuring instead, since some of them might feel relieved to be provided with an attainable language model (Costa, 2017).

Finally, it is also worth mentioning that the teachers' expressiveness as well as their relationship with the students might suffer from the use of English in the classroom (Carroll, 2015; Klaassen and De Graaff, 2001; Vinke, 1995). In the field of education, expressiveness can be defined as a set of "teacher behaviours which are assumed to assist in generating student interest or in promoting student attention" (Vinke, 1995: 97). It includes vocal inflection as well as body language, such as body movement, use of gestures, facial expressions and eye contact (Brown and Atkins, 1988: 23). It has been noticed that EMI teachers tend to make use of expressive strategies less frequently, probably because they are not completely at ease when lecturing in English and they need to concentrate to a greater extent on what they are saying (Vinke, 1995). Their intonation and speed of delivery are usually regular and monotonous (*ibid.*) and they make fewer emphatic pauses because they are more afraid of silence, as they are worried that their listeners would consider it as a sign of a fluency problem (Airey, 2011). Their body language does not seem to work well either, since they tend to be more static and make less use of gestures (*ibid.*). Furthermore, they tend to interact less frequently with their students because they are afraid of not being able to moderate classroom discussions, answer their students' questions on the spot and carry out more informal conversations with them (Carroll, 2015; Guarda and Helm, 2016; Vinke, 1995). Consequently, lessons

often become long and tedious monologues performed by the teacher and characterised by high levels of formality, which makes them more similar to academic prose rather than oral discourse (Thøgersen and Airey, 2011). Teachers are indeed less likely to tell a joke, make a digression, share personal stories or funny anecdotes when lecturing in English because it is harder for them to be spontaneous (Carroll, 2015; Vinke, 1995). Unfortunately, this lack of humour and spontaneity has been proven to have negative effects on students' attention and lecture comprehension (ibid.).

2.1.2 Students' language proficiency

Several researchers have found that students who take part in EMI courses and programmes often do not have adequate language skills to cope with the challenges of learning through a foreign language (Airey and Linder, 2006; Costa and Coleman, 2013; Guarda and Helm, 2016; Gundermann, 2014; Tzoannopoulou, 2017; Zegers, 2008). In some cases, students might not be aware of their linguistic limitations, therefore they tend to lay the blame for any lack of understanding occurring during lectures entirely on their teachers' language competence, especially on their ability to mediate content through the medium of English (Airey and Linder, 2006; Galloway et al., 2017). In other cases, they might be fully conscious of their difficulties being caused by their own incomplete and inadequate knowledge of the English language and are worried that this might have a damaging effect on their academic performance and their learning in general (Ackerley, 2017a; Doiz et al., 2011). This might even discourage them to the point of giving up English-taught programmes and deciding to pursue different academic and career paths (Al-Bakri, 2013). However, whether their worries are well-founded or not is yet to be determined, since the studies carried out so far have produced contrasting results. While some of them have confirmed that studying an academic subject in a foreign language leads to lower exam scores due to the increased difficulty of concept and language acquisition (Byun et al., 2011; Sert, 2008), others have not identified any significant difference between EMI and non-EMI students in terms of learning and academic results (Dafouz et al., 2014; Dafouz and Camacho-Miñano, 2016). However, what most researchers seem to agree on is that EMI students have to make a greater effort to achieve the same results as non-EMI students and that they might also need to change their study

habits and employ different coping strategies to compensate for their language difficulties (Airey and Linder, 2006; Vinke, 1995).

2.1.2.1 Listening skills

Although the range of difficulties attributable to EMI students' linguistic weaknesses is broad, the main concern of most of them seems to be lecture comprehension (Ackerley, 2017a; Kym and Kym, 2014; Sert, 2008). EMI students are indeed afraid of lacking the appropriate listening skills to fully understand the academic content of lectures that are delivered in English, and as studies have shown, they usually do (Hellekjær, 2010; Tzoannopoulou, 2017). Generally speaking, listening comprehension is probably one of the most difficult skills to acquire in a foreign language, as it consists in "an active process of constructing meaning" that requires listeners to make use of both their linguistic and non-linguistic knowledge to decode and interpret an acoustic input (Buck, 2001: 31). In other words, listeners need to be able to recognise phonemes, identify word-units, apply syntactic and discourse rules to form larger units of meaning such as sentences and texts, and draw from their knowledge of the topic, the context and the world around them to construct and test hypotheses about what is being heard (*ibid.*). Therefore, given the fact that EMI students are required to deal with the unfamiliar sounds, vocabulary and grammar of a foreign language while learning new complex academic concepts, it is no surprise that they find lecture comprehension difficult and time-demanding. However, since the continuity and rapidity of speech acts leave little time to build, check and repair understanding, those EMI students that need to ponder over unfamiliar words and unclear sentence structures for a few seconds can easily lose track of what is being talked about (Buck, 2001). In addition, considering the real-time nature of spoken language, students only have one chance at comprehension, as they cannot pause, rewind and listen to their teachers' explanation a second time (*ibid.*). They could ask their teachers to repeat, but studies have shown that students are usually unwilling to ask questions during English-medium lectures (Airey and Linder, 2006; Hellekjær, 2010; Tzoannopoulou, 2017).

More specifically, EMI students have problems with recognising and understanding unfamiliar subject-specific terminology and phraseology in English, which might impair their overall comprehension of lecture content (Ackerley, 2017a; Hellekjær,

2010; Tzoannopoulou, 2017). Actually, this problem is not unusual even in first-language lectures due to the novelty and complexity of the topics covered, but it is accentuated by the use of a foreign language as medium of instruction (Hellekjær, 2010; Tzoannopoulou, 2017). In order to prevent this from happening, it would be useful for students to linguistically prepare for the lectures in advance by engaging in preparatory reading and looking up unknown terminology in a dictionary, so that “the lectures can then be used for confirmation and clarification of what students have already seen” (Airey and Linder, 2006: 559; Gundermann, 2014: 237). If they have time, they could also do some follow-up reading in order to support and deepen their learning (ibid.). Furthermore, EMI students struggle to take notes while listening to lectures, as they end up spending more attentional resources on the process of writing rather than paying attention to their lecturers’ explanation of content (Hellekjær, 2010; Tzoannopoulou, 2017). Consequently, lecturers might want to consider the idea of providing students with printed slides, handouts and personal notes, so that they do not need to take full notes in class (Airey and Linder, 2006). Finally, some EMI students also find it difficult to get used to their lecturers’ accent and rate of delivery, and this seems to add to their comprehension problems (Hellekjær, 2010; Tzoannopoulou, 2017). Usually, it is not a matter of pronouncing words incorrectly, but of getting word stress, sentence stress and intonation wrong, which “have a direct impact on how listeners chunk and interpret discourse segments” and “can carry considerable meaning that supplements, or in some cases contradicts, the literal meaning of the words” (Buck, 2001: 38). As for their lecturers’ speech rate, students usually perceive it to be too fast because of their own lack of L2-input processing automaticity, not because the lecturers actually do speak too fast, since the problem tends to lessen as the course progresses (ibid.). Familiarising with the shift in medium of instruction and with the lecturers’ way of speaking can then take a while. Until then, using explicit discourse-structuring devices and supporting presentations with visual aids can help students follow their lecturers’ train of thought, which in turn facilitates their learning (Airey and Linder, 2006).

2.1.2.2 Reading skills

On the contrary, EMI students tend to be less worried about their English reading skills, even though a high level of reading proficiency is thought to be a key factor in determining academic success, since it is quite common for all university students regardless of the language they are being taught in to spend a large amount of time reading textbooks and journal articles (Shaw and McMillion, 2008). In the case of EMI students, reading proficiency becomes even more important because it facilitates lecture comprehension and vocabulary acquisition (Airey and Linder, 2006; Gundermann, 2014), as previously discussed. A possible reason for their lack of concern is that some of the students might feel reassured by having previously achieved high scores on English reading comprehension tests, but the kind of reading that is effective for completing those tests differs greatly from what they are asked to engage in during English-taught university courses (Shaw and McMillion, 2008). As a matter of fact, not only are they different in terms of reading purposes, but they also involve distinct cognitive processes (Carver, 1990). During reading comprehension tests, students are normally asked to read a text and answer a set of questions about it under time pressure, which means that they cannot read each sentence carefully, but they have to be selective by skimming and scanning through the text in search for relevant information (*ibid.*). Conversely, in a university course, they are asked to read for learning and memorising information, which entails greater concentration, a thorough understanding of the concepts presented in the text and sufficient re-reading and repeating of the content to store it in memory (*ibid.*). When such a complex task needs to be carried out in a foreign language, it is no surprise that the quality of the comprehension as well as the speed of reading might be negatively affected (Fraser, 2007; Shaw and McMillion, 2008).

There are two factors that might influence EMI students' reading proficiency. On the one hand, a limited knowledge of the language being read, especially with regard to its vocabulary and syntax, can lead to vagueness and miscomprehension, which is even more likely to occur when the readers do not have much background knowledge on the topic dealt with in the text (Bernhardt, 2005; Karlgren and Hansen, 2003). On the other hand, lower-order text-processing skills, such as word recognition, semantic encoding and syntactic parsing, are likely to be less automatized in a foreign language regardless of the readers' language level, thus causing the overall comprehension process to slow

down (Carver, 1990; Fraser, 2007). This is due to the fact that our working memory is a capacity-limited storage system that cannot retain information for a long time (Smith, 2004). Consequently, when the decoding of basic linguistic information has not been effectively internalised or stored in long-term memory, fewer attentional resources can be allocated towards higher-order processing devoted to meaning construction, which is a cognitively more complex and demanding task (Fraser, 2007). It can then be deduced that speed and fluency are not just “an outgrowth of skilful reading, they are necessary for it happening”, since they facilitate accuracy and completeness of comprehension (Adams, 1994: 844). This does not mean, however, that L2 readers cannot achieve native-like comprehension skills. As several studies have proven (Fraser, 2007; Shaw and McMillion, 2008), L2 readers can equal L1 readers in terms of comprehension outcomes provided that they are given additional time. EMI students should not then underestimate the increased complexity that reading subject matter texts in English entails and should be prepared to devote more time to studying them, which might not always be possible due to their busy schedule (Shaw and McMillion, 2008). If this is the case, EMI students might have to deal with the potential consequences of a hasty reading, such as lack of understanding and more superficial learning (*ibid.*).

2.1.2.3 Speaking skills

As for their speaking skills, a large number of EMI students claim to feel very anxious when they have to use English in class due to their actual or perceived low level of English oral proficiency. This appears to reduce their confidence and self-esteem while increasing their fear of negative evaluation from teachers and peers (Ackerley, 2017a; Kudo et al., 2017; Lei and Hu, 2014). They are indeed particularly afraid of making mistakes while speaking in front of the class and being laughed at or considered not good enough (Öztürk and Gürbüz, 2014). As a result, interaction between teachers and students and among students is greatly reduced in EMI classes (*ibid.*). This means, for instance, that students are reluctant to ask and answer questions during lectures, which is concerning because questions are irreplaceable tools for ensuring understanding and learning (Airey and Linder, 2006). If this is the case, it could then be useful to spare some time at the end of the lectures for students to come forward and ask questions in a more relaxed and informal

way, even allowing them to use their L1 if necessary (ibid.). This lack of interaction becomes even more obvious when students are asked to participate in a class discussion, which is a task that requires them to express their opinions spontaneously, as they are not provided with enough time to think about how to arrange their ideas in advance in order to construct a coherent and cohesive speech and avoid language mistakes (Kudo et al., 2017; Öztürk and Gürbüz, 2014). It is believed that using small-group discussions to come up with answers to the teachers' questions could help even less proficient EMI students to participate more actively in the lesson, as they "allow students to check their understanding in a less threatening forum than the whole class" (Airey and Linder, 2006: 559). However, some of the students might take advantage of this exercise to switch back to their L1, so teachers might need to keep reminding them to speak in English (Ashcraft, 2008).

Creating a positive and encouraging class environment that fosters active participation can give EMI students' more chances to practise and improve their ability to speak about their specialist subject in English (Ackerley, 2017a; Maíz-Arévalo and Domínguez-Romero, 2013; Öztürk and Gürbüz, 2014), which might then help them feel less stressed and perform better in oral exams. During oral examinations, students are indeed put under great strain, as they cannot avoid answering their teacher's questions or risk making too many mistakes or they would fail the test, so their language weaknesses are likely to come to the fore (Bowles, 2017). More than anything else, EMI students find it difficult to express themselves in English, especially when they are trying to orally describe subject-specific concepts (Airey, 2010; Hincks, 2010; Karakaş, 2017). Evidence of this can be found by comparing students' L1 and L2 oral performances in terms of speaking rate and mean length of runs, that is "the amount of speech, in syllables, between pauses" (Hincks, 2010: 7). In so doing, for instance, Hincks (2010) has found that Swedish students speak on average 23% slower and have 24% shorter runs when asked to give a planned presentation in English, whereas Airey (2010) has claimed that these figures rise up to 45% and 33%, respectively, when Swedish students are asked to explain specialist concepts on the spot. Both scholars agree on assuming that these differences between L1 and L2 oral performances might become even more marked when considering groups of students who are less fluent in English than Swedes, who are generally thought to be advanced English speakers. This might turn out to be a problem

because, when speaking time is limited to a certain number of minutes, as might happen during oral exams, the students' slower speaking rate might result in a decrease in the amount and quality of the information content delivered during their speech (ibid.). In addition, Airey (2010) has taken into consideration another important factor, that is involuntary code-switching, which tends to occur more often when EMI students try to use the specialised language of their field of study rather than when they are engaged in non-specialised conversations and might indicate a lexical gap in disciplinary English.

2.1.2.4 Writing skills

As for their writing skills, EMI students usually lack the specific competences for writing about their discipline of study in a proper manner, which consequently means that written tasks turn out to be particularly challenging for them (Arnbjörnsdóttir and Prinz, 2017; Gundermann, 2014; Hellekjær and Westergaard, 2002). During lectures, they do not have many chances to put their writing skills to the test, as they mainly have to listen to their teachers and write down notes intended for their personal use. Their writing style can then be informal and highly simplified for the sake of brevity, for example, by means of omission of articles and pronouns, by using abbreviations, symbols and nominalisations, and by shortening sentences (Janda, 2009). Therefore, it is especially during formal written assignments that their writing problems become evident (Gundermann, 2014). It should be mentioned, however, that written examinations are not considered a common practice in all academic contexts. In Italian universities, for instance, students are not expected to write much other than their final dissertation, since oral examinations are the predominant form of assessment used regardless of the language students are taking the exam in (Kruse et al., 2016). Conversely, countries such as Denmark consider written tasks as extremely valuable for ensuring both learning effectiveness and assessment reliability (ibid.).

In some contexts more than others, EMI students might then be asked to answer open-ended questions about topics covered in class under exam conditions or they might be required to produce and submit different types of texts as coursework, such as essays, book or article reviews, laboratory reports, case studies, portfolios and dissertations. The genre of text students have to write usually depends on the discipline they are studying,

since each disciplinary community finds some genres more suitable than others to meet its communicative needs (Hyland, 2006). However, EMI students are not always familiar with the distinctive features of the genre of academic writing required by their field of study, which makes them feel frustrated and unprepared (Arnbjörnsdóttir and Prinz, 2017; Breeze, 2008). In addition, the use of English makes it more difficult and time-demanding for them to go through all the necessary steps for approaching these tasks, such as carrying out some research on the topic of their assignment autonomously, organising the information retrieved in a clear and logical way, designing a small-scale practical experiment or a survey to support the trends identified in the literature, and reporting and analysing their findings (ibid.). Evidence of this can be found in the fact that many of them end up committing plagiarism, even unintentionally (Ashcraft, 2008; Irfan, 2018). Above all, however, their main worry remains that of not being able to express their ideas clearly and being misunderstood by their teachers, since there is no space for clarifications in written exams (Gundermann, 2014). For this reason, in several cases, EMI students have admitted that they would welcome any kind of support that they could get from their teachers to improve their academic writing skills (Arnbjörnsdóttir and Prinz, 2017; Breeze, 2008).

2.1.2.5 Linguistic weaknesses, self-confidence and motivation

As previously discussed, a limited command of the four basic language skills (listening, reading, speaking and writing) and a poor knowledge of subject-specific English are likely to impair EMI students' learning in several ways. In addition to hindering their understanding of the subject matter, their participation in class and their success in oral and written examinations, they could also undermine EMI students' linguistic self-confidence by making them afraid of not being equal to the task of learning complex academic subjects through English (Studer and Konstantinidou, 2015). Even though it was demonstrated that difficulties attributable to linguistic weaknesses do not always obscure the advantages of EMI (Ackerley, 2017a), there are cases in which they might lead students to state that they would not choose to study in English, if they had a choice, and that they would learn more if their courses were taught in their native language (Studer and Konstantinidou, 2015). Perceptions of low language proficiency might indeed

correlate with negative attitudes towards English-medium courses and programmes as well as towards the English language itself, which in turn seem to correspond to lower levels of student motivation (Lei and Hu, 2014; Studer and Konstantinidou, 2015). Past research on motivation, with particular reference to the theories developed by experts in the field such as Atkinson and Raynor (1974), Bandura (1993) and Dörnyei (1998), has indeed proven that people who do not have faith in their own capabilities to perform a certain task are less motivated to invest a great amount of effort when approaching it or they tend to give it up altogether, since they end up perceiving that task as a personal threat. Even if they do recognise the extrinsic value of the task and its usefulness for reaching other goals, the costs it entails in terms of effort, time, anxiety and fear of failure might indeed become overriding (ibid.). Consequently, succeeding in what they are doing, which is obtaining good learning outcomes in the case of EMI students, becomes extremely difficult (Dörnyei, 1998).

Looking at the matter from a scientific point of view, Ting (2010) explains that when students consider the learning task as intimidating and above their capabilities, their amygdala, which is a limbic structure responsible for assessing the emotional value of situations, immediately turns off higher-level cognitive processing and suggests a flight response to what it considers a fearful and stressful situation. However, students usually refrain from fleeing the classroom because their prefrontal cortex intervenes and forces them to sit through the lesson despite its unpleasantness (ibid.). Among other things, the prefrontal cortex is indeed responsible for executive control, that is to say that it coordinates “the complex human behaviours which have less to do with species survival and more to do with what *Homo sapiens sapiens* social living is all about” (Ting, 2010: 5). In addition, for the purposes of this study, it is worth mentioning that this brain region is also held accountable for managing short-term working memory, which enables students to hold the new input received during lectures in their mind long enough to turn it into knowledge that will be stored in long-term memory to be recalled whenever necessary (ibid.). It can therefore be deduced that, if students’ prefrontal cortex is too busy trying to prevent them from surrendering to fear and giving up trying to complete what they consider to be overly complex tasks, their working memory, and consequently their learning capacity, are both compromised (ibid.). It follows that providing EMI

students with linguistic support is extremely important, as it can make their learning less stressful and frightening and therefore more effective.

2.2 Training for teachers and language support for students

After having analysed the ways in which the adoption of a foreign language as medium of instruction might have negative effects on the processes of teaching and learning, there is no doubt that providing both teachers and students with training and support is extremely important for enabling them to participate in EMI courses and programmes successfully (Clark, 2017). As far as teacher training is concerned, several universities across Europe are starting to offer specific courses to prepare teachers both linguistically and methodologically for EMI practice (Costa, 2015), such as the University of Padova in Italy (Dalziel, 2017) and the University of Delft in the Netherlands (Klaassen and De Graaff, 2001), to name but a few. As was briefly mentioned in the previous chapter, teachers might indeed greatly benefit from training courses that focus on improving their pronunciation, intonation, lexical and grammatical accuracy as well as on familiarising them with more engaging and interactive teaching strategies (Dalziel, 2017). Teachers may also appreciate the chance to learn more about how to design and develop their own teaching materials and assessment tasks in English (Costa, 2015). Furthermore, they could find it useful to acquire also some basic knowledge of second language acquisition processes and intercultural communication issues that would help them understand the struggle of their non-native English-speaking students and address their needs more effectively during lectures (Klaassen and De Graaff, 2001). While some universities have limited themselves to offering EMI training, others have also developed specific tests to check whether teachers have mastered all the necessary skills to start teaching through the medium of English, such as the TOPTULTE (Test of Performance for Teaching at University Level Through the Medium of English) by the University of the Basque Country and the TOEPAS (Test of Oral English Proficiency of Academic Staff) by the University of Copenhagen (Costa, 2015). Both testing EMI teachers' competence and offering them tangible support whenever they need it have turned out to be fundamental for ensuring quality in EMI courses and programmes and have been fully appreciated by all the parties concerned (Macaro, 2018).

EMI students have often stated that they would also welcome being provided with language support to cope with the demands of their English-taught courses (Ackerley, 2017a; Studer and Konstantinidou, 2015), and they generally expect this kind of support to come from their EMI teachers (Galloway et al., 2017). However, this is hardly ever the case, since most EMI teachers are reluctant to teach language (Airey, 2011; Ashcraft, 2008; Carroll, 2015; Wilkinson, 2017). Recent studies have identified four main reasons that could explain their reluctance. In some cases, EMI teachers prefer to teach content only, without paying any attention to language-related issues, because they believe it is not their job to teach English (Airey, 2012). They might want to be positive discourse models for their students and expose them to good examples of language use, but they do not take any responsibility for the development of their students' language skills, as they claim that they are not language teachers and there is usually no explicit mention of language goals in their syllabus (*ibid.*). Some teachers also justify themselves by stating that students should already have reached independent-user level in English by the time they start their university courses, as they are expected to start approaching the language at primary school (Smit and Dafouz, 2012; Uys et al., 2007). In other cases, EMI teachers do not feel competent enough in their knowledge of the English language to teach their students how to correct their pronunciation, spelling, grammatical and stylistic mistakes (Airey, 2011; Uys et al., 2007). Even if they do take training courses to improve their own general and subject-specific language skills, EMI teachers never end up considering themselves as language experts, so they continue to prefer not to deal with language issues that would make them feel uncomfortable in the classroom (Wilkinson, 2017). Therefore, as long as their students' speech or written text is understandable, they tend not to make them notice their mistakes at all as well as they hardly ever consider them when it comes to assigning grades (Airey, 2011; Uys et al., 2007). Another reason commonly advanced by teachers is the lack of time, since they argue that their syllabus is so vast that it leaves little room for developing students' language skills (Ashcraft, 2008; Carroll, 2015). Finally, some of them also claim that the heterogeneity in the students' command of English makes it more challenging to provide them with suitable language support, as such support should be diversified according to the students' different language levels (Wilkinson, 2017).

Several researchers, however, seem to disagree with EMI teachers' decision to leave language-related issues behind. For instance, Airey (2012) and Northedge (2002) have strongly questioned the idea that it is not EMI teachers' job to teach English, since they believe that all teachers are language teachers and all university courses involve the integration of content and language teaching, even in monolingual settings. This is due to the fact that language is thought to have an active role in constructing and representing disciplinary knowledge (Halliday and Martin, 1993; Lemke, 1990). Therefore, "becoming a functioning participant within a specialist discourse community" is considered to be crucial to being able to develop a deep knowledge of a subject and to becoming a recognised expert in a specialised field (Northedge, 2002: 252). When they begin a university course, however, students are generally newcomers to the symbolic, syntactic and conceptual systems used by the discourse community of their discipline of choice, so they rely entirely on their teachers to be guided in the process of internalising the specialised terminology, discourse rules and frames of reference relevant to their subject field (ibid.). In order to be successful at it, students need to put what they have learnt into practice and try to produce meaning on their own, by talking or writing about subject-related concepts met in class or while studying at home (Lemke, 1990). It is precisely their teachers' job to give them the opportunities to put their discourse competence to the test and to provide them with constructive feedback to increase their mastery of literacy in that subject area (Northedge, 2002). Their key role as "discourse guides" persists even when they decide to teach in a foreign language, although it is true that it becomes more challenging and uncomfortable (Airey, 2011; 2012). In this case, then, a strategic collaboration between content teachers and language teachers could be of great help (Carroll, 2015; Lasagabaster, 2018).

Up until now, however, this strategy of team teaching has rarely been exploited in European universities and English language teachers have mainly contributed to facilitating EMI programmes by working on their own (Lasagabaster, 2018). More specifically, they are usually asked by universities and language centres to provide EMI students with some general language support in the form of English for Academic Purposes (EAP) courses (Carroll, 2015). Most students, however, have reported to be largely dissatisfied with these EAP courses because they do not sufficiently prepare them for attending their EMI courses (Karakas, 2017; Kirkgöz, 2009). In many cases, EAP

support consists indeed in generic and decontextualised academic skills training, as it is expected to be the students' job to apply and adapt those skills according to the specific requirements of their discipline of study, which most of them find very difficult to do (Carroll, 2015; Kirkgöz, 2009). This comes as no surprise, since academic skills cannot always be transferable from discipline to discipline because academic discourse is not “a single uniform and monolithic entity, differentiated merely by specialist topics and vocabularies”, but it is “a multitude of practices and strategies ... crafted within communities” that have different ideas about what is worth communicating and how it should be communicated (Hyland and Bondi, 2006: 7). For this reason, in addition to EAP courses, EMI students should also be offered English for Specific Purposes (ESP) courses, which are generally more focused on language aspects that are characteristic of a particular speciality and profession (Lasagabaster, 2018). On top of that, universities should also consider the idea of establishing team teaching as a systematic practice, since language teachers could help content teachers to become aware of the importance of language in EMI programmes and to recognise their key role as “discourse guide”, thus motivating them to include language aspects in their lectures (*ibid.*). They could also support content teachers in identifying what the students' main linguistic problems are and how to tackle them (Costa, 2012). Even if this strategy might involve additional workload for teachers and costs for institutions, researchers believe that these are not insurmountable obstacles and that the benefits for all the parties concerned, but especially for EMI students, will outweigh the pragmatic reasons for opting not to foster team teaching in EMI programmes (Carroll, 2015; Lasagabaster, 2018).

2.3 Making English Medium Instruction more similar to CLIL

Trying to eradicate the dichotomy between language and content in EMI courses and programmes entails making the EMI approach more similar to CLIL, which is a change that several scholars wish to see reflected in the policies and practices of all those universities interested in the implementation of EMI (Costa, 2012; 2017; Guarda and Helm, 2016; Hellekjær and Hellekjær, 2015; Moncada-Comas and Block, 2019; Pulcini and Campagna, 2015). One of the reasons for offering English-taught courses is indeed that of improving the students' language competence, thus enabling them to succeed in

their academic career and making them fit for the global labour market (Wilkinson, 2004; 2013), but such a result cannot be obtained if language learning continues to be considered as a by-product of EMI (Hellekjær and Hellekjær, 2015). According to Moncada-Comas and Block, it would indeed be “naïve” to think that language learning could take place “by osmosis, simply via exposure to content in English due to EMI’s immersive nature” (2019: 2). It is true that English-taught content lectures are an important source of language input for students, but such input should be comprehensible in order to be of use in terms of language acquisition (Krashen, 1985), which means that the linguistic structures students are exposed to should be just slightly beyond their current level of English knowledge ($i + 1$), which is not always the case in EMI courses considering the difficulties students have reported to experience. Furthermore, even if students manage to understand the message contained in the input, they are not always able to figure out the rules of new linguistic structures by themselves (Gregg, 1984). It follows that unattended learning can have very little or no benefit for language acquisition (Kellogg and Dare, 1989). Therefore, EMI teachers are suggested to follow CLIL teachers’ example and devote some lecture time to focusing on language form, thus treating language not only as a mere tool, but also as an object of study (Costa, 2012; Moncada-Comas and Block, 2019).

EMI teachers who have systematically integrated the teaching of some language issues into their lectures are in short supply, but Costa has identified six lecturers teaching scientific subjects through English at three different Italian universities who have shown “some degree of linguistic interest and awareness” (2012: 30). In her small-scale study, Costa distinguishes between two main categories of focus on form (FonF) that may occur during EMI lectures, which are pre-emptive FonF and reactive FonF. While the former is teacher-initiated, which means that EMI teachers spontaneously decide to draw their students’ attention to some linguistic elements that, according to their experience and intuition, might be problematic, the latter arises from students’ overtly asking questions about unknown terms and phrases and making language mistakes that EMI teachers might want to correct (Costa, 2012). However, considering students’ unwillingness to participate in EMI lectures (Airey and Linder, 2006; Hellekjær, 2010; Tzoannopoulou, 2017) and teachers’ discomfort in correcting their English mistakes (Airey, 2011; Uys et al., 2007), it should be expected that the amount of reactive FonF might be very little or

non-existent in EMI classes, so it should be especially the amount of pre-emptive FonF that indicates how much integrated language and content are. This assumption has been confirmed by Costa's research findings (2012), which have also revealed that there are different types of pre-emptive FonF: lexical FonF, grammatical FonF, typographical input enhancement and code-switching. In other words, the EMI teachers interviewed by Costa have moved the focus of the lesson from content meaning to linguistic form mainly by explaining subject-specific terms and providing students with practical examples, dealing with some grammar aspects, mostly the use of modal verbs, suggesting students to underline keywords and new expressions in the handouts used in class or putting them on the screen, and translating some words or phrases in Italian (*ibid.*). However, Costa concludes by saying that "we are certainly still a long way away from a balance between language and content objectives" (2012: 42).

Similar results can be found in Moncada-Comas and Block's case study (2019), which was carried out at a Catalan university and consisted in analysing the EMI experience of one teacher only through interviews and classroom observations. With such a degree of focus, these scholars were able to gather more in-depth and detailed information about the teacher's background, his identity and self-positioning as an EMI teacher, and his teaching practices (*ibid.*). Jaime, the pseudonym used to protect the teacher's identity for privacy reasons, is a bilingual speaker of Spanish and Catalan who has voluntarily decided to teach his Agronomic Engineering course in English. He seems to be familiar with the language, since he is used to writing academic articles and holding conferences in English (*ibid.*). Nevertheless, he thinks that he has not received enough professional training in English to teach pronunciation, grammar and syntax rules to his students. Besides, he does not consider language teaching as one of his professional responsibilities, since he positions himself as a teacher of content and not as a teacher of language. By teaching content in English, he simply "helps students stay in touch with the language" (Moncada-Comas and Block, 2019: 5). Jaime's beliefs seem then to be in line with the trends identified by Airey (2011; 2012) and other scholars (Ashcraft, 2008; Carroll, 2015; Uys et al., 2007; Wilkinson, 2017), but the same cannot be said of his teaching practices, since classroom observations have revealed that he does make use of a combination of lexical FonF and code-switching, which are clearly strategies aimed at language teaching (Moncada-Comas and Block, 2019). In particular, it seems that Jaime

mainly switches to Spanish to translate subject-related terminology and, when explicitly asked about it, he admits that he does so mainly to ensure the comprehension of disciplinary content and to teach specialised vocabulary in both languages (ibid.). In this case, then, the lecturer “assumes, albeit very slightly, the role of English teacher”, even if he is not fully conscious of doing so (Moncada-Comas and Block, 2019: 11).

On the contrary, there have also been cases in which EMI teachers have deliberately devoted class time to developing their students’ language skills. For instance, several EMI teachers at the United Arab Emirates University have proven to be very sensitive to their students’ linguistic needs and have chosen to support their content and language learning by using targeted English to Arabic translations, suggesting students to use also monolingual dictionaries, and encouraging them to create their own flash cards to learn vocabulary (Ashcraft, 2008). Similarly, a group of EMI teachers at the University of Málaga has designed and implemented an innovative project aimed at meeting the need for language support that their institution was failing to provide (Barrios et al., 2016). More specifically, in addition to language training for EMI teachers and constant monitoring and evaluation of EMI programmes, this project has fostered the provision of different types of language support for EMI students (ibid.). For instance, students have been given access to a large amount of textual and multimedia resources in English as well as to online glossaries of specialised terms organised by subject topics, which include equivalents in Spanish, examples of use and links to audio files for pronunciation assistance (ibid.). They have also been invited to participate in workshops delivered by language experts to improve their academic skills (ibid.). Furthermore, it has been decided that students from the Degree of English Studies should provide language support to EMI students and teachers as part of their Practicum Placement (*Prácticas Externas*). For example, they are asked to assist teachers in preparing and delivering lectures in English, run workshops on language issues autonomously and organise conversation sessions with EMI students on subject topics covered in class. They might also help the teachers with the production of recordings for the online glossaries and with the search for additional resources that EMI students could use to deepen their knowledge and understanding of the subject matter (Barrios et al., 2016).

Another good example of focus on language is that of EMI teachers at the University of Cape Town in South Africa, who have contributed to the creation of online

multilingual glossaries aimed at helping students understand and use the specialised terminology of their discipline of study both in English and in their native language (Madiba, 2014; Paxton, 2009). In this case, the provision of an additional aid did not depend on the initiative of individual teachers, but of the whole University, which launched this project in 2007 as a response to the Language Policy for Higher Education adopted by the South African government in 2002 (ibid.). The glossaries provide equivalents of English terms in up to ten languages due to the highly diversified linguistic background of students. They also include definitions, pictures, graphics, audio files and they give access to specialised blogs and forums (Madiba, 2014). The choice of terms to be included in the glossaries was guided by the analysis of corpora of specialised texts by means of WordSmith Tools (ibid.). Even though it is not widely used yet, corpus linguistics can actually turn out to be particularly valuable in EMI contexts, as will be further explained in the next chapter.

CHAPTER 3

Data-driven learning and English Medium Instruction

3.1 Defining data-driven learning and its benefits

The term “data-driven learning” was first coined by Tim Johns, who believed that “the language-learner is also, essentially, a research worker whose learning needs to be driven by access to linguistic data” (1991: 2). Specifically, the tools which provide language learners with direct access to linguistic data are those of corpus linguistics, namely corpora and corpus analysis programmes, which will be described below. When applied to the classroom environment, this inductive approach to teaching and learning entails a significant change of roles and responsibilities on the part of both teachers and students. This means, in other words, that students can no longer be passive receivers of knowledge from their teachers, as they are asked to carefully analyse samples of authentic language use with the aim of recognising language patterns and working out language rules for themselves (*ibid.*). For this reason, in one of his later works, Johns also compared language learners to detectives who have to find the clues to formulate and test their linguistic hypotheses, as can be drawn from his well-known slogan “Every student a Sherlock Holmes” (1997: 101). On the contrary, teachers are expected to take a step back in order to let students get more involved in their own learning. They still play a fundamental role, even though no longer as transmitters of ready-made knowledge, but rather as guides, coordinators and facilitators of student hands-on learning (Johns, 1991). Consequently, they also need to come to terms with not knowing in advance exactly what learners will discover during their search, which may then require them to follow their syllabus less strictly and be ready to deal with unplanned topics during the lesson (*ibid.*).

This discovery-based approach to language learning seems to be compatible with CLIL principles because, as discussed in the first chapter, CLIL tends to promote “education through construction, rather than instruction” (Marsh, 2006). Unfortunately, the same cannot be said for EMI practices, since EMI lessons tend to be far less interactive than CLIL lessons and are often characterised by long and formal monologues performed

by the teacher, which may not best promote students' attention, comprehension and learning (Carroll, 2015; Thøgersen and Airey, 2011; Vinke, 1995). Therefore, pursuing the aim of making EMI more similar to CLIL, the present study suggests applying a more student-centred approach to EMI contexts by drawing inspiration from data-driven learning, as will be exemplified by means of a case study in the following chapter. Data-driven learning seems indeed particularly suited for higher education, since it promotes students' autonomy and responsibility for their own learning (Huang, 2011; Sah, 2015), which are some of the wished-for outcomes of universities (Wilkinson and Zegers, 2008). It can also potentially foster an active, investigative and engaging learning environment, which is considered to be particularly motivating and effective because it activates learners' innate needs to satisfy curiosities, solve puzzles and construct understanding through experience (Ting, 2010). Furthermore, it enables students not only to become more aware of language forms, but also to develop general cognitive skills that may be transferred to other academic and working fields, such as noticing, reasoning, interpreting, making inferences, hypothesising and verifying (Boulton, 2009; Gilquin and Granger, 2010). In addition, it exposes students to samples of naturally occurring language use by real language users instead of contrived samples that are created for language teaching purposes and that usually provide a limited and distorted view of the target language (Boulton, 2009; Gilmore, 2007).

3.2 Corpora and corpus analysis programmes

As previously stated, the tools which make data-driven learning possible are those of corpus linguistics, namely corpora and corpus analysis programmes. As the name suggests, corpus linguistics can indeed be described as the study of language based on the analysis of a corpus, that is "a large collection of authentic texts that have been gathered in electronic form according to a specific set of criteria" (Bowker and Pearson, 2002: 9). This means that the texts to be included in a corpus cannot be chosen randomly, but they have to be carefully selected in order to be representative of a particular language or a subset of that language (*ibid.*). For this reason, very different types of corpora can be created and used according to the purpose of one's study, whether it is to analyse general or specialised language, written texts or spoken utterances, L1 speakers' or L2 speakers'

use of language forms, and so on. Even though there are no set rules determining how large corpora should be, it can be said that when a corpus is too small, it may not contain all the linguistic patterns that are relevant to one's investigation and it may also make it difficult for its users to make any valid generalisations from collected data (ibid.). Not to mention that corpora do not have to be fixed in size, as they can be constantly updated to mirror the changing state of a language, unless one is interested in the state of a language at a given time (Bowker and Pearson, 2002). More importantly, all samples of language should be authentic, that is there should be no texts that have been purposely created for inclusion in the corpus (ibid.). Corpus linguistics is indeed an empirical approach to language studying, which consists in analysing how people have actually used the language for real and meaningful communication rather than how they might use it according to what is considered grammatically possible (ibid.). Finally, preferring electronic texts over printed texts is now the rule in this field, as it makes it possible to compile larger and more complex computerised corpora that are easier and quicker to consult through specific software packages (ibid.).

The oldest traces of corpora being used for systematic language analysis date back to the 1960s, as it was at that time that the first one-million-word corpora of British and American English started to be assembled on paper (Leńko-Szymańska and Boulton, 2015). However, it was only from the late 1980s onwards that corpora began to be used for language teaching thanks to the increased availability of new technologies and the rapid growth of the world wide web (ibid.). Tribble (2015), one of the pioneering teachers who first introduced corpora in the language classroom, reported that those who wanted to use authentic language data in their teaching back in those days had to make tape recordings of interactions on the field and collect text realia for themselves. The compilation of the corpus and the subsequent preparation of teaching materials were also done manually, as all relevant data needed to be transcribed by typewriter and then photocopied for students. It was such a demanding and time-consuming process that the majority of language teachers simply considered it not feasible (ibid.). However, as personal computers were becoming cheaper and more powerful and the proliferation of electronic texts on the web was making access to data easier and quicker, several teachers changed their mind and data-driven learning became a reality (ibid.). Proof of this can be found in the first conference on Teaching and Language Corpora held in 1994, which can

be considered as the first explicit attempt to discuss which role corpora could play in language education (Leńko-Szymańska and Boulton, 2015). Since then, the conference has become a standing appointment for teachers, researchers and software developers, who meet every two years to share their thoughts on how to make this approach and its tools more accessible and effective in terms of language teaching (ibid.). As time went by, ready-made corpora have then been made available on the web, such as the British National Corpus (BNC) and the Corpus of Contemporary American English (COCA), to be consulted online or downloaded on a local hard drive (Tribble, 2015). In addition, both commercial and free software programmes have been developed to make it easier for teachers to build their own corpus based on their students' linguistic needs and to consult it afterwards (ibid.).

Most corpus analysis programmes are now equipped with both a word lister and a concordancer. The former enables the users to perform some statistical analyses on the corpus, such as calculating the total number of tokens and types in the texts and creating word lists that can be sorted both alphabetically and in order of frequency (Bowker and Pearson, 2002). The latter allows them to recover from the corpus “all the contexts for a particular item (morpheme, word or phrase) and to print them out in a way which facilitates rapid scanning and comparison” (Johns, 1991: 2). All the occurrences of the searched keyword are usually displayed at the centre of the page, one below the other, with a certain prearranged amount of context to the left and to the right, which can be sorted alphabetically so that similar contexts are grouped together (ibid.). In this way, users do not need to read all the texts sequentially from beginning to end to find what they are looking for, but they have direct access to multiple relevant text fragments simultaneously, so that collocations and recurrent patterns of use can be identified more easily and quickly. In addition, present-day sophisticated programmes are likely to offer several other functions. The keyword function, for example, enables the users to compare two different corpora and find out which words occur with an unusually high frequency in each one of them (Bowker and Pearson, 2002; Leńko-Szymańska and Boulton, 2015). Texts in a corpus can also be automatically tagged in order to provide the users with additional information, such as the part of speech of words, the syntactic structure of sentences and, in the case of learner corpora, errors, to help them refine their search query, distinguish among different uses of the same word and become aware of language features

they have not mastered yet (Gilquin and Granger, 2010). Furthermore, modern programmes are now able to support multimodal corpora containing text, audio and video files (ibid.). Despite how advanced these new programmes have become in providing increasingly more detailed and easily readable data, however, it is still their users that are responsible for making sense of those data, as claimed by Johns back in 1991.

3.3 Direct and indirect use of corpora

According to Leech (1997), corpora can be used both directly and indirectly in language education. The direct use of corpora is more in line with Johns' definition of data driven learning (1991), since students are expected to use corpus analysis tools by themselves in order to discover new aspects of the target language and support their own learning (Leech, 1997). However, some scholars believe that investigating corpora on their own could be too technically challenging for students and that it takes extensive training to turn them into independent corpus users (Kennedy and Miceli, 2001; Vannestål and Lindquist, 2007). In particular, studies have proven that some students might find both the search technique and the format in which programmes display search results very confusing and difficult to interpret (Koosha and Jafarpour, 2006; Yoon and Hirvela, 2004). Breyer (2006) has then suggested that concordancing programmes which were originally intended for professional language researchers should now be adapted to the pedagogical setting, by making them more intuitive and user-friendly. However, it should be mentioned that there are also several studies showing that students' supposed technical difficulties are quite often overestimated (Boulton, 2009; Sinclair, 2004). The alternative that would take technology out of the equation is the indirect use of corpora, which mainly entails providing students with printed handouts prepared by the teacher from concordance results (Leech, 1997). The use of other corpus-based resources, such as learner dictionaries, reference grammars and usage manuals, also falls within this category (Leńko-Szymańska and Boulton, 2015). It could be argued, however, that students will still need some kind of guidance to get used to this new inductive learning approach, as they may not be asked to search for examples of authentic language use themselves, but they are still required to work out language rules from those language

occurrences that have been pre-selected for them (Sun, 2003). It seems that this modality is still preferred by the majority of teachers (Tribble, 2015).

In any case, both direct and indirect use of corpora can help students refine their understanding of how a language really works (Leńko-Szymańska and Boulton, 2015). Since its advent, corpus analysis has indeed promoted a renewed focus on language forms and patterns, which are now taught very differently from how past approaches such as the Grammar-Translation Method and the Audio-lingual Method dealt with grammar-related aspects of language (Hadley, 2002). Since those approaches rested on structuralist theories of language, grammar was considered as a static set of clear-cut rules that needed to be memorised first and then practised by translating texts from the source language to the target language and vice versa or by orally repeating model sentences (Brown, 1994; Hadley, 2002). In an attempt to move away from these ineffective approaches, a more communicative way of learning foreign languages started to be adopted from the early 1970s onwards, which went under the name of Communicative Language Teaching and was successfully welcomed by language experts, teachers and students (Richards and Rogers, 2014). As the name suggests, it is true that this approach tends to prioritise communicative competence and verbal fluency over grammatical competence and form accuracy, but this does not mean that the importance of grammar is underestimated (Richards, 2006). On the contrary, Communicative Language Teaching supporters consider grammar as one of the aspects of language that enable learners to accomplish communicative purposes, and they also believe it should be taught inductively and through the use of authentic materials (*ibid.*). Data-driven learning seems then to complement Communicative Language Teaching perfectly and might ensure a more balanced and effective approach to language learning (Hadley, 2002), which could better meet the needs of the present generation of learners, and of EMI students in particular.

In addition, since people do not always use language as specified in grammar books, observing what they have actually said or written by means of corpora seems to be the only way to provide students with an honest overview of the target language that does not hide its complexities and irregularities (Hadley, 2002; Huang, 2011). Corpora are indeed considered more complete than dictionaries and grammar books because they are a more comprehensive and up-to-date database of linguistic evidence (Bowker and Pearson, 2002; Sinclair, 1991). They provide information about the meaning, usage and

typical collocations of words in different contexts as well as indication of their frequency of use, which makes it possible to distinguish between what is grammatically correct and what sounds idiomatic in a language (ibid.). Believing that all language learners could benefit from such a vast amount of reliable information, Boulton stated that students should be confronted with the real and complex language portrayed in corpora right from an early stage “rather than living in the false expectation that clear and simple rules can always be devised” (2009: 39), even though this means questioning Johns’ idea that corpora investigations are for advanced and well-motivated students only (1986 in Boulton, 2009). However, few teachers have tried to use corpora with beginner and intermediate language learners so far, and those who have did not find it exactly straightforward. Braun (2007), for example, tried to use corpus materials and corpus-based learning activities with learners of English as a foreign language at a secondary school in Germany. What emerged from her study is that the integration of corpora into secondary education practices cannot be successful without pedagogical mediation (ibid.). When working with younger, less autonomous and less expert students from both a linguistic and a technological point of view, it is indeed especially important to ensure that corpus materials are appropriate for the students’ language level, relevant to their already packed school curriculum, easy to access and supported by follow-up activities in order to achieve maximum effectiveness (ibid.).

3.4 Recent research trends on data-driven learning: context of use, effectiveness and students’ attitudes

According to the latest data collected by Tribble and then reported at the tenth Teaching and Language Corpora conference in 2012 (Leńko-Szymańska and Boulton, 2015), corpus applications in language teaching have been mainly relegated to higher education contexts so far. In an attempt to better understand how many and which kind of teachers had chosen to implement corpora in their teaching practices, Tribble distributed his survey to language teachers all over the world and obtained 560 responses from 63 countries (2015). Over 75% of respondents claimed that they were currently using corpora in their language lessons, even though the majority of them had only recently started to do so. They were mostly female university professors under the age of 50, well distributed

across Europe, North America and Asia (ibid.). They described their students as quite advanced language learners enrolled in Foreign Language or Linguistics degree programmes or who were taking LAP or LSP courses (ibid.). Despite these shared similarities, respondents were not using corpus tools in the same way, as 56% of them expressed a preference for working offline, while 37% leaned towards consulting online corpora. Among the different corpus analysis programmes they reported to use, Wordsmith Tools and AntConc were the most popular downloadable software packages, whereas Mark Davies' BYU website¹ was the most visited online resource (ibid.). Corpus data were less frequently consulted directly by students and more often used by teachers for personal reference or for preparing class materials (ibid.). When explicitly asked about the usefulness of these tools for language teaching, the vast majority of respondents stated that corpora had had, and were still having, a positive impact on their teaching practices and that they were also extremely beneficial to their students, as they could provide access to useful examples of real language in use. However, many of them were still worried that both preparing corpus-based materials and introducing students to data-driven learning could be too time-consuming (ibid.). In addition to lack of time, other reasons for not using corpora were lack of knowledge, lack of access to software and lack of corpora suitable to meet the students' specific language needs (ibid.).

Other scholars have preferred to shift their research focus from teachers to students, as greater interest has been shown lately in analysing students' attitudes towards data-driven learning and assessing the potential benefits of this new approach to their language development. A good and recent example of this kind of studies is Soruç and Tekin's investigation of the perceived and actual effectiveness of the use of corpora for teaching English vocabulary at a secondary school in Uganda (2017), where English is learnt as a second language and secondary school students already have an upper-intermediate level of English. A mixed-method approach was used, since data were collected both by conducting qualitative interviews with the students and by comparing the results of tests aimed at evaluating their vocabulary knowledge before and after attending a set of teaching sessions (ibid.). Participants were randomly divided in two groups and were taught new words by means of corpus-based activities in one group, and

¹ Now available from: <https://www.english-corpora.org/>

through more traditional activities in the other group (ibid.). What emerged from the study was that, even though a certain degree of improvement could be witnessed in both groups, students who experienced the data-driven approach achieved significantly higher scores in both immediate and delayed post-tests compared to the control group (ibid.). It also became clear from the analysis of the interviews that students enjoyed working with corpora, especially because they felt more autonomous and empowered in their learning. They described corpus-based tasks as “enjoyable”, “motivating” and “relaxing” (Soruç and Tekin, 2017: 1822-1824). Many of them also stated that what made learning particularly fun and exciting was precisely the use of technology, which they did not find particularly challenging, as they were used to work with computers (ibid.).

Similarly, other studies have tried to prove the effectiveness of corpora not only for enlarging students’ vocabulary (Çelik and Keser, 2010; Lee et al., 2018), but also for reinforcing their knowledge of grammar rules and typical collocations (Koosha and Jafarpour, 2006; Uçar and Yükselir, 2015) and for improving their writing skills (Gaskell and Cobb, 2004; Yoon, 2008). Furthermore, researchers have also found that corpora seem to be particularly useful tools for learning specialised terminology and phraseology as well as for getting used to the textual conventions of specific genres (Ackerley, 2017b), even though this function of corpora has been explored mainly with regard to its application by those who already are, or who are training to become, professional translators (Bermúdez Bausela, 2016; Laursen and Pellón, 2012). Generally speaking, several scholars agree that there is not enough tangible evidence to prove that the various benefits advocated by supporters of corpora are real, since many of the studies carried out so far in this field are too limited in terms of scope and methods of research (Boulton, 2009; Boulton and Cobb, 2017; Leńko-Szymańska and Boulton, 2015). However, even if this area of research is still in need of further investigation, what these studies did manage to show is that corpora can be used in several different ways, for pursuing different learning purposes and potentially enhancing different language skills. Some of the ways in which corpora can be applied to the language classroom will be described below, trying to focus especially on those functions that might be useful also when applied in an EMI context.

3.5 Different affordances of corpora in an EMI context

3.5.1 Corpora and subject-specific terminology and phraseology

As discussed in the second chapter, many of the difficulties that students are likely to experience when attending English-taught individual courses or entire degree programmes are caused both by a limited command of the English language per se and a poor knowledge of subject-specific terminology and phraseology (Ackerley, 2017a; Airey, 2010; Bernhardt, 2005; Hellekjær, 2010). It is indeed generally acknowledged that the transition from secondary school to university entails the socialisation of students into the academic and professional field of their choice, which necessarily requires not only the acquisition of specific knowledge, skills and values, but also the familiarisation with the specialised language used in that field (Crosthwaite and Cheung, 2019; Weyreter and Viebrock, 2014). Language plays indeed a fundamental role in the development of students' professional identity, as it makes it easier for them to start perceiving themselves and being perceived as members of a professional community (ibid.). For EMI students, this means that they have to build on their general English knowledge and skills acquired in school to master also what is commonly referred to as English for Specific Purposes or ESP (ibid.). Until they have done so, they might still have difficulties in carrying out some essential tasks, such as fully understanding the academic content of English-medium lectures, reading and studying English textbooks and journal articles on their own as well as speaking and writing about their specialist subject in English (Arnbjörnsdóttir and Prinz, 2017; Buck, 2001; Gundermann, 2014; Hincks, 2010; Shaw and McMillion, 2008).

The term 'English for Specific Purposes' started to be used between the 1960s and the 1970s to identify the different subsets of the English language that are "used in specific contexts by specific groups for specific purposes" (Gollin-Kies et al., 2015: 17). At that time, as a result of globalisation, an ever increasing number of people started to work in multilingual settings where English was used as a lingua franca and they realised that there was a mismatch between the kind of language they had learnt in school and the one needed in their jobs (Swales, 2000; Weyreter and Viebrock, 2014). In addition to being able to take part in everyday-life conversations, for example, doctors needed to discuss symptoms and treatment options with both patients and colleagues, while entrepreneurs needed to exchange views about business practices and marketing

strategies. This new way of using English then paved the way for the adoption of a more needs-driven and goal-oriented approach to English language teaching, which aimed to provide learners with greater exposure to the specialised language of their discipline of study in order to turn them into functioning members of that discourse community (ibid.). Consequently, there has been a significant increase in ESP research and teaching, and it seems that both fields have greatly benefited from the use of data retrieved from specialised corpora (Arnó-Macià, 2012; Gavioli, 2005; Gollin-Kies et al., 2015). Several scholars (ibid.) have indeed realised that subject-specific corpora can offer excellent opportunities to gather and analyse authentic samples of academic and professional communication in different fields, which can then be used to inform both ESP studies and ESP courses.

In particular, corpora have been largely used to create lists of specialised words or technical terms for different disciplines, such as agricultural sciences (Martínez et al., 2009), architecture (Beloso, 2015), business and finance (Tongpoon-Patanasorn, 2018), civil engineering (Gilmore and Millar, 2018), dentistry and medicine (Crosthwaite and Cheung, 2019; Lei and Liu, 2016), just to name a few. In many cases, the compilation of these lists was inspired by Hyland and Tse's study (2007), whose findings have shown that the idea of a single academic vocabulary that is equally valid across disciplines is not realistic because, even if different academic fields do share some common words, those words are not necessarily "used in the same way and do not mean exactly the same thing in different disciplinary contexts" (ibid.:249). The most commonly used method for compiling this kind of highly specialised keyword lists consists in registering all those words that stand out from the comparison between smaller subject-specific corpora and more general and long-established keyword lists, such as West's General Service List (1953 in Browne et al., 2013a) and Coxhead's Academic Word List (2000) or their updated versions (Browne et al., 2013a; 2013b). This process makes it possible to create lists that are more representative of the language used in different specialised contexts, which makes them also more effective in terms of ESP teaching purposes (Hyland and Tse, 2007). In particular, they could be used not only to inform the contents and materials of ESP lessons, but also to guide ESP students in their own discovery of the specialised language of their discipline of study by means of subject-specific corpus consultation (ibid.). In this way, students could have the chance to learn new words in their context of

use, which Hyland and Tse consider as extremely important, since “vocabulary is more than individual words acting separately in a discourse” (2007: 251).

Gavioli (2005), for instance, has provided some detailed examples of how she has made use of specialised corpora in her own ESP classroom. In both the examples that will be reported below, Gavioli’s students had run into some unknown English words that they could not completely understand and properly translate into Italian, their L1, even after consulting dictionaries and encyclopaedias. In one case, they were struggling with a highly specialised and rarely used technical term belonging to the field of medicine, while in another case they were not able to make sense of a much more common word that, however, takes on a specialised meaning within the field of economics (*ibid.*). In both cases, Gavioli and her students decided to search for those peculiar words in small specialised corpora made ad hoc. In particular, they focused on the context surrounding their occurrences, which provided them with useful clues to solve the puzzle of understanding what those words actually meant and how they were typically used by members of those specialised discourse communities (*ibid.*). Similarly, Gavioli opted for consulting larger specialised corpora of medical English when her students were struggling to tell the difference between two words they were quite familiar with and used as synonyms, but that actually have subtle differences of usage. In this way, then, they managed to learn that ‘disorder’ is a more selective term, as it is mainly used to refer to illnesses of a psychological or psychiatric nature, whereas ‘disease’ has a more general use. In addition to familiarising students with singular specialised lexical items, Gavioli used corpora for teaching longer fixed phrases that are frequently used in certain disciplines, such as the expression ‘patients with a history of [+ disease]’ in the field of medicine. Furthermore, since her classes were mainly aimed at improving the students’ translating skills, Gavioli often encouraged them to compare the occurrences of key terms in English with those of their equivalents in Italian by consulting both English and Italian specialised corpora (2005). As a result, students had the chance to focus on differences and similarities between the foreign language and their own language, thus raising their awareness of both. All these ways of using corpora described by Gavioli could potentially be applied successfully in an EMI context, where students also feel the need to familiarise themselves with the language specific to their field of study.

3.5.2 Corpora and subject-specific writing skills

Another important area where the use of corpora could turn out to be extremely beneficial to EMI students is that of writing. As previously discussed, EMI students do not have many chances to practise their writing skills during lectures, nor do their teachers often guide them in the discovery of those distinctive features that characterise the writing genre typically used in their field of study, so they end up finding formal written assignments particularly challenging (Arnbjörnsdóttir and Prinz, 2017; Gundermann, 2014; Hellekjær and Westergaard, 2002). Even if written examinations are not a common practice in some universities (Kruse et al., 2016), acquiring subject-specific writing skills is still important for EMI students, since they might need to make use of those skills in their future jobs and for scholarly publications (Casañ-Pitarch and Calvo-Ferrer, 2015). Therefore, in order to prepare students for the challenges that await them, teachers in EMI courses and programmes could consider the idea of using specialised corpora to familiarise students with the writing practices of the disciplinary community they wish to join. Although corpus analysis has often been associated with the study of recurrent patterns of small-scale items such as words and phrases, specialised corpora can actually provide useful information about the discourse structures and genre conventions that are applied in different disciplines to construct and communicate knowledge successfully (Charles et al., 2009; Conrad, 2002; Hyland and Bondi, 2006). Some examples of this particular function of corpora for enhancing students' L2 writing development will be provided below which could also work in an EMI context.

On the one hand, specialised corpus analysis could be used by teachers to design materials and lessons with a focus on those lexicogrammatical features and discourse functions that students are expected to master by the end of their studies to be able to write properly about their discipline of choice. Maher and Milligan (2019), for instance, conducted a corpus-based genre analysis of Master's dissertations written by engineering students and stated that their findings could be used to develop a tailored dissertation-writing training course to support engineering students in their final step before graduation. Similarly, Cho and Lee (2016) investigated the use of relative clauses in a specialised corpus of science and engineering journal articles with the aim of exploiting their findings to better prepare graduate students in those academic fields for writing and publishing their own research studies. On the other hand, several scholars have shown

that specialised corpora could also be consulted by students themselves, who are always on the lookout for new and effective tools for improving their writing skills. In some cases, students were suggested to use corpora as reference tools for self-correction of mistakes while writing and revising their own texts, which was proven to serve as a catalyst not only for producing better-quality texts, but also for boosting students' confidence as L2 writers (Yoon, 2008). Some of the mistakes that could be avoided or corrected as a result of corpus consultation regarded word order, capital letters, punctuation and pronouns (Gaskell and Cobb, 2004), the use of prepositions, verb voice and collocations (Yoon, 2008), word choice and register (Dolgova and Mueller, 2019). In other cases, students were asked to explore specialised corpora to discover subject-specific and genre-specific language features. In Friginal's study (2013), for example, the direct use of corpora helped raise forestry students' awareness of the typical characteristics of research reports in their field of study, such as the use of linking adverbials to clarify the development of logical arguments, reporting verbs to facilitate the correct citation of sources, and present-tense passive verbs to set the appropriate tone. Similarly, Hafner and Candlin (2007) investigated the different ways in which law students made strategic use of corpus tools to develop their competence in legal discourse practices and successfully complete their writing assignments. Furthermore, Flowerdew (2015) prepared corpus-based workshops for science and engineering students to help them identify words and phrases conveying particular rhetorical functions that they could use to improve the discussion section of their dissertations.

In the end, both Lee and Swales' (2006) and Charles' (2012) studies deserve a special mention, since they took the direct use of specialised corpora to the next level by engaging students in the compilation of their own corpus. In the former study, some doctoral students specialising in different subject areas but attending the same experimental 13-week EAP course at the English Language Institute of the University of Michigan were asked to compile two corpora, one of their own writing and one of 'expert' writing including published journal articles in their field of study (Lee and Swales, 2006). By comparing data from the two corpora, students could identify their writing weaknesses and address them by using the 'expert' corpus as a model (*ibid.*). In this way, they managed to raise their awareness of subject-specific lexicogrammatical and discourse patterns, thus becoming more confident in their own writing skills (*ibid.*). Similarly, in

the latter study, a larger mixed-discipline group of advanced-level students attending a 6-week EAP writing course at Oxford University Language Centre engaged in the development of their own small-size but highly specialised corpora for composing and editing purposes (Charles, 2012). Students' opinions on the experience were then collected by means of questionnaires and interviews, and the survey findings showed that the majority of the students did not have any difficulties when building their own corpus and then exploring it through the AntConc software (ibid.). Most of them also agreed that corpus consultation contributed significantly to improving the quality of their written output and that they intended to continue to use corpora for writing in the future (ibid.). A later study by Charles (2014) has indeed confirmed that many of the students who attended one of her EAP courses promoting 'do-it-yourself corpus-building' were still consulting specialised corpora 12 months after the end of their course, especially for checking grammar and lexis.

3.5.3 Corpora, speaking skills and pronunciation

As explained in the second chapter, spoken interactions between teachers and students and among students are not very common in EMI classes, since students' fear of making mistakes while speaking prevents them from exploiting the opportunities offered by the classroom environment to talk about their specialist subject in English (Ackerley, 2017a; Kudo et al., 2017; Öztürk and Gürbüz, 2014). This lack of practice may result in students having difficulties performing well at oral examinations (Airey, 2010; Hincks, 2010) and then effectively communicating and interacting in the workplace. This might be concerning, since English speaking skills are considered the second most important language skills by the majority of employers in countries where English is learnt as a foreign language, and the most important ones in all those countries where it is a national or official language (Cambridge English and Quacquarelli Symonds, 2016). Once again, however, specialised corpus analysis can turn out to be useful for addressing this kind of language problem, even though the effectiveness of corpora in improving students' speaking skills is still an under-researched area (Staples, 2019).

Specialised corpora of spoken language can be compiled by recording and transcribing spontaneous workplace conversations, which is what Brown and Lewis

(2003) and Cho and Yoon (2013) did with interactions occurring in the pay office of a New Zealand company and with earnings calls made at a Korean international company respectively. In the former study, the corpus obtained was compared with a second corpus of written texts in the same subject domain in order to identify differences between oral and written language use (Brown and Lewis, 2003), whereas in the latter study it was explored in comparison with a similar corpus of earnings calls made by L1 speakers of English (Cho and Yoon, 2013). Despite their different research interests, both studies came to the conclusion that the specialised corpus itself or the findings that emerged from its investigation should be used in the classroom to raise students' awareness of spoken language conventions specific to their field of study (*ibid.*). In addition, a groundbreaking study by Staples (2019) has recently shown that specialised corpora of spoken language could also be used to improve students' English pronunciation, which might occasionally be responsible for communication breakdowns in the workplace. In particular, Staples created a corpus of nurse-patient interactions to identify the typical pronunciation needs of those nurses working in American hospitals whose L1 is not English. Bearing the findings of that analysis in mind, the same specialised corpus was then used to inform the curriculum of a 'Pronunciation for Nurses' course, which focused especially on intonation, pitch range, and sentence stress, to develop teaching materials for the course and to assess its participants' progress (Staples, 2019). This corpus-based teaching experiment was extremely successful, as nurses attending the course showed a better command of specific pronunciation features that are essential for conveying empathy when interacting with patients (*ibid.*).

3.6 Corpora and language training for EMI students

Drawing inspiration from how specialised corpora have been used in the previously mentioned studies for language teaching purposes, the present study aims to investigate how corpora can be integrated into EMI contexts successfully. In particular, as will be suggested and discussed in the next chapter, it seeks to illustrate how content teachers and language teachers might work together to compile and investigate their own specialised corpus covering the topics and text genres that are dealt with in a specific English-taught course. This might lead to identifying which subject-specific terms, phrases and language

conventions need to be mastered by students attending that particular course. The findings might then be used to prepare ad hoc language exercises to help students in their acquisition of ESP, thus easing the difficulties of studying in a foreign language. In this case study, therefore, an indirect use of corpora is preferred because the direct consultation of corpora is thought to be too complicated and time-consuming in a context where students are not familiar with corpus analysis tools and are already busy working on both language and content simultaneously. However, all the activities offered to the students are meant to promote self-discovery of language rules in order to preserve the intrinsic nature of data-driven learning. This particular form of language training is expected to give EMI students the chance to work on improving their language skills and to get used to the specialised language of their discipline of choice.

CHAPTER 4

Language training and English Medium Instruction at the University of Padova

4.1 Introducing the case study and its objectives

This case study aims to illustrate how English-Medium Instruction in higher education can be brought closer to the ideal of content and language integration promoted by CLIL theories by providing an example of how to turn students' language development from an accidental by-product to a planned and tangible objective of the EMI syllabus. As discussed in the previous chapters, it is indeed uncommon for the content subject and the target language to share the spotlight in EMI practices because, unlike in CLIL practices, the English language is considered as a medium only and is very rarely focused upon (Dalton-Puffer et al., 2010; Wilkinson, 2017; Wolff, 2003). On the one hand, this might make it more difficult for students to successfully participate in EMI courses and programmes, especially if they are not proficient enough to measure up to the task of studying complex academic subjects through English, as they are left to deal with language issues on their own. This is often the case of several southern European countries such as Italy (Guarda and Helm, 2016), where people are less accustomed to the practice of EMI and tend to have lower levels of English proficiency compared to northern European countries (Education First, 2019; Wächter and Maiworm, 2002; 2008; 2015). On the other hand, this lack of explicit focus on language might also hinder the further development of students' linguistic competence. This is due to the fact that input is less likely to turn into intake without students actually noticing the forms and structures of the language they are being exposed to, which means that language acquisition is less likely to occur under these circumstances (Saville-Troike, 2006). This is concerning because, although often neglected, the improvement of students' language skills is still an important wished-for outcome of EMI (Wilkinson, 2004; 2013).

Therefore, giving students the opportunity to work not only on building up their knowledge and professional skills, but also on improving their language weaknesses seems to be an essential requirement for all those EMI programmes that intend to help students achieve academic success and prepare themselves for entering the workplace. Aiming to investigate how this requirement can be fulfilled efficiently and effectively, this case study provides a group of students attending an English-taught degree programme at the University of Padova with language training in the form of subject-specific terminology and phraseology exercises, thus showing how the language component of EMI classes can be brought into focus. Hereinafter, all the steps that were taken to carry out this research project will be discussed in detail, starting with the three main research questions this study has tried to address:

- Do students feel more confident and prepared for studying in English after completing the language learning activities offered in this case study?
- Do students perceive subject-specific language exercises as more useful than general English exercises?
- Could this be a model to follow for the provision of subject-specific language learning activities for EMI students?

4.2 Research method

4.2.1 Identifying a course for the case study

First of all, special attention needed to be focused on finding a suitable course for the case study. In order to do so, a project proposal was written and presented to the head of the English-taught degree programme in Psychological Science offered by the School of Psychology at the University of Padova. This University's School of Psychology is particularly renowned for offering a wide range of opportunities for studying different branches of psychology through the medium of English to all those interested in pursuing a career in the field. According to the latest figures, the educational offer of the School includes indeed 4 Bachelor's and 8 Master's programmes with several individual English-taught courses as well as 1 Bachelor's and 1 Master's programmes run entirely in English (Università degli Studi di Padova, 2020a; 2020b). This was thought to facilitate the search

for suitable participants because, as outlined in the project proposal (see Appendix A), ideal candidates for the case study should be students attending an English-taught course that is non-linguistic in nature during the second semester of the academic year 2019/2020. Together with a brief description of the study and its objectives, the proposal included also an overview of the workload that both the professor teaching the course and the students enrolled in it were signing up for when accepting to participate. In particular, it stated that the professor would be asked to provide full access to the teaching materials of the course as well as consultations, if needed, as an expert in the subject field. In addition, the professor would need to encourage the students to carry out the activities suggested, which were estimated to consist in three 40-minute sessions of language exercises to be completed online during the first three weeks of the course. In the end, students would also be expected to fill in an anonymous questionnaire, which could be used to enable the collection of information about the participants' linguistic background and English language level as well as their perceptions of the usefulness of this type of activities.

After receiving the approval of the head of the English-taught degree programme in Psychological Science, the project proposal was forwarded to all the professors teaching on the programme, inviting them to participate in this innovative and collaborative teaching experiment. Several professors responded to the call for participants and showed great interest in the project, which might be considered as a result that strikes a blow for establishing team teaching as a systematic practice in EMI contexts. As previously discussed, EMI teachers are often reluctant to include any language-related issues in their lessons and to take responsibility for the development of their students' language skills (Airey, 2011; 2012; Carroll, 2015; Wilkinson, 2017). However, the general tendency noticed in this study towards their welcoming a cooperation with language experts might suggest that EMI teachers might become more willing to consider the idea of offering a more rounded learning experience that includes also explicit language teaching, if provided with a little help. A first-year undergraduate course called 'Social Psychology and Communication' was selected for the case study. It was indeed believed that first-year students might be more in need of some form of language support compared to later-year students, since they are still generally new to the practice of learning academic subjects through English.

It is also worth noticing that no linguistic prerequisites were stated on the official webpage of the course ‘Social Psychology and Communication’ (Università degli Studi di Padova, 2020c), even though it was specified that the course was available to students enrolled on the Psychological Science degree programme only, whose level of English is usually tested beforehand because all the courses offered in that programme are taught in English only (Università degli Studi di Padova, 2019e). In general, course attendance was highly recommended, but not compulsory. In addition to traditional lectures, it was stated on the course website that attending students would be engaged in more interactive seminars and practical activities, contrary to what previous studies have found to be the norm in EMI contexts (Costa and Coleman, 2013; Thøgersen and Airey, 2011). Furthermore, the final assessment for both attending and non-attending students was described as a written exam with open questions (Università degli Studi di Padova, 2020c).

4.2.2 Compiling and investigating the corpus

The course professor provided full access to the teaching materials of the course, which included a PDF version of the course textbook, the slides she planned to use as visual aids during lessons and several journal articles that students were expected to read on their own. All these materials were used to create a highly specialised electronic corpus of 460,779 tokens and 19,938 types. In order to compile and consult the corpus, Laurence Anthony’s free software tools were used, in particular AntFileConverter (2017), TagAnt (2015) and AntConc (2019a). By means of the first two programmes, all files received were converted into plain text format and were assigned parts-of-speech tags before being uploaded to AntConc for linguistic investigation. Both the ‘word list’ and the ‘concordance’ functions of AntConc turned out to be a particularly useful starting point to explore the corpus, identify the most frequent words and analyse how they are typically used in context. Great attention was paid not only to the use of specialised nouns, but also to other parts of speech, such as adjectives, verbs, prepositions, numbers and percentages. In addition, the ‘keyword list’ function made it possible to compare the corpus created with a larger and less specialised corpus of psychology texts generated by AntCorGen (Anthony, 2019b), which counted up to 192,673,447 words. Similarly, a comparison was

made also between the corpus of course materials and a 10-million-word corpus of general British and American English¹, which was accessed through Cobb's 'Compleat Lexical Tutor' (2020), a free website that contains a variety of corpus tools. By doing so, two lists of keywords specific to 'Social Psychology and Communication' were created, including all those terms that occur with an unusually high frequency in the corpus of course materials compared to the two reference corpora used (see Appendix B). These key terms were also examined through AntConc concordancer to search for patterns of use and related phraseology. As a result of these linguistic investigations, a third list was then created, which will be reported below, comprising all those specialised terms that would be particularly interesting to include in the activities.

List of keywords to be included in the activities:

- | | |
|----------------------------|----------------------------|
| ✓ Aggression (+1413.02) | ✓ Identity (+1224.4) |
| ✓ Alienation (+135.97) | ✓ Impression (+546.72) |
| ✓ Attitude (+1494.89) | ✓ Interaction (+196.85) |
| ✓ Authority (+556.64) | ✓ Isomorphism (+167.00) |
| ✓ Behavior (+3673.1) | ✓ Mediation (+318.12) |
| ✓ Commitment (+333.9) | ✓ Negotiation (+250.42) |
| ✓ Communication (+2428.58) | ✓ Patient (+36.86) |
| ✓ Criticism (+110.22) | ✓ Person (+2815.22) |
| ✓ Deception (+170.18) | ✓ Physician (+323.71) |
| ✓ Deviance (+634.63) | ✓ Processes (+253.46) |
| ✓ Disclosure (+632.32) | ✓ Psychology (+7364.09) |
| ✓ Embarrassment (+620.97) | ✓ Relation (+34418.00) |
| ✓ Emotions (+410.1) | ✓ Relationships (+898.78) |
| ✓ Goals (+316.15) | ✓ Research (+488.95) |
| ✓ Group (+887.77) | ✓ Responsibility (+312.46) |

¹ A combination of the British National Corpus (BNC) and the Corpus of Contemporary American English (COCA).

✓ Schemas (+1222.9)	✓ Stigmatization (+316.32)
✓ Self (+1834.05)	✓ Symbol (+423.26)
✓ Socialization (+1311.96)	✓ Theory (+1549.34)
✓ Speech (+304.56)	✓ Threat (+169.57)
✓ Stereotypes (+953.88)	✓ Violence (+472.31)

4.2.3 Developing the activities

The activities created for the students were directly informed by the results of the corpus investigation, which made it possible to identify those subject-specific terms, phrases and language conventions that students needed to master by the end of the course as well as those aspects of the English language that might create difficulties for those whose L1 is not English. Specifically, since the number of incoming exchange students and of regularly enrolled international students at the University of Padova is still relatively low (Università degli Studi di Padova, 2018a; 2018b), the L1 of the majority of those attending the course was expected to be Italian. Therefore, it was decided to focus on preventing the most common mistakes that Italian students are likely to make, especially in terms of pronunciation and spelling. The activities are meant for intermediate learners of English and do not necessarily get progressively more difficult from one session to the next, even though it is true that the third session comprises slightly more exercises than the others. Further details on the contents and types of activities offered to the students will be provided in a separate section below.

The reason why students were not asked to investigate the corpus by themselves is that they would need a detailed tutorial on how to use corpus analysis tools because, since they were not attending a degree programme in linguistics or in languages, they were not expected to be familiar with those specialist software programmes. Due to the students' already busy schedule and to the fact that they had to work on their own at home with fewer chances to ask their teacher or their peers for clarifications, the direct

consultation of the corpus did not seem a good solution in this case. The risk was indeed that students would find it too complicated and time-consuming and would get discouraged to the point where they would decide not to do the exercises at all. Therefore, aiming to preserve at least part of the exploratory and discovery-based nature of data-driven learning (Johns, 1991), the activities prepared for the students took the more familiar form of quizzes, crosswords, word search puzzles, matching and fill-in-the-gaps exercises (see Appendix C). In some cases, the students were also provided with some pre-selected language occurrences from the corpus to use as model examples for working out the correct answer to each question. In this way, they still had to work out language rules and keyword definitions for themselves, thus taking an active role in their own learning, but without having to worry about unknown tools.

Once the activities were ready, they were uploaded to Wooclap, which is an innovative learning platform that aims to boost students' motivation, active participation in class and long-term learning (Lebbe and Alzetta, 2015). It can be used in two modalities: the 'votes' mode, which enables students to interact with their teachers during lessons by asking and answering questions in real time through their smartphones, tablets and laptops, and the 'participant pace' mode, which allows them to complete questionnaires and activities from home and at their own pace (*ibid.*). In this case, the latter modality was chosen because it seemed to fit better with the unusual circumstances under which this case study was carried out. At the end of February 2020, the University of Padova, as several other universities in Italy and abroad, decided to suspend all face-to-face classes and move all courses online due to the spread of the Coronavirus pandemic (Università degli Studi di Padova, 2020d). Therefore, even though the original plan consisted of making language training part of the EMI lesson routine, since the course professor initially seemed quite willing to let her students carry out the tasks in class, in the end the only possible solution given the circumstances was to ask students to complete the language exercises from home.

Not to overburden them with work, the first two sessions were presented as highly recommended, if not compulsory for those who wanted to be considered 'attending students', whereas the third session was to be considered as completely optional. In addition, students were given a whole week to complete each session of activities. Specifically, the first two sessions needed to be carried out during the first two weeks of

the course and the last one during the fourth week, so that students could make a habit of focusing on language forms and were not overloaded with new information all at once (see Table 1). At the beginning of each week, they were provided with the link to access the activities directly from their devices. Furthermore, since they were required to create a new Wooclap account using their official university email address on their first access so that their participation could be easily monitored, they were also given some brief instructions on how to register, move back and forth between the activities and submit their answers. The Wooclap platform is indeed intuitive and easy to navigate, so there was no need for more detailed instructions.

Session of activities:	Week of the course:	Activity type:	Focus of the tasks:
Session 1	1 st week	highly recommended	pronunciation, specialised nouns and adjectives, noun phrases, nominalisation
Session 2	2 nd week	highly recommended	spelling, numbers and percentages, verbs and prepositions
Session 3	4 th week	optional	pronunciation, spelling, compound nouns, noun phrases, specialised nouns and adjectives, numbers and percentages

Table 1. Activity plan.

4.2.4 Developing the feedback questionnaire

A feedback questionnaire was developed and made available to the students at the end of this language learning experiment via Google Forms, so that their answers could be collected anonymously. The questionnaire consisted in 6 open-ended questions and 14 closed-ended questions, including 5 yes/no questions, 5 multiple choice questions and 4 five-point Likert scale questions (see Appendix D). It was divided in two sections. The first section aimed to collect information on the linguistic background of the students who participated in these language learning activities in order to enable the formulation of a

class profile. In particular, the students were asked what language they consider as their L1, which was described to them as the language they have been exposed to from birth or that they use more often in their everyday life, for how long they have been studying English and what they thought their current level of English was in terms of listening, reading, speaking and writing skills. In order to gain more details about their previous experience as learners of English as a second or foreign language, they were also asked whether they had already studied content subjects through the medium of English at primary or secondary school and whether they had taken part in any study trip, summer school or exchange programme in an English-speaking country. Both types of language learning experience entail indeed a greater degree of immersion into the target language compared to traditional language classes, which might then have better prepared them for attending an EMI university programme. Furthermore, it asked whether students enjoyed using English in their free time and whether they considered it as a useful tool for enhancing their academic and career opportunities because motivation, whether it is intrinsic or extrinsic in nature, is an important factor in determining language learners' perseverance and success in their study of the language (Deci and Ryan, 2000; Dörnyei and Ushioda, 2009; Noels et al., 2000). On the other hand, the second section of the questionnaire was meant to find out the students' opinions on the set of course-specific language exercises they had carried out. Above all, they were asked to state whether the activities had made them learn something useful or something new and whether they felt more confident and prepared for studying psychology in English. In addition, it asked how they would feel about being offered similar language exercises for other courses and whether they would prefer general English language exercises instead.

4.2.5 Data analysis

In the end, a thorough analysis of the data collected from this teaching experiment was carried out and it involved multiple steps. First of all, the total number of students enrolled on the Moodle page of the course was compared with the numbers of those who completed the activities on Wooclap, so that the participation rate in each session could be identified. Then, the total scores obtained by each student in each session of activities attended was calculated in order to find out whether there was any difference in the

students' performance and language level. Specifically, the students were divided in four groups according to the percentage of correct answers they gave: those with an excellent performance who got more than 90% of the answers right, those who performed very well and managed to complete between 75% and 90% of the exercises correctly, those who performed sufficiently well by answering between 60% and 75% of the questions correctly, and those with a poor performance who got less than 60% of the answers right. Particular attention was paid to the total scores attained by those students who decided not to continue with the activities after completing the first session with the aim of understanding the reasons behind the subsequent decline in participation, especially whether it was a result of students finding the activities too easy or too difficult for their language level. In addition, the students' average scores for each individual exercise were calculated and compared, so that it could be possible to determine which exercises they found particularly difficult to complete. Afterwards, the students' responses to the questionnaire were examined and used to formulate a class profile as well as to summarise the students' opinions on the particular set of activities they had just carried out for 'Social Psychology and Communication' and on the provision of subject-specific language exercises for English-taught psychology courses in general.

4.3 The activities

4.3.1 Specialised nouns and adjectives

The main objective of the activities was to foster the acquisition of keywords specific to the course 'Social Psychology and Communication', so students were mostly asked to work with highly specialised nouns and adjectives. Three different types of exercise on specialised nouns were offered to the students. Two of them were included in the first session of activities, during which the students were asked to complete a task on the construction of noun phrases and another one on the process of nominalisation that turns verbs or other word classes into nouns. The third type of exercise was included in the third session and asked the students to work with compound nouns. As emerged from the investigation of the corpus, nominalisation, noun phrases and compound nouns are typical features of the academic texts that students were expected to read during the course. Therefore, making them notice and practise those linguistic features was thought to be

useful not only to prepare students for studying course materials on their own, but also to familiarise them with the conventions of the academic genre, so that they may more easily contribute to their disciplinary community by writing their own research articles later on.

A project that entails researching a great number of subjects

large-scale

a

project

research

Submit

Figure 1. Exercise on the construction of noun phrases.

Specifically, the first task displayed the components of some noun phrases in random order and asked the students to put them in the correct order (see Figure 1). In this case, it was particularly important to include both shorter noun phrases with few premodifiers preceding the head nouns, such as ‘human communication apparatus’, and longer ones characterised by premodifiers and postmodifiers, such as ‘a positive mental health effect stemming from participation in the group’, so as neither to discourage students with lower levels of English nor to bore those with higher levels. On the other hand, the second task asked the students to complete a crossword by turning the verbs provided in the clue section into nouns. For this exercise, they were encouraged to use the American spelling of words, as a prevalence of this variety of English was observed when analysing the course materials. Finally, in the third task, the students were asked to match some compound nouns with ‘self-’, such as ‘self-deception’, ‘self-discrepancy’,

‘self-enhancement’ and ‘self-schema’, with their own definition. In order to formulate a clear and concise definition for each term, the APA Dictionary of Psychology was consulted (American Psychological Association, 2020).

Furthermore, four different types of exercise on specialised adjectives were offered to the students. Devoting some time to the study of specialised adjectives seemed indeed particularly important because when they modify some common keywords such as ‘behaviour’ and ‘communication’, they might make these words take on a specialised meaning that is unlikely to be fully understood by those who are not experts in the field of psychology. The first two types of exercise were included in the first session, during which the students had to match some specialised adjectives describing the keyword ‘behaviour’, such as ‘proattitudinal’, ‘adaptive’ and ‘antisocial’, with their own definition and then they had to join some words together to build up some compound adjectives, such as ‘goal-directed’ and ‘identity-confirming’ (see Figure 2). The last two types of exercise were included in the third session. In this case, the students were asked to match some specialised adjectives describing the keyword ‘communication’, such as ‘verbal’ and ‘synchronous’, with their own opposite and then they were asked to find the negative form of some adjectives by adding the negative prefixes ‘dis-’, ‘non-’, ‘anti-’, ‘counter-’, ‘in-’, and ‘un-’.

Some adjectives are made up of two words, such as “goal-directed”. Let’s build them up:

- 1) behavior that goes against the rules;
- 2) behavior that cares about other people’s thoughts and needs;
- 3) behavior that is consistent with a person’s identity;
- 4) behavior adopted when choosing between two or more possible alternatives.

1) Rule-
Select choice

2) Other-
Select choice
A. breaking
B. making
C. oriented
D. confirming

Submit

Figure 2. Exercises on compound adjectives.

4.3.2 Pronunciation

Studies have shown that EMI students tend to feel anxious when they have to use English in class for asking or answering questions and for participating in class discussions (Ackerley, 2017a; Airey and Linder, 2006; Öztürk and Gürbüz, 2014), so offering them a chance to practise the correct pronunciation of some course-related keywords might help boost the students' confidence in their speaking skills, thus lowering their anxiety levels and facilitating active participation during lectures and seminars. Therefore, three different pronunciation exercises were included in the activities offered to this group of students: two in the first session and one in the third session.

Use only the words with the /aɪ/ sound to complete the first four sentences and the words with the /ɪ/ sound to complete the last four sentences:
PHYSICIAN, LIFESTYLE, SYSTEM, ANONYMITY, HYPOTHESIS, SYMBOL, STEREOTYPE, PSYCHOLOGY

Words with the /aɪ/ sound

1) We define social _____ as the systematic study of the nature and causes of human social behavior.

2) These results are consistent with the _____ that girls and boys are being socialized to believe that there is a gender difference in math performance.

3) A _____ is a set of characteristics attributed to all members of some specified group or social category.

Submit

Figure 3. Fill-in-the-gaps exercises on pronunciation.

In the first exercise, the students were asked to focus on the 'th' sound. Specifically, they were given a list of words containing the 'th' digraph and were asked to distinguish between the cases in which the sound is voiced (/ð/), as in 'other' and 'gathering', and those in which it is unvoiced (/θ/), as in 'theory' and 'empathy'. In the

second exercise, the focus was on the letter ‘y’, especially on how it can be pronounced as either /ɪ/ as in ‘physician’ or /aɪ/ as ‘stereotype’. In this case, the students not only had to identify the different sounds of some selected keywords, but they also had to complete a fill-in-the-gaps exercise, in which the first four sentences needed to be completed with a word containing the /aɪ/ sound, while the last four sentences required a word with the /ɪ/ sound (see Figure 3). All the sentences in the aforementioned exercise were taken directly from the corpus of course materials. Finally, in the third exercise, the students were asked to analyse one word containing the letter ‘i’ at a time and state in each case whether it had to be pronounced as either /ɪ/ as in ‘alienation’ or /aɪ/ as in ‘anxiety’. As previously mentioned, in these pronunciation exercises, the focus was mainly on those English words whose Italian equivalents have a similar spelling, but a different pronunciation, such as ‘identity’(/aɪ/) and ‘identità’(/ɪ/).

4.3.3 Spelling

Since a written exam with open-ended questions was the type of assessment chosen by the professor of ‘Social Psychology and Communication’ to evaluate the students’ knowledge of the topics covered during the course, spelling exercises were thought to help students focus on accuracy in their writing. Two different types of spelling exercises were included in both the second and the third session of activities. In the first type of exercises, students were provided with two spelling alternatives for each word and were asked to choose the correct option. As with pronunciation exercises, this type of spelling exercise was also meant to direct the students’ attention to those English terms whose spelling is similar to that of their Italian equivalents and which are therefore more likely to be misspelled, such as ‘communication’ (*comunicazione*), ‘responsibility’ (*responsabilità*) and ‘patient’ (*paziente*). The second type of exercise was slightly more complicated because it asked students to work with words that look alike and then tend to be easily mistaken even by advanced learners of English, such as ‘thorough’, ‘though’, ‘thought’ (noun), ‘thought’ (verb), ‘through’ and ‘tough’. They had to match each word with its definition and then use them to complete a fill-in-the-gaps exercise (see Figures 4 and 5). All the sentences included in the aforementioned exercise were taken directly from the corpus of course materials.

SPELLING

Look out for those words that look alike: match each word with its definition.

Advice

Select choice ▼

Advise

Select choice

A. (verb) to make a suggestion about what you think someone should do

B. (noun) suggestions about what you think someone should do


 **Submit**

Figure 4. Matching exercises on spelling.

**Now complete this fill-in-the-blank exercise with the following words:
ADVICE x2 and ADVISE x2.**

1) The availability of social support – in the form of and emotional and material aid – increases our ability to cope successfully with change.

2) It is common to people seeking jobs to network, to seek information and assistance from people they know, in person, online, or through networking sites.

3) Patients exhibit agency in having performed some medically relevant action against or without medical .

4) A counsellor at a community college may a weak student to switch from pre-med to an easier major.



 **Submit**


Figure 5. Fill-in-the-gaps exercises on spelling.

4.3.4 Verbs and prepositions

In the second session of activities, the students were also given the chance to revise some high-frequency verbs that need to be followed by specific prepositions as well as those verbs that necessarily require an object before the preposition. In particular, they were asked to complete a fill-in-the-gaps exercise with the prepositions ‘in’, ‘on’, ‘for’, and ‘with’. The focus was again on those English verbs that behave differently when translated into Italian and may then be more easily mistaken, such as ‘depend + on’ (*dipendere da*) and ‘participate + in’ (*partecipare a*). In addition, they were asked to pay particular attention to the structures ‘allow + object + to’ and ‘enable + object + to’ (see Figure 6), since their Italian equivalent is the verb ‘*permettere*’, which does not necessarily need an object. The students were also asked to work on finding synonyms for common reporting verbs such as ‘say’ and ‘think’, which they often tend to overuse, thus making their texts and presentations sound too repetitive. To make the task more enjoyable, they were asked to search for those synonyms in a word search puzzle.

Several English verbs are followed by prepositions. Some verbs, however, might require an object before the preposition. Which two of the following sentences are correct?

 You can select multiple choices




Observational techniques ALLOW researchers to study social activity in real-world settings.

We group people, objects, and events into categories or schemas and develop stereotyped attitudes that ALLOW to treat individuals as members of a category.

Convenience samples usually lack external validity and do not ENABLE the investigator to generalize the findings to any larger population.

Experiments ENABLE to manipulate independent variables and measure behavior in various ways.




 Submit

Figure 6. Exercises on verbs that require an object before the preposition.

4.3.5 Numbers and percentages

Some of the activities in the third session focused on numbers, percentages and related phraseology, which the students were expected to be able to use confidently, especially for reporting the results of psychological tests and experiments. In order to let the students figure out for themselves how to use numbers and percentages correctly, they were provided with some pre-selected occurrences from the corpus to use as model examples for answering some specific questions (see Figure 7). In particular, they were asked whether the definite article “the” should be put before percentages, whether a singular or a plural verb should come after percentages, whether it is a point or a comma that separates the integer part from the fractional part of a number, what happens when a number occupies the first position in a sentence and how the term ‘half’ should be used in a sentence.

Do we need to use the definite article “the” before percentages? Choose the correct sentence:

According to our survey, the 80% of students would welcome being provided with language support.

←

According to our survey, 80% of students would welcome being provided with language support.

→

Submit

Figure 7. Exercises on numbers and percentages.

4.4 Results

4.4.1 Class profile

As emerged from the analysis of the data collected, 80 students were enrolled on the course ‘Social Psychology and Communication’ during the second semester of the academic year 2019/2020, of whom 65 completed the first session of activities on Wooclap, 48 went on to do the second session and 40 decided to carry out also the third and last optional session. It is difficult to say whether the students who took part in this language learning experiment were attending or non-attending students, since all of the course professor’s lectures had to be recorded beforehand and uploaded to the Moodle page of the course due to the Coronavirus shutdown, which has made checking student attendance less straightforward, as there could be no face-to-face interaction between students and teaching staff. Of the 65 students who participated, 43 also agreed to fill in the feedback questionnaire after completing one or more sessions of activities. Thanks to the good number of answers received, it was then possible to identify the main characteristics of this highly heterogeneous group of students and use them to formulate a class profile, which will be reported below.

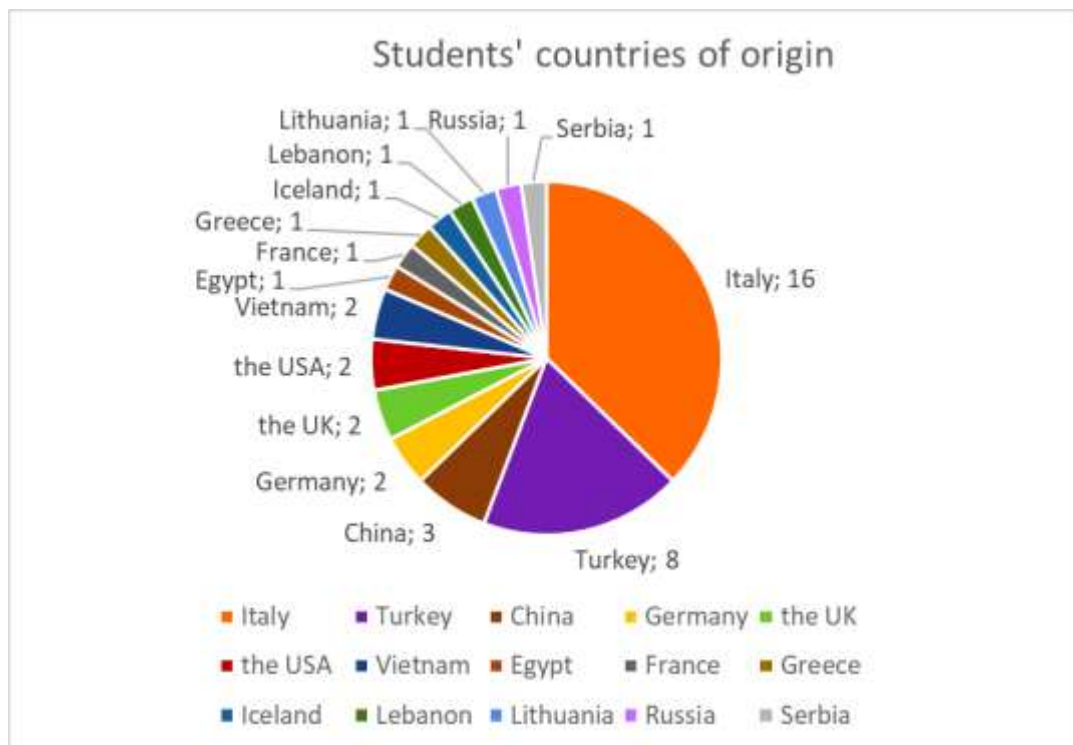


Figure 8. A representation of the students’ countries of origin.

As discussed in the previous chapters, EMI courses and degree programmes tend to attract large groups of both domestic and international students (Hellekjaer and Westergaard, 2003; Wächter and Maiworm, 2008). Therefore, it was no surprise when the students attending the English-taught course ‘Social Psychology and Communication’ and participating in these language learning activities were found to come from 15 European and non-European countries (see Figure 8). Specifically, it emerged that the two largest groups of students come from Italy (16) and Turkey (8), but there were also smaller groups of students who come from many other different countries, including China, Egypt, France, Germany, Greece, Iceland, Lebanon, Lithuania, Russia, Serbia, the United Kingdom, the United States of America and Vietnam. It follows that their linguistic background is highly diversified, since they speak up to 13 different languages as their mother tongue, including Arabic, Chinese, English, French, German, Greek, Icelandic, Italian, Lithuanian, Russian, Serbian, Turkish and Vietnamese. These data show that, contrary to the initial expectations, international students are the majority group in this particular English-taught course.

The overwhelming majority of students are between 19 and 22 years old (37 out of 43) and have been studying English since they were in primary school (29 out of 43). In particular, around 46% of students started learning this target language during their first year of primary school, while 24% of them began later on, during their third year. Three students, however, are in their early thirties, which means that even if their first contact with the English language can be traced back to the same life stage of the others, they may have been exposed to it for longer than the rest of their classmates. Of the remaining students, just 13% started learning English during middle school and a mere 6% began in secondary school. This is mainly the case of non-European students because, as discussed in the first chapter, European countries tend to follow the guidelines which were provided to them by the European Union in the 1990s and which promoted earlier learning of foreign languages (Marsh, 2012). Furthermore, the group comprises 4 students coming from the UK and the USA for whom English is their first language and 1 bilingual student of English and Chinese coming from Hong Kong. Consequently, as these figures alone already seem to suggest, it is highly unlikely for the students attending the course to form a homogeneous group in terms of English language proficiency, which is not unusual in EMI contexts (Wilkinson, 2017).

In addition to the difference in the amount of time devoted to studying English, the students who participated in this case study reported to have had very different language learning experiences before starting the same EMI programme at the University of Padova. Particular attention was paid to investigating those less conventional and more immersive language learning experiences that might have better prepare them for attending an EMI degree programme. It emerged that around 24% of students, without counting those five students who grew up with English as their first language or as one of their first languages, seem to have had several chances to immerse themselves into the target language and practise using it for real and meaningful purposes, as they reported having both spent a period of time studying in an English-speaking country and had an experience of CLIL at primary or secondary school. The wide majority of students, however, did not manage to combine both types of experience to enrich their language learning and had to settle for only one of them. Specifically, 32% experienced the CLIL approach only, whereas 18% only took part in study trips, summer schools or exchange programmes abroad. In addition, up to 26% of students did not do either of the above, so they have probably learnt English through more traditional language classes.

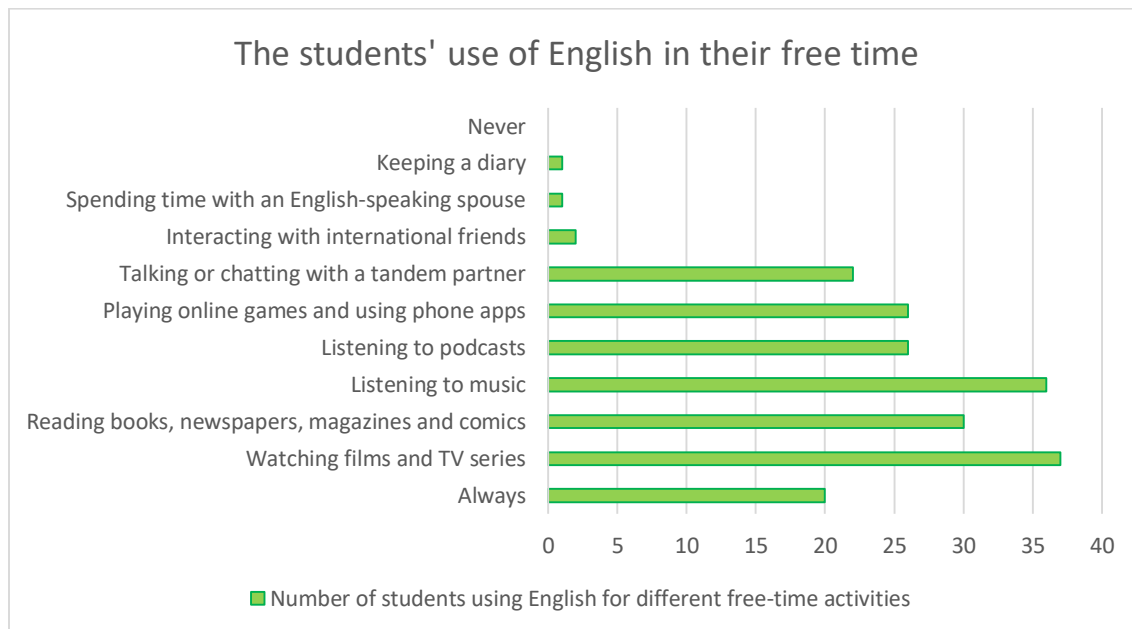


Figure 9. Different types of free-time activities that enable students to keep up their English.

On the contrary, all students seem to be used to keeping up their English in their free time, using the language as a tool to cultivate their hobbies and do what they are most

passionate about. In particular, as can be seen from the graph above, they mainly use English for watching films and TV series, listening to music and reading books, newspapers, magazines and comics. It is also worth noticing that some of them use English to communicate with tandem partners, international friends and, in one case, with a spouse of a different nationality. However, when they were asked whether having a good level of English was important to them and why, the majority of students advanced more practical reasons for wanting to master English. More specifically, around 37% of them would like to have a good level of English because they have planned to apply for an English-taught Master's degree programme, while another 37% would like to work abroad and believe English could improve their job opportunities. Just 7% of students think that good English skills could help them find a good job in Italy and a mere 5% believe they are necessary for performing well on their current degree programme. In addition, a student stated that learning English is important because it "is the most widely spoken language in the world" and another one because it "gives access to many different sources of information". Only two students stated that English was not important to them.

On average, most students perceive their own language level as C1 according to the *Common European Framework of Reference for Languages* (Council of Europe, 2018) in terms of listening (22, of which 8 are Italian), reading (22, of which 11 are Italian), speaking (17, of which 7 are Italian) and writing skills (16, of which 8 are Italian). In general, both Italian and international students seem to consider their receptive skills as their strengths, whereas productive skills are thought to be their weak points. The data show indeed that 11 (4 are Italian) and 9 (4 are Italian) students believe that their language level is C2 in terms of reading and listening skills respectively, while 13 (7 are Italian) and 9 (4 are Italian) students think they have a B2 when it comes to writing and speaking skills. Not to mention that 3 students (only one of them is Italian) think that their language level drops down even to B1 when considering their productive language skills. However, it should be noticed that only 26 out of the 38 students who completed the questionnaire and for whom English is not their first language stated to have had their English language proficiency tested by means of an official exam. Furthermore, at least in a few cases, the certificate they claim to have gained does not exactly correspond to the language level they declared to have.

Even if most students described themselves as quite advanced language learners, less than half of them claimed to feel completely at ease with English and stated that they are not worried at all about studying psychology in a language that is not their L1. It is interesting to notice that nearly two-thirds of those confident students are international students, whereas only one-third are Italian. A Turkish student also stated that an English-taught course is “no big deal” because “everyone has to speak English nowadays”, while a British student admitted being “more concerned by the language skills of the professor”. On the contrary, more than 30% of both Italian and international students said that they were worried about making spelling or grammar mistakes during the exam and nearly 20% of them admitted feeling uncomfortable speaking in English in front of the class. Only around 5% were worried that they might not understand part of the lesson and no one seemed to be particularly concerned about the amount of specialised terms they were expected to learn during the course. In addition, around 20% of students believed that studying in English required them to make a greater effort to achieve good results. In spite of this, the wide majority said that they were excited to deal with new psychology-related topics in English and, when explicitly asked whether they would prefer the course to be taught in Italian, all students except one answered that, even if they had the choice, they would still prefer to study in English. The only student who expressed a preference for studying in Italian is a native speaker of English who might have a personal interest in learning the Italian language.

4.4.2 Students’ performance in the activities

The majority of students performed quite well in the activities, especially in the second session, as can be seen in Figure 10. Even if the percentage of those who got more than 90% of the answers right remains fairly steady at around 35% and 32% in the first and third session respectively, it reaches indeed a peak of 58% in the second session. Furthermore, the percentage of those who got less than 60% of the answers right drops significantly from around 12% in both the first and the third session to approximately 2% in the second session. Examining the average score attained by students in each individual exercise of the three sessions, the reason behind these figures appears clear. Most students

performed better in the second session because there were no exercises on noun phrases, whose construction appeared to be particularly challenging for this group of students.

On average, less than 30% of students managed to put all the components of noun phrases in the correct order when they were made up of both premodifiers and postmodifiers. Similarly, 60% of students had problems working with compound nouns and 50% of them did not manage to find all the synonyms for common reporting verbs that had been hidden in the word search puzzle. Exercises on adjectives and pronunciation were slightly less problematic, but still challenging. In particular, around 30% of students struggled to come up with the negative form of adjectives and around 25% of them were not able to identify the correct pronunciation of ‘isomorphism’, ‘deviance’ and ‘hierarchy’, which were the top three mispronounced words. On the contrary, more than 80% of the students performed well in those activities focusing on prepositions and numbers and up to 90% of them achieved high scores in spelling exercises. In this case, the top three misspelled words were ‘embarrassment’, ‘accommodation’ and ‘responsibility’. Unfortunately, it was not possible to collect the scores obtained by the students in the exercise on nominalisation, since Wooclap does not have a function for creating crosswords and a different website was used (PuzzleFast, 2020).

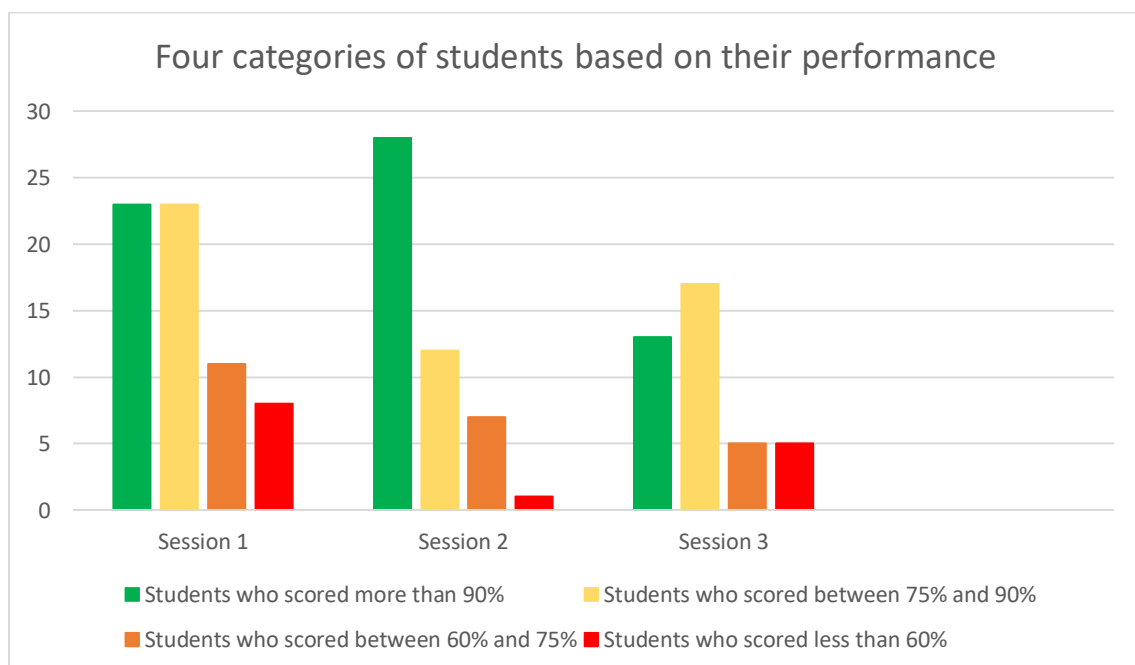


Figure 10. An evaluation of the students’ performance in each one of the three sessions of activities based on the percentage of correct answers they gave.

Students who scored:	Less than 60%	Between 60% and 75%	Between 75% and 90%	More than 90%
Pronunciation	11	11	12	31
Adjectives	3	4	13	45
Noun phrases	43	17	4	1
Nominalisation	n/a	n/a	n/a	n/a

Table 2. Students' performance in each type of exercise of the first session based on the percentage of correct answers they gave.

Students who scored:	Less than 60%	Between 60% and 75%	Between 75% and 90%	More than 90%
Spelling	0	2	7	39
Numbers and percentages	4	0	11	33
Verbs	14	11	8	15
Verbs and prepositions	3	7	24	14

Table 3. Students' performance in each type of exercise of the second session based on the percentage of correct answers they gave.

Students who scored:	Less than 60%	Between 60% and 75%	Between 75% and 90%	More than 90%
Pronunciation	2	5	15	18
Spelling	2	5	5	28
Compound nouns	9	15	0	16
Noun phrases	32	0	8	0
Adjectives	10	10	19	1
Numbers and percentages	14	0	1	25

Table 4. Students' performance in each type of exercise of the third session based on the percentage of correct answers they gave.

In order to justify the slight decline in student participation rate between the first and the fourth week of this language learning experiment, it was also decided to analyse the total scores attained by those students who decided not to continue with the activities after completing the first session separately. The analysis showed that one-third of them got more than 90% of the answers right, which might have led them to think that they did not need any additional language training, whereas one-third did not even manage to reach the pass threshold and might then have got discouraged and given up. As for the remaining one-third of the students, they may have simply lost interest in the activities or other external factors may have come into play, such as having to deal with an already busy schedule, which some of them mentioned in the comment section of the final feedback questionnaire.

4.4.3 Students' feedback on the activities

The students who participated in these three sessions of language learning activities seem to have considerably appreciated the chance to spend some time focusing on language issues, since 45% of them rated the activities as very useful (4 or 5 points on the Likert scale), 29% as quite useful (3 points on the Likert scale) and only 26% as not very useful (1 or 2 points on the Likert scale). More specifically, as shown in the graph below, exercises on spelling and terminology received the highest ratings because they were considered particularly relevant and effective, whereas those focusing on numbers, percentages and related phraseology received the lowest ratings. Exercises on pronunciation, verbs and prepositions were also quite appreciated. However, not all of the students found the content of the activities new, since up to 42% of them stated that they were already familiar with many of the language structures that were dealt with in the three sessions. Nevertheless, around 47% and 32% of participants reported to feel very confident and quite confident about their knowledge of language specific to their psychology course after completing the activities, while only 21% of them stated that the activities did not particularly boost their confidence.

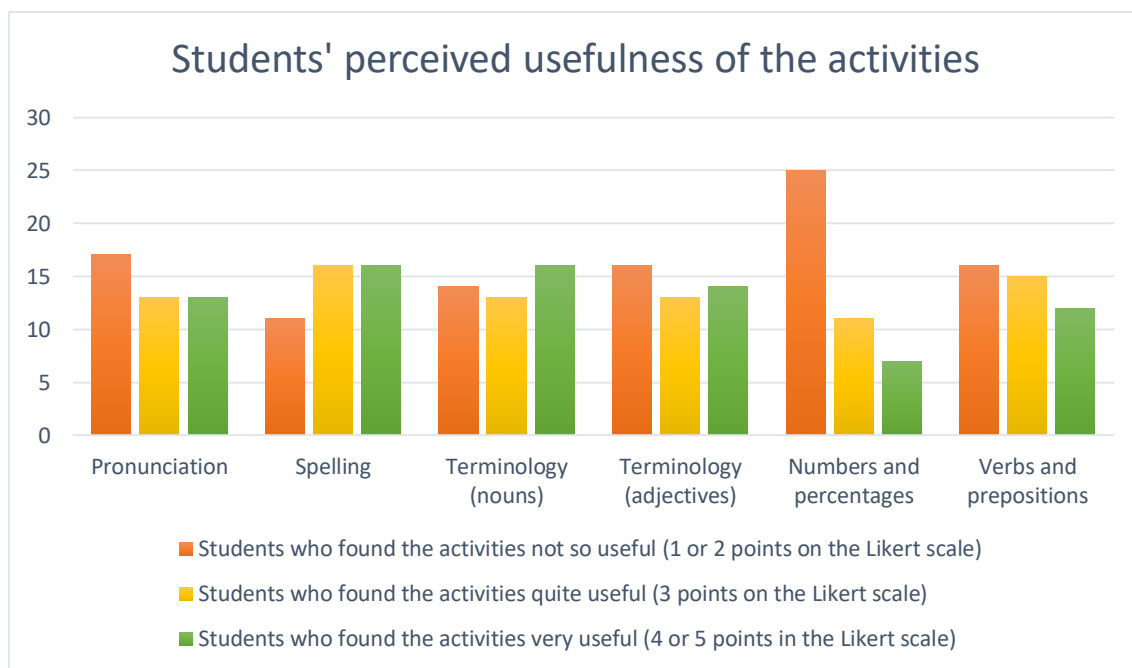


Figure 11. Students' usefulness ratings of different types of language learning activities.

When explicitly asked whether they had any further comments on the activities or any suggestions for improving them, different opinions emerged among the students. Some of them really enjoyed carrying out the tasks, since they described them as “fun”, “stimulating” and “helpful”, but two students did not particularly like the crossword and the word search puzzle because they personally find word games challenging. In addition, one student would have preferred not to carry out the activities online and another one stated that language training in general is not needed due to their advanced level of English and that being provided with similar quizzes about the content topics of the course would be much more appreciated. Similarly, two students suggested to make all three sessions of activities optional, so that those who already feel confident about their English language skills could skip them and focus on the content part of the course instead. What emerged from the data collected is indeed that, besides those five students for whom English is their first language, four other students believe that they do not need to do any language exercises. Conversely, all the others seemed to appreciate being provided with subject-specific language training and half of them also said that they would have welcomed some general English exercises as well. All in all, around 60% of students said that they would like the opportunity to do more language exercises for the course ‘Social

Psychology and Communication’ and for other English-taught courses in their Psychological Science degree programme.

In the end, it is worth noticing that Italian students seem to have appreciated the activities provided more than international students. The data show indeed that as many as 75% of Italian students found the activities very useful, while less than 20% of international students considered them as extremely beneficial to their language development. In addition to exercises on spelling and terminology, Italian students seem to find pronunciation exercises particularly effective as well. More than 80% of them stated that they have learnt several new terms and phrases during the three sessions, whereas the majority of international students tended to be already familiar with the content of the activities. After completing the tasks, most Italian students reported to feel more confident about their knowledge of subject-specific English, but not as much as international students. Furthermore, more than 80% of them said that they would like to do more language exercises, both course-specific and general English exercises, whereas international students seem to be less interested in receiving extra language support.

4.5 Discussion

The data collected through this case study confirm what past studies such as those conducted by Wächter and Maiworm in the European context (2015) and by Clark in the Italian context (2017) have already shown, namely that students attending EMI courses and programmes tend to have very different levels of English language proficiency. As previously discussed, the group of students who participated in this case study is indeed characterised by a high degree of heterogeneity in terms of students’ first language, country of origin, length of exposure to English and language learning experiences, which inevitably leads to different levels of command of the English language. The students’ linguistic background can indeed either facilitate or hinder the acquisition of a foreign language depending on how much their first language and the language they would like to learn differ from each other in terms of vocabulary, word order and grammar structures (Schachter, 1974; VanPatten, 2007). Not to mention that English might be taught differently in different school contexts and the role it plays in people’s everyday life might vary across different countries, since some offer more opportunities than others to

continue to practise the target language even outside of the classroom environment (Education First, 2019). Consequently, language learners are more likely to develop different strengths at different times. In this case study, the students speak up to 13 different first languages, come from 15 countries in Europe and beyond and have had different language learning experiences. Some of them have been studying English for longer and have had more chances to study abroad and use the language for real communication purposes, whereas others started learning it more recently and have not got the chance to take any study trip to an English-speaking country yet. Similarly, while some have already experienced being taught content subjects through the medium of English at primary or secondary school, others are still new to this practice.

The different scores attained by students in the three sessions of activities that they were asked to carry out as part of their language training for the course ‘Social Psychology and Communication’ have confirmed that some of them are more competent in English than others. However, nearly all students described themselves as advanced learners of English, since the percentage of students who stated that their language level is C1 or C2 ranges between 80% and 90% in terms of receptive skills and between 60% and 70% in terms of productive skills. This means that some might have overestimated their English language competence. This hypothesis is further reinforced by the fact that more than half of them admitted that they do not feel completely at ease when taking an English-taught course, especially Italian students, who tend to have lower levels of English proficiency compared to international students (Costa and Coleman, 2013; Guarda and Helm, 2016; Pulcini and Campagna, 2015). In particular, making spelling and grammar mistakes during their final written exam and speaking in front of the class during lectures seem to be their biggest worries, which is in line with the findings of several other studies on the matter (Ackerley, 2017a; Arnbjörnsdóttir, B. and Prinz, 2017; Breeze, 2008; Kudo et al., 2017; Öztürk and Gürbüz, 2014). On the contrary, they do not seem to be particularly concerned about lecture comprehension and ESP vocabulary acquisition, which is quite unusual for EMI students (Ackerley, 2017a; Kym and Kym, 2014; Sert, 2008). Since they filled in the questionnaire after attending four weeks of the course and completing one or more sessions of language activities, it might be speculated that their lack of concern might be a sign that they have found their professor’s accent and rate of delivery easy to understand and that the language training they received succeeded in boosting their

confidence. In addition, they are not worried about their reading skills, whose importance is often underestimated by university students in general (Shaw and McMillion, 2008).

However, despite their language concerns, the students seem to be particularly excited to deal with new psychology-related topics in English as well as they appear to have a positive attitude towards English-medium education in general. When they were asked whether they would prefer the course to be taught in Italian, the great majority answered that, even if they had the choice, they would still prefer to study in English, which is the same answer that was given by other EMI students at the University of Padova in a previous study (Ackerley, 2017a). The students seem indeed to be highly motivated language learners, who enjoy using English in their free time, recognise its value as an international medium of communication and firmly believe that mastering it will give them access to both academic and professional opportunities in Italy and abroad. Therefore, the wide majority of them enjoyed spending some time focusing on language forms and structures specific to their psychology course. Exercises on spelling and specialised terminology were considered the most useful, immediately followed by exercises on pronunciation, verbs and prepositions, whereas those on numbers, percentages and related phraseology were not described as particularly interesting. Even if some students were already familiar with part of the content of the activities, the majority still reported to feel much more confident about their knowledge of subject-specific English after completing the exercises, which means that even revision exercises can help EMI students consolidate their language learning and feel more prepared for their courses. These findings then suggest an affirmative answer to the first research question that this case study has tried to address about the effect of the activities on students' confidence. As for the second research question about students' preference for subject-specific or general English exercises, half of them stated to believe that subject-specific exercises can better meet their language learning needs, whereas the other half would prefer to be provided with both types of exercises.

In the end, to answer the third and last research question, this case study seems to provide a good model to follow for the provision of subject-specific language learning activities for EMI students, but some minor adjustments should be made in order to better meet the needs of groups of students who have different levels of English language proficiency. What emerged from the analysis of the data collected is indeed that, while

some students found the activities useful and effective to boost their confidence and increase their knowledge of ESP, others did not appreciate them because they thought the tasks were too easy for their language level. This is the case not only of those five students for whom English is a first language, but also of other students who are advanced learners of English or who believe that they do not need any language training at all. On the contrary, the activities seem to have been particularly beneficial to Italian students, who actually were the targeted group of this study in the first place. In the light of these findings, it would then be useful to provide EMI students with at least two set of language exercises, one for high intermediate and one for more advanced students, and let them choose the level they think is more suitable to them. Otherwise, language exercises could be made optional. On top of that, this case study has proven that collaborative team teaching involving content teachers and ELT specialists can be a good solution to bring language issues back into focus in EMI contexts, as several scholars have already suggested (Carroll, 2015; Lasagabaster, 2018), and that specialised corpora can be extremely effective tools to inform the teaching of ESP terminology, phraseology and language conventions to EMI students.

Conclusion

Building on previous studies by several authoritative researchers in the field, this dissertation aimed to contribute not only to develop a broader understanding of the challenges that English-medium education entails, especially for students at university level, but also to find a solution to make this teaching approach more accessible and effective. As discussed in the first chapter, the idea of using a foreign language as medium of instruction is not new, but it was especially in the 1990s that this educational practice really started to become popular across Europe (Georgiou, 2012). In particular, this study focused on some of the most important actions taken by the European Union since its establishment in 1993 to raise public awareness about the benefits of this dual-focused teaching approach and to promote its implementation in its Member States at all levels of education. Among other initiatives, it was considered worth mentioning the LINGUA programme established by the Council of Europe, the workshops held by the European Centre for Modern Languages and the proposals made by the think tank convened by the European Commission, since they all contributed to the development of what came to be known as CLIL and which was soon made available in most European primary and secondary schools (Marsh, 2012). Furthermore, it was thought to be interesting to explore how the international marketisation of higher education led Europe to create a harmonised, cooperative and competitive European Higher Education Area (EHEA) through the Bologna Process, which facilitated both the adoption of English as the common lingua franca of European universities and the spread of EMI courses and degree programmes (Smit and Dafouz, 2012).

To avoid misunderstandings, the distinction between CLIL and EMI was also made clear in the first chapter. While the former term is usually referred to as a bottom-up approach at the primary and secondary levels of education, the latter term is generally used to indicate a top-down approach in tertiary education (Costa, 2009). In addition, while CLIL theories aim to enable students to learn to use the target language and use the target language to learn at the same time, EMI theories do not consider the target language as an object of study, but as a medium only (Marsh, 2006; Smit and Dafouz, 2012). This lack of explicit focus on language in EMI courses and programmes tends to be seen as a

problem because, as was explained in the second chapter, unattended language learning is thought to have very little or no benefit for language acquisition (Kellogg and Dare, 1989). Furthermore, even if EMI students are expected to be more independent learners of English compared to CLIL students, the content and language learning objectives of their university courses are much more domain-specific and highly specialised, so they also feel the need to be supported in improving their language skills. Not to mention that providing some form of language support is even more important with students coming from southern European countries, where people tend to have lower levels of English proficiency compared to the rest of Europe (Education First, 2019). Several studies have indeed shown that students' linguistic weaknesses can impair their learning in many ways, such as hindering their understanding of the subject matter, their participation in classroom activities and their success in oral and written examinations (Ackerley, 2017a; Airey, 2010; Bernhardt, 2005; Gundermann, 2014; Hellekjaer, 2010; Hincks, 2010). Unless enough attention is paid to the language component of EMI, the advantages of this immersive teaching approach are then likely to be reduced.

This is the reason why this study has tried to find a feasible way to include language teaching into the EMI syllabus by fostering the collaboration between content teachers and language teachers and by making use of specialised corpora and innovative online learning platforms. As emerged in the second chapter, team teaching might turn out to be a good solution to overcome EMI teachers' reluctance to teach language, since they do not often feel competent enough in their knowledge of English to teach their students how to correct their pronunciation, spelling, grammatical and stylistic mistakes and, above all, they tend to think that it is not their job to do so (Airey, 2012; Uys et al., 2007). Language experts might then help content teachers to recognise their key role as "discourse guide" and motivate them to include language teaching in their lectures (Lasagabaster, 2018). Furthermore, they might support content teachers in identifying the students' main linguistic needs and develop suitable tasks and activities to meet those needs (Costa, 2012), as was done in this case study. Specialised corpora can therefore be extremely helpful in this context because, as was discussed in the third chapter, they provide an honest representation of the language used for constructing and transmitting knowledge within a certain disciplinary community, without hiding its complexities and irregularities (Hadley, 2002; Huang, 2011). They can be directly investigated by students

or they can be used by teachers to inform the content of language activities, which students can then complete without having to deal with complicated corpus analysis software programmes. In addition, specialised corpora are very versatile tools, as can be seen from the several examples reported in this study of how they can be applied to the language classroom. In particular, they can be used to broaden the students' knowledge of ESP terminology and phraseology and to improve their subject-specific writing and speaking skills (Charles, 2012; Gavioli, 2005; Gollin-Kies et al., 2015; Lee and Swales, 2006; Staples, 2019). In this case study, a specialised corpus of course teaching materials was used to develop subject-specific language training for a group of first-year students attending an English-taught psychology degree programme at the University of Padova.

The data collected through this case study and then reported in the fourth chapter of this dissertation clearly show that participants have generally appreciated spending some time focusing on language forms and structures specific to their psychology course, as it has made them feel more confident about their knowledge of subject-specific English and more prepared for taking an English-taught course. However, it was not possible to determine whether they consider subject-specific language exercises, such as those that were developed for them, more useful than general English exercises, since students' opinion was evenly divided on the matter. The analysis of their answers to the feedback questionnaire also revealed a significant difference of opinion between Italian students and students from other countries. Italian students seem indeed to have appreciated this form of language training more than international students and to be more interested in doing additional language exercises for other courses in their degree programme. This might be due to the fact that Italian students tend to have lower levels of English proficiency compared to international students, as shown by previous studies (Costa and Coleman, 2013; Guarda and Helm, 2016; Pulcini and Campagna, 2015). The different scores attained by participants in the three sessions of activities have indeed confirmed that some students are more competent in English than others, which comes as no surprise considering that the group investigated is characterised by a high degree of heterogeneity in terms of students' first language, country of origin, length of exposure to English and language learning experiences. For this reason, this study has concluded that language training for EMI students is perceived as beneficial, but it could be more effective if diversified according to the students' language level. In future studies, it might also be

interesting to find out whether similar results would be achieved by integrating language exercises into classroom activities, as originally planned in this case study. However, despite the unusual circumstances under which this teaching experiment was carried out, the data collected can still provide useful insights into EMI students' language training needs as well as new ideas for including language teaching into the EMI syllabus.

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Appendix A

Project Proposal

Project description and objectives

This project is part of a study of English-medium instruction (EMI) in higher education, which tries to address what is considered to be one of the major obstacles to the successful implementation of English-taught courses and degree programmes in Italian universities, namely the lack of adequate English language proficiency on the part of the students (Ackerley, 2017; Guarda and Helm, 2016; Pulcini and Campagna, 2015). In particular, the project aims to investigate whether offering language support to students in the form of subject-specific terminology exercises would make it easier for them to study in a foreign language. A data-driven approach to language learning will be adopted, since it appears to be particularly effective to identify key subject-related terms and analyse recurrent features of English for Specific Purposes (ESP), that is the English language used in specialised contexts and fields of knowledge (Bowker and Pearson, 2002; Gavioli, 2005). The expected outcome is that the students will find language-focused activities useful and engaging and that they will then feel more confident and prepared when learning through the medium of English. Furthermore, the broader aim of this project is to investigate whether this could be a model to follow for the provision of subject-specific language learning activities for EMI students.

Participants

A group of students attending an English-taught course at the University of Padova during the second semester of the academic year 2019/2020. The subject taught in the course should be non-linguistic in nature, so it cannot be either an English language course or an English literature course.

Workload for the students

The students will be asked to carry out some interactive online activities at home during the first three weeks of the course. These activities will engage the students for no more than 40 minutes per week. Alternatively, it would be possible to make the activities

available to the students before the start of the course. After completing the activities, they will be asked to fill in a short questionnaire, which will be used to collect information about the participants' linguistic background and English language level as well as their perceptions of the usefulness of this type of activities. All data will be collected anonymously and will be used for the purpose of this study only.

Workload for the Professor

The Professor will be asked to provide access to the teaching materials of the course (slides, textbooks, journal articles, etc.), which will then be analysed by means of corpus linguistics tools in order to create a glossary of key-terms and prepare some activities tailored to address the particular linguistic features of the academic field. If possible, the Professor will be consulted as an expert in the subject field of the course in order to double-check that key subject-related terms have been included in the glossary. During the first three weeks of the course, the Professor will be asked to remind the students to carry out the online activities and fill in the questionnaire.

Activities

The students will be asked to carry out some problem-solving activities (crosswords, fill-in-the-gaps exercises, etc.), which will probably focus on the following language aspects:

- Session 1: glossary of key-terms and definitions, pronunciation and word stress, spelling.
- Session 2: the structure of noun phrases.
- Session 3: numbers, percentages and related phraseology.

Even though these activities will focus mainly on language aspects, they will turn out to be useful for content learning too.

The activities will be made available through Moodle and the final questionnaire will be created using Google Forms.

Project Proposal References

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Appendix B

Keyword List 1*: a ranking of the top 150 terms

(*generated from the comparison between the corpus of course materials and a less specialised corpus of psychology texts)

Rank	Frequency	Keyness	Keyword
1	3608	+8498.31	social
2	1294	+7364.09	psychology
3	1788	+3673.1	behavior
4	987	+2815.22	person
5	810	+2428.58	communication
6	1235	+2139.24	people
7	755	+2118.87	members
8	913	+2050.58	others
9	1450	+1834.05	self
10	697	+1827.41	personality
11	220	+1808.09	sociological
12	330	+1798.09	identities
13	579	+1743.9	attitudes
14	486	+1701.74	persons
15	281	+1579.84	intergroup
16	623	+1549.34	theory
17	432	+1535.47	American
18	412	+1494.89	attitude
19	200	+1427.58	chapter
20	398	+1413.02	aggression
21	194	+1337.66	persuasion
22	208	+1311.96	socialization
23	465	+1224.4	identity
24	168	+1222.9	schemas
25	155	+1174.68	sociology
26	239	+1101.52	love
27	316	+1039.27	press
28	905	+1038.76	will
29	320	+990.56	norms
30	584	+959.9	men
31	196	+953.88	stereotypes
32	3633	+927.89	are
33	504	+898.78	relationships
34	1824	+887.77	group
35	371	+790.61	situation
36	747	+772.68	do
37	219	+756.99	exchange

38	617	+733.83	influence
39	227	+731.38	message
40	198	+728.4	deviant
41	236	+718.43	society
42	258	+717	esteem
43	1011	+712.06	about
44	144	+704.3	conformity
45	254	+695.83	roles
46	332	+695.02	toward
47	151	+691.67	psychologists
48	99	+685.33	blacks
49	213	+674.34	aggressive
50	189	+645.17	helping
51	76	+639.33	disclosures
52	547	+635.17	status
53	127	+634.63	deviance
54	176	+632.32	disclosure
55	611	+623.99	new
56	111	+620.97	embarrassment
57	706	+618.31	women
58	200	+603	someone
59	113	+597.5	dissonance
60	229	+596.46	interpersonal
61	381	+580.67	help
62	533	+579.94	another
63	149	+565.28	attribution
64	139	+556.64	authority
65	142	+546.72	impression
66	1032	+543.52	if
67	142	+541.09	marriage
68	281	+532.15	conflict
69	235	+531.74	friends
70	82	+521.19	obedience
71	162	+508.14	man
72	876	+488.95	research
73	125	+480.82	photo
74	125	+472.59	nonverbal
75	235	+472.31	violence
76	49	+458.82	groupthink
77	88	+453.76	bystander
78	145	+438.78	perspectives
79	119	+438.27	situational
80	182	+433.28	member
81	4899	+428.84	is
82	144	+423.26	symbolic
83	102	+414.98	attributions

84	175	+414.18	collective
85	305	+410.1	emotions
86	166	+408.62	theories
87	85	+407.62	intimacy
88	105	+405.86	altruism
89	515	+403.56	role
90	126	+398.87	conversation
91	307	+398.39	source
92	146	+390.77	occupational
93	561	+390.27	work
94	36	+387.78	misdeed
95	123	+387.01	couples
96	104	+386.14	cohesion
97	92	+383.08	schema
98	188	+382.44	expectations
99	129	+378.85	attraction
100	155	+375.04	messages
101	88	+374.85	frustration
102	102	+372.3	police
103	82	+371.24	dating
104	99	+369.99	stereotype
105	86	+368.3	jobs
106	40	+367.52	riots
107	66	+365.16	persuasive
108	37	+364.94	ingratiation
109	86	+364.16	impressions
110	81	+363.3	rape
111	1015	+361.22	journal
112	165	+357.25	reactions
113	173	+356.07	engage
114	452	+352.12	students
115	83	+350.01	crowd
116	253	+349.3	must
117	217	+342.42	box
118	104	+339.86	crime
119	198	+339.74	act
120	561	+339.01	example
121	343	+336.39	psychological
122	55	+334.85	pornography
123	113	+333.9	commitment
124	331	+332.16	review
125	79	+332.13	undesirable
126	171	+330.18	college
127	161	+328.1	thinking
128	61	+324.4	legitimate
129	144	+323.71	physician

130	199	+323.09	media
131	837	+316.94	groups
132	59	+316.32	stigmatized
133	180	+316.15	goals
134	118	+312.85	organizational
135	113	+312.46	responsibility
136	137	+312.01	woman
137	222	+308.81	situations
138	285	+304.56	speech
139	195	+301.27	feel
140	208	+298.68	beliefs
141	89	+293.71	justice
142	33	+290.64	misdeeds
143	255	+289.44	personal
144	81	+288.89	conversations
145	199	+287.86	mediated
146	29	+287.34	prentice
147	157	+276.85	relations
148	116	+272.87	actor
149	360	+269.32	family
150	42	+266.45	delinquency

Keyword List 2*: a ranking of the top 150 terms

(*generated from the comparison between the corpus of course materials and a corpus of general British and American English)

Rank	Keyness	Keyword
1	+34418.00	relation
2	+17411.00	situate
3	+7873.00	meaning
4	+7326.00	converse
5	+5447.00	interpersonal
6	+4091.00	motivate
7	+3758.00	compute
8	+3520.00	politic
9	+3187.00	especial
10	+3092.00	dissonant
11	+2807.00	probable
12	+1617.00	misdeed
13	+1480.75	socialise
14	+1356.00	program
15	+1142.00	clothe
16	+1118.00	professional
17	+1047.00	adolescence
18	+951.00	ingratiate
19	+951.00	criterion
20	+785.00	alienate
21	+761.00	athletic
22	+642.00	subculture
23	+618.00	psychiatric
24	+595.00	paralinguistic
25	+500.00	shoplift
26	+500.00	stratify
27	+500.00	legitimacy
28	+476.00	dissatisfy
29	+452.00	buss
30	+404.00	predispose
31	+403.11	deviant
32	+381.00	eventual
33	+381.00	forewarn
34	+357.00	kraut
35	+357.00	sociobiology
36	+357.00	ridgeway
37	+333.00	revisit
38	+321.00	dyad
39	+318.70	bystander
40	+318.12	mediate
41	+309.00	cohabit

42	+309.00	equip
43	+298.55	stereotype
44	+285.00	interrelate
45	+285.00	directive
46	+285.00	okay
47	+267.50	acquaint
48	+264.62	steamship
49	+246.44	aggression
50	+238.00	throughput
51	+238.00	pronunciation
52	+238.00	grocery
53	+214.00	configure
54	+214.00	theorise
55	+214.00	pottery
56	+208.25	heuristic
57	+207.40	schema
58	+202.00	sociolinguist
59	+190.33	encode
60	+190.00	bodybuilder
61	+190.00	synchronous
62	+190.00	suspicious
63	+190.00	disruptive
64	+190.00	ridicule
65	+190.00	intone
66	+178.50	burgle
67	+178.50	sear
68	+172.50	anomie
69	+171.27	orient
70	+168.21	altruism
71	+167.00	luff
72	+167.00	isomorphic
73	+167.00	asynchronous
74	+167.00	transgress
75	+167.00	parenthood
76	+167.00	complaints
77	+167.00	admonish
78	+167.00	subset
79	+166.50	perpetrate
80	+150.27	infer
81	+147.40	superordinate
82	+146.38	reciprocity
83	+143.00	injustice
84	+143.00	reappraise
85	+143.00	reaffirm
86	+142.50	plenum
87	+142.50	loafed

88	+142.50	trope
89	+142.50	debrief
90	+127.00	conger
91	+127.00	argyle
92	+126.83	segregate
93	+124.22	arouse
94	+119.00	impoverish
95	+119.00	hedonist
96	+119.00	argumentative
97	+119.00	equivocate
98	+116.60	socioeconomic
99	+111.00	longitudinal
100	+107.00	instigate
101	+103.00	reciprocate
102	+101.44	cognition
103	+101.00	spillover
104	+99.17	mobilise
105	+95.00	embezzle
106	+95.00	marmot
107	+95.00	geste
108	+95.00	elate
109	+95.00	surmount
110	+95.00	reassert
111	+95.00	introvert
112	+95.00	abbreviate
113	+95.00	preoccupy
114	+95.00	reallocate
115	+95.00	misinformation
116	+90.40	inoculate
117	+90.40	coerce
118	+83.50	supplicate
119	+83.25	ruminate
120	+83.25	conform
121	+80.80	disclaim
122	+78.14	delinquent
123	+77.35	sociology
124	+74.75	attain
125	+74.53	norm
126	+71.55	psychology
127	+71.50	gestalt
128	+71.40	decode
129	+71.40	ethnocentric
130	+71.00	annotate
131	+71.00	adjoin
132	+71.00	ethology
133	+71.00	cairn

134	+71.00	railing
135	+71.00	oversimplify
136	+71.00	sympathise
137	+71.00	embroil
138	+71.00	congruous
139	+71.00	bewilder
140	+71.00	bereave
141	+71.00	debilitate
142	+71.00	disfigure
143	+71.00	affirmative
144	+71.00	readjust
145	+71.00	intoxicate
146	+71.00	transsexual
147	+71.00	directory
148	+71.00	dilate
149	+71.00	recount
150	+67.33	catharsis

Appendix C

SOCIAL PSYCHOLOGY AND COMMUNICATION - ACTIVITIES (Part 1)

- Pronunciation
- Keywords
- Adjectives
- Noun phrases
- Nominalization

PRONUNCIATION

You are about to take a short pronunciation quiz. In particular, you will be focusing on the pronunciation of the "th" sound. In English, the "th" sound can be voiced as in "this" (/ð/) or unvoiced as in "think" (/θ/). Which words contain the "voiced th" sound? And which ones contain the "unvoiced th" sound?

When in doubt, feel free to consult "Cambridge Dictionary" (link in the following slide), where you will be able to listen to both the British and the American pronunciation of the words included in the quiz.

For this exercise, listen to the American pronunciation of words.

<https://dictionary.cambridge.org/>

If you need, you can also consult this Interactive Phonemic Chart (link in the following slide) for an additional help with recognising the sounds of the English language.

<http://edit.macmillanenglish.com/pronunciation/phonemic-chart-in-american-english/>

✓ Which words contain the "voiced th" sound as in "this" (/ð/)?

Trustworthy

Without

Healthy

Thousand

Threat

Clothing

Therefore

Something

Other

Empathy

- ✓ Which words contain the “unvoiced th” sound as in “think” (/θ/)?

Theory

Gathering

They

Method

Than

Together

Ethics

Authority

Hypothesis

Father

- ✓ Now focus on the "y" sound. In English, the letter “y” can be pronounced /ɪ/ as in “philosophy” or /aɪ/ as in “why”. How do you pronounce the letter “y” in the following words? Use only the words with the /aɪ/ sound to complete the first four sentences and the words with the /ɪ/ sound to complete the last four sentences:

PHYSICIAN, LIFESTYLE, SYSTEM, ANONYMITY, HYPOTHESIS,
SYMBOL, STEREOTYPE, PSYCHOLOGY

Words with the /aɪ/ sound:

- 1) We define social _____ as the systematic study of the nature and causes of human social behavior.
- 2) These results are consistent with the _____ that girls and boys are being socialized to believe that there is a gender difference in math performance.
- 3) A _____ is a set of characteristics attributed to all members of some specified group or social category.
- 4) Occupational status is a key component of social standing and a major determinant of income and _____.

Words with the /ɪ/ sound:

- 1) Complete _____ of research participants should be preserved.
- 2) Holding certain attitudes may be seen as a _____ of loyalty to the group.
- 3) Spoken language is a socially acquired _____ of sound patterns with meanings agreed on by the members of a group.
- 4) How does patient agency affect the _____-patient dynamic within the visit?

KEYWORDS AND ADJECTIVES

✓ “BEHAVIOR” is a keyword in your academic field. Below you can find some adjectives used to describe it. Try to match each one of them with its definition:

- | | |
|-------------------|---------------|
| 1) Goal-directed | 5) Overt |
| 2) Proattitudinal | 6) Bizarre |
| 3) Innate | 7) Antisocial |
| 4) Adaptive | 8) Defensive |

- A) behavior that reflects and is consistent with a person’s attitude towards someone or something;
- B) any behavior that enables an individual to adjust to the environment appropriately and effectively;
- C) behavior that is odd, strange, or unexpected, particularly if it is out of the ordinary for a given person;
- D) behavior that is explicit, that is, observable without instruments or expertise;
- E) behavior characterized by the use or overuse of defense mechanisms in response to real or imagined threats of harm;
- F) behavior that is oriented toward attaining a particular aim;
- G) behavior that sharply deviates from social norms and also violates other people’s rights;
- H) behavior that appears to be developed and expressed with no specific training or experience and thus has a strong genetic basis.

- ✓ Some adjectives are made up of two words, such as “goal-directed”. Let’s build them up:

- 1) behavior that goes against the rules;
- 2) behavior that cares about other people’s thoughts and needs;
- 3) behavior that is consistent with a person’s identity;
- 4) behavior adopted when choosing between two or more possible alternatives.

- | | |
|--------------|---------------|
| 1) Rule- | A) breaking |
| 2) Other- | B) making |
| 3) Identity- | C) oriented |
| 4) Decision- | D) confirming |

NOUN PHRASES

Especially in academic English, it is common to pack large amounts of information into long noun phrases, which are usually characterised by a head noun and a wide range of modifiers (determiners, adjectives, adverbs, nouns, prepositional phrases, etc.). Some modifiers go before the head noun, while others go after it.

Let’s put the following noun phrases in order:

Example: A + social + psychology + experiment

determiner + adjective + noun + head noun

- 1) The apparatus that people use to communicate
 - Communication
 - Apparatus
 - Human

- 2) A project that entails researching a great number of subjects
 - Large-scale
 - A
 - Project
 - Research

- 3) The theory according to which people tend to adjust their style of speech to their interlocutor
 - Accommodation
 - The
 - Of
 - Speech
 - Theory

- 4) The recognition of facial expressions by means of a system that is completely automatic
 - Automatic
 - Recognition
 - Action
 - Facial
 - Fully

- 5) The attachment that children may develop to their caregiver, which can be quite strong and emotional in nature
 - To
 - Emotional
 - The
 - Strong
 - Caregiver
 - Attachment
 - A

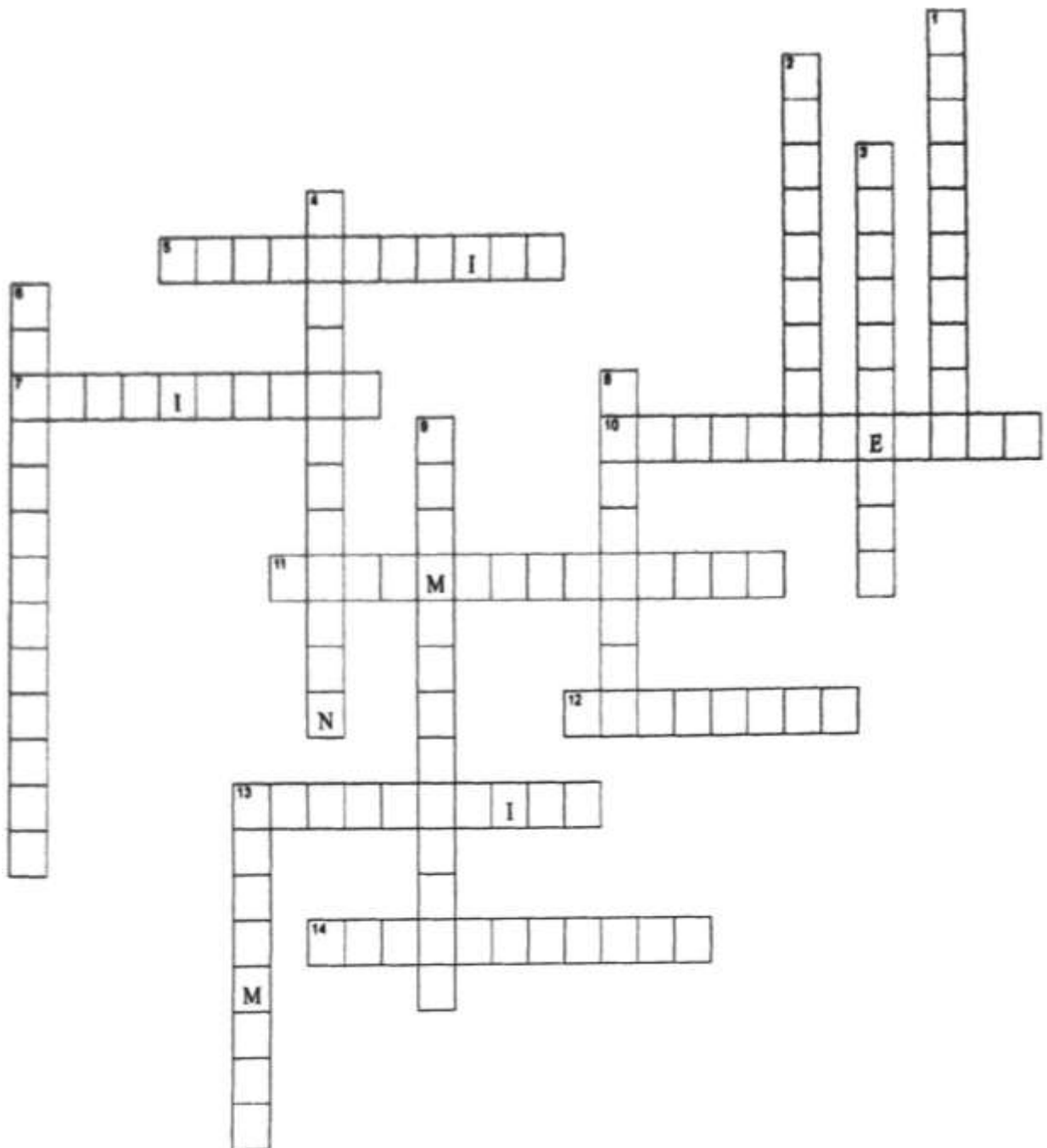
- 6) The assessment carried out by physicians of the behavior of a patient, which may turn out to be problematic in some cases
- Possibly
 - Assessment
 - Physician
 - Behavior
 - Problematic
 - Patient
 - Of
 - Some

NOMINALIZATION

Nominalization is also commonly used in academic English. It is a process used to turn verbs or other word classes into nouns that usually requires some kind of morphological transformation. For instance, the verb “to analyse” can be turned into the noun “analysis”, “to categorize” can be turned into “categorization”, and so forth. Click on the link in the following slide and try to complete the crossword by transforming verbs into nouns.

N.B. Words ending in “-ize” (American English) can also be spelled “-ise” (British English). For this exercise use the “z”.

<https://www.puzzlefast.com/en/puzzles/2020011915570558E/nsl-puzzle>



Across:

- | | |
|-------------------|------------------|
| 5. to interact | 12. to behave |
| 7. to commit | 13. to alienate |
| 10. to estrange | 14. to negotiate |
| 11. to stigmatize | |

Down:

- | | |
|-------------------|-------------------|
| 1. to occur | 6. to socialize |
| 2. to mediate | 8. to deviate |
| 3. to hypothesize | 9. to communicate |
| 4. to organize | 13. to argue |

SOCIAL PSYCHOLOGY AND COMMUNICATION - ACTIVITIES (Part 2)

- Spelling
- Numbers and percentages
- Verbs and prepositions

SPELLING

✓ Which one is spelled correctly?

- | | |
|------------------|------------------|
| - argument | - argoment |
| - uncounscious | - unconscious |
| - responsability | - responsibility |
| - patient | - pacient |
| - expectation | - espection |

✓ Which letter/letters should be doubled?

- | | |
|-----------------|-----------------|
| - comunication | - communication |
| - embarrassment | - embarassment |
| - aggressive | - aggressive |
| - accomodation | - accommodation |
| - sucessfull | - successful |
| - beginning | - begginning |
| - imppression | - impression |
| - accept | - accept |
| - occupational | - occupational |
| - access | - acess |

✓ Look out for those words that look alike: match each word with its definition.

- 1) Thorough
- 2) Though
- 3) Thought (noun)
- 4) Thought (verb)
- 5) Through
- 6) Tough

- A) difficult, strong, severe;
- B) from one end or side of something to the other;
- C) simple past of the verb “to think”;
- D) careful and covering every detail;
- E) used to introduce a fact or opinion that makes the other part of the sentence seem surprising;
- F) an idea or opinion.

Now complete this fill-in-the-blank exercise with the following words: THOROUGH, THOUGH, THOUGHT (noun), THOUGHT (verb), THROUGH, TOUGH.

- 1) Enacting a social identity involves adopting styles of dress, behavior, and _____ associated with the social category.
- 2) People, even _____ occupied with a task, notice an emergency less quickly if they are in group.
- 3) If we see a judge give the death penalty to a criminal, we might infer that the judge is _____ in disposition.
- 4) All the participants were given a _____ and detailed debriefing after the study.
- 5) Usually, emotions are _____ of as short-lived reactions to a stimulus outside of the individual.
- 6) Subtyping is a process _____ which perceivers create subcategories of stereotyped groups who serve as exceptions to the rule without threatening the overarching stereotype.

N.B. Even if these words do look alike, they are pronounced very differently. Take the time to consult Cambridge Dictionary (link in the following slide) to check their pronunciation.

<https://dictionary.cambridge.org/>

✓ Once again, match each word with its definition.

- 1) Affect
- 2) Effect

A) (verb) to influence someone or something, or cause them to change;

B) (noun) a change, reaction, or result that is caused by something.

Now complete this fill-in-the-blank exercise with the following words: AFFECT x2 and EFFECT x2.

- 1) The number of witnesses present might _____ a person's willingness to help in an emergency.
- 2) Sherif used the autokinetic _____ as a basis for studying informational influence in groups.
- 3) The tendency for members' status characteristics to _____ group structure and interaction is called status generalization.
- 4) Perceived certainty of sanctions generally has a much greater _____ on persons who have low levels of moral commitment.

NUMBERS AND PERCENTAGES

Have a look at the following sentences, which will provide you with some examples of how to use numbers and percentages in English. Use these examples to help you answer the following questions:

- 1) One striking statistic is that 60% of business phone calls fail to reach their intended recipient.
- 2) In 2010, only 9.5% of married couples were interracial; of these, 38% were White-Hispanic, 8% were Black-White, and the rest were White-other.

- 3) In the late 1990s, 60% of professional football players and 85% of professional basketball players were African American.
- 4) Fifty-three percent of patient disclosures in our dataset were in response to a physician's direct question regarding some potentially problematic behavior.
- ✓ Do we need to use the definite article "the" before percentages? Choose the correct sentence:
- According to our survey, the 80% of students would welcome being provided with language support.
 - According to our survey, 80% of students would welcome being provided with language support.
- ✓ Do we need a singular or a plural verb after percentages? Choose the correct sentence:
- More than 90% of students have passed their exams.
 - More than 90% of students has passed their exams.
- ✓ In English do we need to use a point or a comma to separate the integer part from the fractional part of a number? Choose the correct sentence:
- Only 9.3% of students will have to resit this exam.
 - Only 9,3% of students will have to resit this exam.
- ✓ What happens when a number occupies the first position in a sentence? Choose the correct sentence:
- 62% of students regularly visit this website for updates.
 - Sixty-two percent of students regularly visit this website for updates.

VERBS AND PREPOSITIONS

- ✓ “Say” and “think” are frequently used verbs to report other people’s words and ideas. If you do not want to be too repetitive, you could use some of the following synonyms. Find them in this word search puzzle.

S	Y	P	Q	P	A	F	G	E	B	H	S
U	U	D	Y	J	R	S	T	S	J	S	P
G	Z	R	E	S	O	A	M	O	T	V	U
G	A	Q	E	S	T	A	I	O	D	H	Z
E	F	R	B	S	C	S	T	W	A	B	K
S	X	Z	G	E	W	R	A	O	W	F	R
T	A	M	B	U	L	P	I	D	G	Q	W
Y	W	A	N	S	E	I	H	B	D	X	D
C	L	A	I	M	I	A	E	F	E	F	F
M	E	N	T	I	O	N	V	V	U	K	E
C	O	N	C	L	U	D	E	Z	E	T	V
A	E	X	P	L	A	I	N	Q	O	Y	O

- ✓ Some English verbs are often followed by prepositions. Try to complete this fill-in-the-blank exercise with the following prepositions: in, on, for, with.
- 1) If members of a group agree ____ the meanings of particular identities and behaviors, they can regulate their own behavior effectively.
 - 2) Two people waiting to participate ____ a psychology experiment may begin talking by speculating about the purpose of the experiment.
 - 3) When we notice the physiological reaction produced by an event in the environment, we tend to search ____ an appropriate explanation.
 - 4) The opportunities for deviance available to a person depend ____ age, sex, kinship, ethnicity, and social class.
 - 5) The widespread use of emoticons is an effort to compensate ____ the difficulty of conveying emotions.

- 6) Research indicates that individuals with family support are more likely to cope _____ stressful events by using active strategies rather than avoidance or withdrawal strategies.
 - 7) Theories of attribution focus _____ the methods we use to interpret another person's behavior and to infer its sources.
 - 8) Understanding the norm of reciprocity, those in need are less likely to ask _____ help when they believe they will not be able to repay the aid in some form.
- ✓ Several English verbs are followed by prepositions. Some verbs, however, might require an object before the preposition. Which two of the following sentences are correct?
- 1) Observational techniques allow researchers to study social activity in real-world settings.
 - 2) We group people, objects, and events into categories or schemas and develop stereotyped attitudes that allow to treat individuals as members of a category.
 - 3) Convenience samples usually lack external validity and do not enable the investigator to generalize the findings to any larger population.
 - 4) Experiments enable to manipulate independent variables and measure behavior in various ways.

SOCIAL PSYCHOLOGY AND COMMUNICATION - ACTIVITIES (Part 3)

- Pronunciation
- Spelling
- Compound nouns
- Noun phrases
- Keywords
- Adjectives
- Numbers and percentages

PRONUNCIATION

You are about to take a short pronunciation quiz. In particular, you will be focusing on the pronunciation of the letter “i”. In English, the letter “i” can be pronounced /ɪ/ as in “with” or /aɪ/ as in “white”. When in doubt, feel free to consult Cambridge Dictionary (link in the following slide), where you will be able to listen to both the British and the American pronunciation of the words included in the quiz. For this exercise, listen to the American pronunciation of words.

<https://dictionary.cambridge.org/>

If you need, you can also consult this Interactive Phonemic Chart (link in the following slide) for an additional help with recognising the sounds of the English language.

<http://edit.macmillanenglish.com/pronunciation/phonemic-chart-in-american-english/>

✓ How do you pronounce the letter “i” in the following words?

- Identity: /ɪ/ or /aɪ/
- Alienation: /ɪ/ or /aɪ/
- Anxiety: /ɪ/ or /aɪ/
- Influence: /ɪ/ or /aɪ/
- Interaction: /ɪ/ or /aɪ/
- Hierarchy: /ɪ/ or /aɪ/

- Recipient: /ɪ/ or /aɪ/
- Reliance: /ɪ/ or /aɪ/
- Reciprocity: /ɪ/ or /aɪ/
- Isomorphism: /ɪ/ or /aɪ/
- Deviance: /ɪ/ or /aɪ/
- Variety: /ɪ/ or /aɪ/
- Violence: /ɪ/ or /aɪ/

SPELLING

✓ Look out for those words that look alike: match each word with its definition.

1) Advice

2) Advise

A) (verb) to make a suggestion about what you think someone should do

B) (noun) suggestions about what you think someone should do

Now complete this fill-in-the-blank exercise with the following words: ADVICE x2 and ADVISE x2.

1) The availability of social support – in the form of _____ and emotional and material aid – increases our ability to cope successfully with change.

2) It is common to _____ people seeking jobs to network, to seek information and assistance from people they know, in person, online, or through networking sites.

3) Patients exhibit agency in having performed some medically relevant action against or without medical _____.

4) A counsellor at a community college may _____ a weak student to switch from pre-med to an easier major.

✓ Once again, match each word with its definition.

- 1) Quite
- 2) Quiet
- 3) Quit
- A) (adverb) very, completely
- B) (verb) to stop doing something
- C) (adjective) not noisy or not busy

Now complete this fill-in-the-blank exercise with the following words: QUITE, QUIET, QUIT.

- 1) Media campaigns are commonly used by public officials to change citizens' behavior through public service announcements that attempt to encourage people to _____ smoking.
- 2) On the surface, fake and genuine smiles may look _____ similar, but there are distinct differences between the two.
- 3) Parents often use their resources to create a home environment that facilitates doing well in school, for example, by providing their children with a _____ place to study.

N.B. Even if these words do look alike, they are pronounced very differently. Take the time to consult "Cambridge Dictionary" (link in the following slide) to check their pronunciation.

<https://dictionary.cambridge.org/>

✓ Once again, match each word with its definition.

- 1) Text
- 2) Test
- 3) Task
- A) the written words in a book, magazine, etc.
- B) a usually assigned piece of work often to be finished within a certain time
- C) an exam, an experiment

Now complete this fill-in-the-blank exercise with the following words: TEXT, TEST, TASK.

- 1) In some cases, investigators juxtapose theories that make different predictions, and the results of the _____ may enable them to reject one theory in favor of another.
- 2) The lack of a synchronous connection is taken advantage of when a communicator uses e-mail or _____ to send “bad news”.
- 3) A collective _____ requires group members to take into account the views of other group members to achieve a successful outcome.

COMPOUND NOUNS

✓ In your academic field, compound nouns with “SELF” are quite common. You can find some of them below. Try to match each noun with its definition:

- | | |
|-----------------------|--------------------------|
| 1) Self-disclosure | 6) Self-schema |
| 2) Self-enhancement | 7) Self-evaluation |
| 3) Self-deception | 8) Self-regulation |
| 4) Self-discrepancy | 9) Self-criticism |
| 5) Self-reinforcement | 10) Self-differentiation |
-
- A) an incongruity between different aspects of one’s self-concept, particularly between one’s actual self and either the ideal self or the ought self;
 - B) the act of revealing personal or private information about one’s self to other people;
 - C) the process or result of convincing oneself of the truth of something that is false or invalid;
 - D) the control of one’s behavior through the use of self-monitoring, self-evaluation, and self-reinforcement;
 - E) the evaluation of one’s own behavior and attributes, with recognition of one’s weaknesses, errors, and shortcomings;
 - F) the tendency to seek recognition for one’s individuality and uniqueness, particularly in contrast to the other members of one’s social group;

- G) a cognitive framework comprising organized information and beliefs about the self that guides a person's perception of the world;
- H) one's description and evaluation of oneself, including psychological and physical characteristics, qualities, skills, roles and so forth;
- I) the rewarding of oneself for appropriate behavior or the achievement of a desired goal;
- J) any strategic behavior designed to increase either self-esteem or the esteem of others.

NOUN PHRASES

It is also common to pack large amounts of information into long noun phrases, which are usually characterised by a head noun and a wide range of modifiers (determiners, adjectives, adverbs, nouns, prepositional phrases, etc.). Some modifiers go before the head noun, while others go after it. Let's put the following noun phrases in order:

Example: A + social + psychology + experiment

determiner + adjective + noun + head noun

- 1) The test which measures the strength of a person's subconscious association between mental representations of objects in memory
 - Test
 - Implicit
 - Association

- 2) The scores of tests that assess a person's abilities in areas such as comprehension, memory, inductive reasoning and so forth
 - Scores
 - Test
 - Mental
 - Ability

- 3) The model according to which it is possible for people to process information in two ways
- Of
 - The
 - Model
 - Dual-process
 - Processing
 - Information
- 4) The effect that arises from participating in a group and that positively influences a person's mental health
- Health
 - Positive
 - The
 - From
 - In
 - A
 - Stemming
 - Group
 - Participation
 - Mental
 - Effect

KEYWORDS

“COMMUNICATION” is a keyword in your academic field. Below you can find some adjectives used to describe it. Try to match each adjective with its opposite:

- | | |
|-----------------|----------------------|
| 1) Face-to-face | A) Covert |
| 2) Synchronous | B) Nonverbal |
| 3) Direct | C) Computer-mediated |
| 4) Verbal | D) Asynchronous |
| 5) Honest | E) Misleading |

ADJECTIVES

The negative form of adjectives can be created by adding negative prefixes, such as: dis, non, anti, counter, in, un. Let's add the correct negative prefixes to the following adjectives:

conventional > _____

correct > _____

respectful > _____

verbal > _____

social > _____

stereotypic > _____

appropriate > _____

attitudinal > _____

healthy > _____

intuitive > _____

consistent > _____

NUMBERS AND PERCENTAGES

Have a look at the following sentences, which will provide you with some examples of how to use the term “half” in English. Use these examples to help you answer the following questions:

- 1) The second half of this chapter considers the ways in which people actively determine how others perceive them.
 - 2) One-half of the students were asked to pay attention to the request; the other half were not forewarned.
 - 3) Half of the general public has an unfavorable opinion of us.
 - 4) More than half of the conflicts were about relationships.
- ✓ When do we need to use a singular verb? And a plural verb? Only two of the following sentences are correct. Which ones?
- Over half of the electorate has voted for this candidate.
 - Over half of the electorate have voted for this candidate.
 - Over half of Americans has voted for this candidate.
 - Over half of Americans have voted for this candidate.

Appendix D

Feedback Questionnaire

Thank you for completing the activities! We would really like to know whether you have found them useful and engaging. Any feedback you could provide would be greatly appreciated and will be collected anonymously. Thank you!

Age: _____

L1 (the language you have been exposed to from birth or that you use more often in your everyday life): _____

Home country: _____

How long have you been studying English? _____

Have you ever studied English in an English-speaking country (e.g., by taking part in study trips, summer schools, exchange programmes in the UK, the USA, Canada, Australia, New Zealand)?

☐ Yes

☐ No

Have you ever had any experience of CLIL at primary or secondary school? *CLIL: when a non-linguistic subject (history, science, etc.) is taught in English.

☐ Yes

☐ No

What do you think your current level of English is?

- Listening: ☐ A2 ☐ B1 ☐ B2 ☐ C1 ☐ C2

- Reading: ☐ A2 ☐ B1 ☐ B2 ☐ C1 ☐ C2

- Speaking: ☐ A2 ☐ B1 ☐ B2 ☐ C1 ☐ C2

- Writing: ☐ A2 ☐ B1 ☐ B2 ☐ C1 ☐ C2

Do you have any English language certificate (IELTS, TOEFL, Cambridge exams, etc.)?

☐ Yes

☐ No

If so, which? _____

Do you use English in your free time? If so, what for? You may select more than one option:

- ☐ I always use English in my free time
- ☐ For watching films and TV series
- ☐ For reading books, newspapers, magazines and comics
- ☐ For listening to music
- ☐ For listening to podcasts
- ☐ For playing online games and using phone apps
- ☐ For talking or chatting with a tandem partner
- ☐ I never use English in my free time
- ☐ Other: _____

You have just begun a course that is entirely taught in English. How does that make you feel? You may select more than one option:

- ☐ I am worried that I might not understand part of the lesson
- ☐ I feel at ease with English, so I think I will not have any difficulties
- ☐ I feel challenged, as I will need to make a greater effort to achieve good results
- ☐ I am excited to deal with new psychology-related topics in a foreign language
- ☐ I feel uncomfortable speaking in English in front of the class
- ☐ I feel overwhelmed by the amount of new words that I need to learn
- ☐ I am concerned about making spelling or grammar mistakes during the exam
- ☐ No problem, I am an L1 speaker of English

☐ Other: _____

If you had the choice, would you prefer the course to be taught in Italian?

☐ Yes

☐ No

Is having a good level of English important to you? If so, why?

☐ To perform well on this degree course

☐ Because I would like to participate in an exchange programme

☐ Because I would like to apply for a Postgraduate/Master's degree abroad/in English

☐ Because it improves my job opportunities in Italy

☐ Because it improves my job opportunities abroad

☐ I do not think it is important

☐ Other: _____

Do you find the activities we have done in class useful?

Not so useful ☐1 ☐2 ☐3 ☐4 ☐5 Very useful

Which set of activities do you find more useful? (1 = Not so useful; 5 = Very useful)

- | | | | | | |
|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| - Pronunciation: | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| - Spelling: | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| - Terminology (working with nouns): | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| - Terminology (working with adjectives): | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| - Numbers and percentages: | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |
| - Verbs and prepositions: | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 |

Have you learnt anything new?

Not much ☐1 ☐2 ☐3 ☐4 ☐5 A lot

Do you feel more confident about your knowledge of language specific to "Social Psychology and Communication" after completing these activities?

Not so confident ☐1 ☐2 ☐3 ☐4 ☐5 Very confident

The activities we have done in class are specific to the language of “Social Psychology and Communication”, as they introduce you to vocabulary and samples of language that you are likely to encounter during this specific course. Do you find them more useful than general English exercises?

☐ Yes, I prefer course-specific language exercises

☐ No, I prefer general English language exercises

☐ I appreciate both

☐ I do not feel I need to do any language exercises

Would you like the opportunity to do (non-compulsory) language exercises for “Social Psychology and Communication” or other modules in the Psychological Science degree?

☐ Yes

☐ No

Do you have any further comments or suggestions for improving this kind of activities?

Summary in Italian

Questo studio ha come obiettivo principale quello di proporre una soluzione pratica ed efficace per tentare di eliminare uno dei principali ostacoli al successo di un metodo d'insegnamento innovativo che prende il nome di "English Medium Instruction" o "EMI", il quale prevede l'utilizzo dell'inglese come lingua veicolare di corsi universitari in paesi in cui l'inglese non è la lingua ufficiale. Nello specifico, il problema a cui si intende porre rimedio è la mancanza di competenze linguistiche adeguate da parte di studenti che partecipano a programmi EMI e per i quali l'inglese non è la lingua madre. Sebbene l'inglese sia oggi la lingua straniera più studiata in Europa e le persone inizino ad impararla in età sempre più giovane (Eurydice, 2017), non è infatti insolito constatare che non tutti riescono a raggiungere entro la fine della scuola secondaria un tale livello di competenza in inglese da poter frequentare senza particolari difficoltà singoli corsi universitari e interi programmi di laurea erogati in lingua inglese. Questo fenomeno è particolarmente accentuato nei paesi dell'Europa meridionale, come l'Italia, la Spagna e la Grecia, dove la pratica EMI è ancora una novità e il livello d'inglese delle persone tende ad essere più basso rispetto ai paesi dell'Europa settentrionale (Education First, 2019; Wächter and Maiworm, 2002; 2008; 2015). Per questo motivo, il presente studio propone di fornire agli studenti che si apprestano a seguire uno o più corsi EMI un addestramento linguistico specifico per la loro disciplina di studio, facendo così avvicinare le pratiche EMI a quell'ideale di integrazione di lingua e contenuto già promosso dalle teorie CLIL ai livelli primari e secondari dell'educazione. L'obiettivo che si intende raggiungere supportando gli studenti nel loro apprendimento dell'inglese specialistico (ESP) è quello di accrescere la loro preparazione e il loro senso di sicurezza, evitando così che le loro debolezze linguistiche ostacolino la loro carriera universitaria e le loro future opportunità lavorative.

Il primo capitolo inizia con un breve approfondimento sul ruolo fondamentale che la lingua inglese svolge al giorno d'oggi in un mondo sempre più globalizzato ed interconnesso. Visto che le occasioni per entrare in contatto con persone provenienti da altri paesi e parlanti lingue diverse si sono fatte sempre più frequenti, è di conseguenza aumentato anche il bisogno di concordare una lingua comune per la reciproca

comprensione e l'inglese sembra essere la scelta più ovvia data la sua diffusione globale, come dimostra il modello dei tre cerchi concentrici della lingua inglese di Kachru (1985). Il primo cerchio comprende infatti tutti i paesi in cui l'inglese è la madrelingua della maggioranza della popolazione, ossia Regno Unito, Stati Uniti, Canada, Australia e Nuova Zelanda; il secondo cerchio rappresenta tutte le ex-colonie britanniche, dove l'inglese viene ancora appreso come seconda lingua per poter essere utilizzato al posto delle lingue locali in tutti gli ambiti ufficiali; infine, nel terzo cerchio, si trova un numero sempre crescente di paesi, tra cui anche l'Italia, dove l'inglese viene studiato come lingua straniera e viene utilizzato soltanto per comunicare oltre i confini nazionali. Il numero di coloro che imparano l'inglese come seconda lingua o come lingua straniera ha oggi superato di gran lunga il numero dei madrelingua. È perciò possibile affermare che l'inglese ha ormai raggiunto lo status di 'lingua franca', ossia viene utilizzato come strumento di comunicazione internazionale anche tra persone la cui lingua madre non è l'inglese (Mackenzie, 2014).

Secondo alcuni studiosi, questo fenomeno è da considerarsi non soltanto come una nuova forma di imperialismo che favorisce il perpetuarsi delle disuguaglianze tra Nord e Sud del mondo, ma anche come una seria minaccia alla diversità linguistica globale (Crystal, 2000; Piller, 2016; Phillipson, 1992; 1998). Molti altri invece ritengono che la diffusione della lingua inglese sia un fenomeno estremamente positivo e vantaggioso perché pensano che sia una condizione indispensabile per favorire la comunicazione e la cooperazione internazionale in svariati ambiti, tra cui quelli delle relazioni diplomatiche, dei trasporti, del commercio e della condivisione di informazioni e conoscenze (Ku and Zussman, 2010; Melitz, 2018; Popova and Beavitt, 2017). Inoltre, Crystal (2000) sostiene che, se l'inglese viene imparato in aggiunta alla propria madrelingua piuttosto che in sostituzione di essa, il repertorio linguistico di ogni persona risulterà arricchito e la diversità linguistica globale potrà essere preservata. Considerando quindi le infinite opportunità a cui una buona conoscenza dell'inglese può dare accesso, non c'è da stupirsi se gli insegnanti siano costantemente alla ricerca di metodi e approcci sempre più efficaci e che permettano agli studenti di immergersi completamente nella lingua inglese e di padroneggiarla al meglio.

Un metodo d'insegnamento che ha recentemente attirato l'attenzione di insegnanti e ricercatori è proprio l'EMI (English Medium Instruction) che, come è già

stato accennato in precedenza, consiste sostanzialmente nell'utilizzare la lingua inglese per insegnare una disciplina non linguistica a livello universitario in paesi in cui l'inglese non è la lingua ufficiale. L'EMI si distingue dal CLIL (Content and Language Integrated Learning), la sua controparte nella scuola primaria e secondaria, perché tende a considerare la lingua inglese soltanto come un mezzo attraverso cui veicolare contenuti, mentre le teorie CLIL attribuiscono alla lingua una duplice natura, considerandola sia come un mezzo sia come un oggetto di studio (Dalton-Puffer, Nikula and Smit, 2010; Marsh, 2006; Smit and Dafouz, 2012; Wolff, 2003). Ne consegue che gli insegnanti che implementano il CLIL cercano di proporre anche attività che mirano a sviluppare le competenze linguistiche dei loro studenti, mentre gli insegnanti che applicano l'EMI preferiscono concentrarsi sulla trasmissione dei contenuti e lasciano che siano gli studenti, in base alle loro necessità, a dedicare una maggiore o minore attenzione alle questioni linguistiche, come ad esempio imparare la terminologia specialistica del corso o ripassare regole grammaticali fondamentali per poter parlare o scrivere della loro disciplina di studio in modo corretto.

Entrambi i metodi hanno iniziato a diventare popolari in Europa a partire dagli anni Novanta e la loro diffusione è stata supportata soprattutto dall'Unione Europea allo scopo di migliorare le competenze linguistiche dei cittadini europei in altre lingue dei paesi membri, così da facilitare il tanto desiderato processo di integrazione europea. In particolare, alla diffusione del CLIL hanno contribuito soprattutto il programma LINGUA fondato dal Consiglio d'Europa, gli studi dell'European Platform for Dutch Education e dell'Università di Jyväskylä, che per primi hanno coniato il termine CLIL nel 1994, i workshop organizzati dal Centro Europeo di Lingue Moderne e le proposte del gruppo di esperti riunito dalla Commissione Europea nel 1997 (Marsh, 2012). Invece, per quanto riguarda la diffusione dell'EMI, è importante ricordare il cosiddetto "Processo di Bologna", con cui l'Unione Europea ha cercato di far fronte alla progressiva mercatizzazione delle università dando vita ad uno "Spazio Europeo della Formazione Superiore" (EEHA) armonizzato, cooperativo e competitivo, la cui lingua franca doveva essere l'inglese (Smit and Dafouz, 2012). Infatti, fornire corsi e programmi di laurea in lingua inglese permette alle università di reclutare studenti sia nazionali sia internazionali, aumentando così i propri profitti, di partecipare a programmi di scambio, come l'Erasmus Plus e l'Erasmus Mundus, e di migliorare la loro posizione nelle classifiche mondiali

delle migliori università (Coleman, 2013; Fabricius et al., 2016; Hellekjaer and Westergaard, 2003; Wilkinson, 2004).

Osservando i dati raccolti da tre studi effettuati dall'Academic Cooperation Association nel corso degli ultimi anni (Wächter and Maiworm, 2002; 2008; 2015), appare evidente che sono state soprattutto le università dell'Europa settentrionale e centrale ad implementare il maggior numero di programmi EMI fin dai primi anni 2000, in particolare in paesi come la Finlandia, i Paesi Bassi e la Germania. Più recentemente, anche alcuni paesi dell'Europa orientale, soprattutto l'Ungheria e la Lituania, hanno incrementato notevolmente la loro offerta di corsi e programmi EMI. Invece, i paesi dell'Europa meridionale rimangono ancora indietro in questo ambito rispetto al resto d'Europa. L'Italia, tuttavia, ha fatto dei notevoli passi avanti, passando dall'offrire un totale di 11 programmi EMI in 7 diverse università nel 2002 ad un totale di 439 programmi EMI in 61 università nel 2019 (University, 2019; Wächter and Maiworm, 2002). La diffusione di questi programmi si è concentrata soprattutto nelle regioni dell'Italia settentrionale, perché sono tendenzialmente più ricche e hanno maggiori contatti internazionali (Costa and Coleman, 2013). Il caso studio trattato in queste pagine è ambientato proprio in una di queste università settentrionali, ossia l'Università di Padova, che è stata fondata nel 1222 ed è oggi una delle più grandi università pubbliche italiane, con oltre 64.000 studenti iscritti. L'Università di Padova ha fatto dell'internazionalizzazione la sua priorità, reclutando insegnanti e studenti provenienti da ogni parte del mondo, promuovendo i programmi di scambio e fornendo una vasta scelta di corsi e programmi di laurea in lingua inglese.

Nel secondo capitolo, l'attenzione si focalizza su uno dei problemi che vengono più frequentemente riscontrati quando si offrono corsi e programmi EMI, ossia l'inadeguatezza delle competenze linguistiche di studenti e insegnanti. Per quanto riguarda gli insegnanti, il fatto di dover fare lezione in lingua inglese può danneggiare la loro sicurezza, il loro senso di competenza e la loro autorevolezza (Carroll, 2015). Molti di essi temono infatti di non poter assicurare che la qualità delle loro lezioni rimanga invariata quando queste vengono fornite in una lingua straniera. In particolare, temono di poter presentare i contenuti in modo meno chiaro ed accurato per colpa di una pronuncia scorretta, di una scarsa fluidità verbale, di una semplicità eccessiva del lessico utilizzato e delle frasi da loro composte o del mancato utilizzo di strategie espressive (Airey, 2011;

Hellekjær, 2010; Klaassen and De Graaff, 2001; Tzoannopoulou, 2017; Vinke, 1995). Inoltre, visto che la capacità di improvvisare in una lingua straniera è solitamente ridotta, preparare le presentazioni in inglese richiede agli insegnanti molto più tempo del solito perché si vedono costretti a pianificare ogni minuto della lezione in anticipo per evitare di essere colti di sorpresa (Carroll, 2015). Per lo stesso motivo, tendono ad interagire di meno con i loro studenti, rischiando così di rendere la lezione un lungo e tedioso monologo privo di battute, digressioni personali o aneddoti divertenti (Thøgersen and Airey, 2011).

Per quanto riguarda gli studenti, la loro preoccupazione maggiore è quella di non riuscire a comprendere il contenuto delle lezioni erogate in inglese a causa della loro scarsa conoscenza della lingua, per la presenza di parole nuove e troppo specialistiche o per colpa dell'accento e della velocità di esposizione dei loro insegnanti (Ackerley, 2017a; Kym and Kym, 2014; Sert, 2008). Questo rende loro più difficile anche prendere appunti durante le spiegazioni in classe (Hellekjær, 2010; Tzoannopoulou, 2017). Inoltre, molti studenti sostengono di non sentirsi a proprio agio quando viene loro chiesto di intervenire in classe per rispondere alle domande dell'insegnante o per partecipare a dibattiti e discussioni, perché temono di fare errori davanti a tutti e di essere presi in giro dai compagni (Ackerley, 2017a; Kudo et al., 2017; Lei and Hu, 2014; Öztürk and Gürbüz, 2014). In questo modo, le loro opportunità di far pratica dell'inglese parlato si riducono drasticamente e diventa così molto più difficile affrontare un esame orale (Airey, 2010; Hincks, 2010; Karakaş, 2017). Anche gli esami scritti sono spesso considerati molto complessi dagli studenti che seguono corsi erogati in lingua inglese, non soltanto perché temono di fare molti errori lessicali e grammaticali, ma anche perché non conoscono bene le caratteristiche del genere di scrittura accademica che viene richiesto nel loro ambito disciplinare (Arnbjörnsdóttir and Prinz, 2017; Gundermann, 2014; Hellekjær and Westergaard, 2002). Al contrario, anche se diversi studi hanno dimostrato che leggere in una lingua straniera rende il processo di comprensione molto più lento e difficoltoso, molti studenti non sembrano essere particolarmente preoccupati di dover leggere e studiare una gran quantità di libri di testo e articoli di riviste specializzate in lingua inglese (Carver, 1990; Fraser, 2007).

Di conseguenza, è molto importante fornire un supporto linguistico sia agli insegnanti sia agli studenti affinché questo metodo di insegnamento risulti efficace. Molte

università, tra cui anche l'Università di Padova, hanno iniziato ad offrire corsi di addestramento per insegnanti EMI che mirano non soltanto a migliorare le loro competenze linguistiche, ma anche a far loro conoscere strategie d'insegnamento più efficaci e interattive (Costa, 2015; Dalziel, 2017). Agli studenti invece vengono spesso offerti corsi EAP (English for Academic Purposes), generalmente organizzati da esperti di lingua inglese o da madrelingua, i quali però risultano inadeguati per la loro preparazione perché troppo generici e decontestualizzati (Carroll, 2015; Kirkgöz, 2009). Gli studenti hanno infatti bisogno di internalizzare il particolare sistema simbolico e concettuale, la terminologia specialistica e le specifiche regole del discorso che vengono utilizzati dalla comunità disciplinare di cui vogliono far parte (Northedge, 2002).

Gli insegnanti dei loro corsi EMI, in quanto esperti in materia, sarebbero i più adatti ad aiutare gli studenti in questo compito, ma raramente dedicano del tempo ad approfondire questioni linguistiche in classe per diversi motivi. Alcuni ritengono che non sia compito loro insegnare l'inglese specialistico ai loro studenti visto che non sono insegnati di lingua, mentre altri non si sentono all'altezza perché ritengono di non avere una conoscenza della lingua sufficiente per poterla insegnare agli studenti (Airey, 2012; Uys et al., 2007; Wilkinson, 2017). Alcuni sostengono anche di non avere abbastanza tempo per inserire esercizi di lingua inglese in un programma d'insegnamento già molto vasto, mentre altri ritengono che sia molto difficile trattare questioni linguistiche data l'eterogeneità dei livelli linguistici degli studenti (Ashcraft, 2008; Carroll, 2015; Wilkinson, 2017). Per questo motivo, sarebbe auspicabile una collaborazione tra insegnanti EMI ed esperti di lingua inglese. Questi ultimi potrebbero infatti aiutare gli insegnanti EMI a identificare la terminologia e gli aspetti linguistici che potrebbero creare particolari difficoltà agli studenti e saprebbero sviluppare degli esercizi mirati su quegli argomenti da far fare agli studenti in classe o a casa per prepararsi alla lezione (Costa, 2012; Lasagabaster, 2018). Così facendo, è più probabile che gli studenti migliorino le proprie competenze linguistiche perché vengono incoraggiati a prestare attenzione non soltanto ai contenuti del corso, ma anche alle forme linguistiche utilizzate dagli esperti della materia. Come sostengono Moncada-Comas e Block (2019), sarebbe infatti ingenuo pensare che l'apprendimento linguistico possa avvenire per osmosi, semplicemente esponendo gli studenti alla lingua straniera.

Come viene discusso nel terzo capitolo, i corpora specializzati possono essere degli strumenti particolarmente utili per poter individuare i bisogni linguistici degli studenti EMI e creare così attività adatte per supportarli nel loro apprendimento dell'inglese specialistico. In generale, un corpus può essere definito come una collezione di testi autentici raccolti in formato elettronico secondo determinati criteri (Bowker and Pearson, 2002). Mentre i corpora generici sono molto vasti, quelli specializzati tendono ad essere più selettivi perché i testi raccolti devono essere rappresentativi del linguaggio specialistico che viene utilizzato in un particolare settore disciplinare (ibid.). Per poterli analizzare è necessario utilizzare dei programmi software, come AntConc, i quali sono dotati di funzioni complesse che permettono di svolgere analisi statistiche, creare liste di parole disposte in ordine di frequenza o di importanza e recuperare tutte le occorrenze di una certa parola per osservare come essa venga utilizzata all'interno di un contesto autentico (ibid.). Ciò che distingue l'analisi dei corpora dallo studio delle grammatiche tradizionali è proprio la loro autenticità, ossia il fatto che permettono di osservare ciò che le persone hanno realmente detto e scritto e non ciò che è considerato grammaticalmente possibile, quindi ciò che risulta idiomatico in una lingua (Hadley, 2002; Huang, 2011).

I corpora possono essere utilizzati in modo diretto o indiretto. Nel primo caso, sono gli studenti stessi a svolgere ricerche linguistiche esplorando un determinato corpus, mentre nel secondo caso il corpus viene analizzato dagli insegnanti, i quali poi si servono dei risultati delle loro ricerche per creare esercizi linguistici mirati (Leech, 1997). La prima modalità rende il processo di apprendimento più attivo e coinvolgente, dal momento che gli studenti si comportano come fossero dei "detective" che vanno alla ricerca di indizi per poter formulare e testare le loro ipotesi sul funzionamento della lingua che vogliono apprendere (Johns, 1997). Tuttavia, diversi studiosi ritengono che sia troppo difficile per gli studenti utilizzare complessi strumenti di analisi dei corpora da soli, quindi ritengono che la seconda modalità sia di più facile applicazione (Kennedy and Miceli, 2001; Koosha and Jafarpour, 2006; Vannestål and Lindquist, 2007; Yoon and Hirvela, 2004). Anche se si opta per la modalità indiretta, si tratta comunque di un approccio d'insegnamento induttivo, visto che agli studenti viene comunque chiesto di ricavare le regole della lingua straniera per conto proprio, servendosi degli esempi tratti dai corpora che vengono preselezionati per loro dagli insegnanti (Sun, 2003). In entrambi

i casi si tratta quindi di “data-driven learning” (apprendimento guidato dai dati), termine che è stato coniato da Tim Johns nel 1991.

I corpora specializzati sono strumenti molto versatili e possono essere applicati con successo anche all'interno dei contesti EMI per rendere più facile agli studenti assimilare complessi concetti accademici in una lingua straniera. Nello specifico, i corpora specializzati possono essere utili per far conoscere e memorizzare agli studenti la terminologia e la fraseologia specifiche della loro disciplina di studio in lingua inglese (Gavioli, 2005). Questa funzione dei corpora è molto importante perché, come hanno dimostrato le ricerche di Hyland e Tse (2007), l'idea di un vocabolario accademico unico e uguale per tutte le discipline di studio non è realistica visto che ogni ambito ha il proprio lessico specialistico e che, anche se ambiti diversi possono condividere dei termini comuni, non è detto che questi vengano utilizzati allo stesso modo o con lo stesso significato. Inoltre, i corpora possono anche essere utilizzati per sviluppare le competenze di discorso e di scrittura degli studenti, migliorando la loro pronuncia e fluidità verbale e familiarizzandoli con le convenzioni del genere di testi che viene loro chiesto di scrivere durante i corsi o all'esame (Brown and Lewis, 2003; Charles et al., 2009; Cho and Yoon, 2013; Conrad, 2002; Hyland and Bondi, 2006; Staples, 2019). In questo modo, gli studenti imparano ad utilizzare il linguaggio che viene ritenuto appropriato dalla comunità disciplinare di cui desiderano far parte e iniziano così a sviluppare la propria identità professionale e ad essere riconosciuti come membri effettivi di quella stessa comunità (Crosthwaite and Cheung, 2019; Weyreter and Viebrock, 2014).

Nel quarto e ultimo capitolo viene presentato il caso studio. Si tratta di un esperimento didattico innovativo e collaborativo, durante il quale è stata offerta ad un gruppo di studenti EMI iscritti all'università di Padova la possibilità di usufruire di un addestramento linguistico finalizzato ad accrescere la loro conoscenza dell'inglese specialistico. Per poter reclutare partecipanti adatti ai fini dell'esperimento, ossia studenti che durante il secondo semestre dell'anno accademico 2019/2020 frequentassero un corso EMI il cui programma non trattasse direttamente né di lingua né di letteratura, è stata inviata una dettagliata proposta di collaborazione al referente del corso di laurea in “Psychological Science”, dal momento che tutti gli insegnamenti di tale corso vengono erogati esclusivamente in lingua inglese (Università degli Studi di Padova, 2019e). Dopo aver ottenuto la sua approvazione, la proposta è stata inoltrata a tutti i professori che

insegnano nel corso di laurea, invitandoli a partecipare all'esperimento. Molti professori si sono dimostrati interessati al progetto, ma soltanto uno dei loro insegnamenti è stato scelto per questo caso studio, ossia il corso in "Social Psychology and Communication". Ciò che rende questo corso particolarmente adatto per l'esperimento è il fatto che si tratti di un corso per studenti del primo anno, i quali hanno solitamente più bisogno di un supporto linguistico perché non hanno ancora molta pratica dei corsi EMI.

Alla docente del corso "Social Psychology and Communication" è stato chiesto di fornire pieno accesso ai materiali di insegnamento che avrebbe utilizzato durante il corso, tra cui il libro di testo, diversi articoli di riviste specializzate e le presentazioni che sarebbero state proiettate in aula. Tutti questi materiali sono stati raccolti per creare un corpus elettronico altamente specializzato di 460.779 parole. Per la sua creazione e consultazione sono stati utilizzati i programmi software di Laurence Anthony, in particolare AntFileConverter (2017), TagAnt (2015) e AntConc (2019a). In questo modo è stato possibile generare una lista di parole chiave del corso da inserire all'interno delle attività linguistiche da proporre agli studenti. Queste attività hanno preso la forma di quiz, cruciverba, puzzle, esercizi di completamento e abbinamento, in modo da preservare almeno in parte la propensione alla ricerca e alla scoperta tipica del "data-driven learning" (Johns, 1991). I vari esercizi sono stati organizzati in tre sessioni e sono stati caricati su Wooclap, una piattaforma online innovativa che permette agli studenti di completare le attività anche da casa (Lebbe and Alzetta, 2015). Questa funzione della piattaforma si è rivelata indispensabile dal momento che l'Università di Padova, come molte altre università italiane, ha deciso di sospendere tutte le lezioni in presenza a partire dalla fine di febbraio 2020 e ha optato per una didattica esclusivamente online a causa della pandemia di COVID-19 (Università degli Studi di Padova, 2020d).

Su un totale di 80 studenti iscritti al corso di "Social Psychology and Communication" nel secondo semestre dell'anno accademico 2019/2020, ben 65 hanno completato la prima sessione di attività, di cui 48 hanno portato a termine anche la seconda sessione e 40 la terza. I partecipanti presentano un background linguistico molto diversificato, dal momento che provengono da 15 paesi diversi: Italia, Turchia, Cina, Egitto, Francia, Germania, Grecia, Islanda, Libano, Lituania, Russia, Serbia, Regno Unito, Stati Uniti e Vietnam. Molti di loro hanno un'età compresa tra i 19 e i 22 anni e hanno iniziato a studiare la lingua inglese fin dai primi anni della scuola primaria. Alcuni

hanno già avuto un'esperienza CLIL e altri hanno già fatto dei viaggi studio all'estero, ma il 26% afferma di aver appreso l'inglese soltanto attraverso metodi più tradizionali. In media, la maggioranza ritiene di avere un livello di competenza avanzato, pari ad un C1 nel *Quadro comune europeo di riferimento per la conoscenza delle lingue* (Consiglio d'Europa, 2018), anche se è possibile che alcuni sopravvalutino la loro conoscenza dell'inglese visti i punteggi piuttosto bassi ottenuti nelle attività. Questa ipotesi trova ulteriore conferma nel fatto che, quando è stato loro chiesto esplicitamente se si trovassero completamente a loro agio studiando una materia accademica complessa in lingua inglese, più della metà degli studenti ha ammesso di non esserlo, soprattutto perché temono di fare errori grammaticali o di spelling durante l'esame e perché non si sentono tranquilli ad intervenire in classe parlando in inglese davanti a tutti. Tra coloro che hanno partecipato all'esperimento, ci sono inoltre 4 studenti di madrelingua inglese. Tutti gli studenti utilizzano l'inglese nel loro tempo libero, soprattutto per guardare film e serie tv, ascoltare musica e leggere libri, giornali, riviste e fumetti. Inoltre, la maggioranza ritiene che avere una buona padronanza della lingua inglese sia un requisito importante per poter conseguire i propri progetti accademici e lavorativi, quindi si può dedurre che si tratta di studenti molto motivati.

Risulta evidente da un'analisi dei punteggi ottenuti dagli studenti nelle tre sessioni di attività che alcuni di loro hanno un buon livello di inglese, mentre altri presentano ancora una conoscenza lacunosa della lingua. In generale, comunque, la maggioranza dei partecipanti ha ottenuto dei buoni punteggi, soprattutto nella seconda sessione di attività. Gli esercizi che hanno creato maggiori difficoltà sono quelli sulla costruzione dei "noun phrases", sui nomi composti e sui verbi dichiarativi. Sono risultati invece meno complicati quelli su numeri e percentuali, sull'uso di aggettivi e preposizioni e sulla pronuncia e lo spelling di alcuni termini specialistici. Nello specifico, gli studenti hanno fatto fatica a pronunciare correttamente le parole 'isomorphism', 'deviance' e 'hierarchy' e a scrivere senza errori le parole 'embarrassment', 'accommodation' e 'responsibility'. Analizzando poi le risposte al questionario che è stato somministrato loro alla fine dell'esperimento, appare evidente che la maggioranza degli studenti ha apprezzato le attività proposte, ritenendole molto utili. Hanno considerato particolarmente rilevanti ed efficaci gli esercizi di spelling e di terminologia, mentre quelli sui numeri e le percentuali non hanno suscitato il loro interesse. Inoltre, la maggioranza degli studenti ha affermato

che, anche se il contenuto delle attività non era completamente nuovo per loro, l'addestramento linguistico proposto li ha comunque aiutati a sentirsi più sicuri e preparati. Per questo motivo, oltre il 60% degli studenti accoglierebbe volentieri un simile addestramento linguistico per gli altri corsi EMI che frequentano e la metà vorrebbe anche ricevere esercizi di inglese accademico più generici. È stato inoltre notato che sono soprattutto gli studenti italiani ad aver apprezzato questa opportunità di rafforzamento linguistico, forse perché il loro livello d'inglese tende generalmente ad essere più basso rispetto a quello di studenti provenienti da altri paesi. In conclusione, è possibile affermare che questo caso studio costituisce un buon modello da seguire per fornire agli studenti EMI un addestramento linguistico mirato. Tuttavia, si ritiene che le attività sarebbero più efficaci diversificando l'offerta, ossia fornendo esercizi di difficoltà maggiore agli studenti più competenti e altri di difficoltà minore agli studenti che presentano maggiori lacune nella loro conoscenza della lingua inglese.