

EFFECTS OF ENGLISH MEDIUM INSTRUCTION  
ON CONTENT COURSES IN HIGHER EDUCATION

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## DECLARATION OF ORIGINALITY

I, Çiğdem Bak, certify that

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## ABSTRACT

### Effects of English Medium Instruction on Content Courses in Higher Education

This study explores the effects of foreign language-medium instruction, namely English medium instruction (EMI) on content courses in higher education. Therefore, in order to investigate these effects, undergraduate university students' perceptions studying at the faculty of education at an EMI university in Turkey were examined. The data were collected from students via semi structured individual and focus group interviews and a background questionnaire. The data were analyzed using qualitative methods via content analysis. The findings indicated that students were aware and knowledgeable about the foreign language policies applied in their EMI university, and their implementations in their EMI program. Moreover, students did not report significant comprehension problems due to the instruction delivered with a foreign language-medium; English. Students also talked about the importance of limited native language (L1) use on increasing comprehension and motivation, and they reported using various strategies in and out of the classroom in order to understand the content. Moreover, students expressed their need for extra support in terms of speaking skill in English and field terminology in Turkish. Finally, students were found to have positive perceptions regarding EMI as a medium of instruction, and they considered EMI to have positive effects on their foreign language, academic, professional, and personal development.

## ÖZET

### Yükseköğretimde İngilizce'nin Öğretim Dili Olarak Kullanımının Alan Dersleri Üzerindeki Etkileri

Bu çalışmada yükseköğretimde İngilizce'nin alan dersleri işlenirken öğretim dili olarak kullanımının bu dersler üzerindeki etkileri araştırılmıştır. Bu etkileri araştırmak amacı ile Türkiye'de öğretim dili İngilizce olan bir devlet üniversitesinin eğitim fakültesinde okumakta olan lisans öğrencilerinin konuya ilişkin görüşleri alınmıştır. Bu çalışmada veri toplanırken; yarı yapılandırılmış bireysel ve odak grup görüşmeleri ve özgeçmiş anketi yapılmıştır. Veriler incelenirken; içerik analizinin yapıldığı nitel analiz teknikleri kullanılmıştır. Çalışmanın sonucunda, öğrencilerin üniversitelerinde uygulanan yabancı dil politikaları ve bu politikalar doğrultusunda oluşan yabancı dilde öğretim uygulamaları konusunda farkındalık ve bilgi sahibi oldukları görülmüştür. Bu çalışmada, öğrenciler alan derslerinin yabancı dilde yapılmasının dersleri anlama konusunda önemli bir sorun teşkil etmediğini bildirmişlerdir. Ayrıca, öğrenciler kısıtlı anadil kullanımının dersleri anlama ve motivasyonu artırma açısından önemli olduğunu belirtmişlerdir. Bu bağlamda, yabancı dilde yapılan dersleri anlamak için öğrenciler ders içinde ve ders dışında çeşitli yöntemler kullandıklarını bildirmişlerdir. Bunlara ek olarak, öğrenciler İngilizce konuşma becerisi ve anadilde alan terminolojisi konularında daha fazla desteklenmeleri gerektiğini düşünmektedirler. Sonuç olarak, öğrencilerin İngilizcenin öğretim dili olarak kullanılması konusunda olumlu algıları olduğu saptanmış ve öğrenciler bu durumun yabancı dil, akademik, kariyer ve kişisel gelişimleri üzerinde olumlu etkileri olduğunu bildirmişlerdir.

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## DEDICATION

This dissertation is dedicated to  
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## ABBREVIATIONS

CEFR	: Common European Framework of Reference for Languages
EFL	: English as a Foreign Language
EIL	: English as an International Language
ELF	: English as a Lingua Franca
EMI	: English Medium Instruction
FLMI	: Foreign Language-Medium Instruction
IELTS	: International English Language Testing System
L1	: First/Native Language
TOEFL	: Test of English as a Foreign Language
TWE	: Test of Written English

# CHAPTER 1

## INTRODUCTION

### 1.1 Background of the study

The study is motivated by the internationalization process that many universities throughout the world have been experiencing. Within this process, since English is considered to be the lingua franca, many universities adopt English medium instruction where courses are taught fully or partially in English. As a result, the way medium of instruction policies is constructed, and how these policies are implemented with reference to various aspects of EMI such as instructional practices, classroom pedagogy, the contributions of this process to students' academic and personal lives during and after the education have been the topic of various research similar to this study.

As outlined above, the status of English as a lingua franca has become more of an issue in all areas of life. According to Crystal (2003), "a language achieves a genuinely global status when it develops a special role that is recognized in every country" (p. 3). English with its prevalent existence throughout the world can be considered to have this genuine status. For instance, millions of native and non-native speakers use English for various reasons such as occupational and/or personal (Ricento, 2015). Additionally, one of the areas where English is used widely and dominantly is in the area of education especially in the context of higher education. In line with this, Hammel (2007) states that "throughout the 20<sup>th</sup> century, international communication has shifted from a plural use of several languages to a clear pre-eminence of English, especially in the field of science" (p.53). Therefore, with the internationalization efforts in the academia where English is seen as an

international language, various universities around the world including several universities in Turkey have started using English medium instruction (EMI) while delivering content courses. Consequently, these practices have necessitated institutions to reconstruct and revise their language policies and practices. As a result, EMI as a phenomenon, has been documented in the literature in a multifaceted way throughout the world (Jenkins, 2014; Macaro, 2018). In line with this, due to the increasing potential and application, EMI has also been documented and researched in Turkey with its underlying reasons, implementations, and consequences (Doğançay-Aktuna, 1998; Selvi, 2014; İnal, Bayyurt, & Kerestecioğlu, 2021).

In higher education, in order to apply EMI, various foreign language-medium instruction policies are constructed with the aim of ensuring its successful implementation; however, with practice, a more accurate picture come into view. For instance, in order to meet the academic requirements, students are to use their foreign languages effectively. As a result, the importance of previous foreign language education, and also the English preparatory program can be considered to be crucial. Accordingly, when the objectives and tasks in the English preparatory program are in line with the tasks that students are to deal with during their departmental courses, then students may be better at handling their content courses (Kırkgöz, 2009b). In other words, for students to be successful in their departments, it is important to equip students with necessary skills and facilities. For instance, field terminology can also be a source of difficulty for students. Another issue can be about the need to improve speaking skill since it is one of the most crucial skills to participate in class discussions, to ask and answer questions. As a result, the current study explores EMI with its various components with respect to students' experiences, needs,

motivations, and achievements regarding EMI, and it tries to provide some insights and suggestions regarding EMI and its implementation in an efficient way.

## 1.2 Significance of the study

This study contributes to the existing research in language policy and planning in a number of ways. Since the aim of the study is to explore the effects of English medium instruction (EMI) on content courses in higher education, the study can be considered to have contributions to both theory and practice in the field of language policy and planning. Throughout the world and in the country where this research is carried out, EMI policies gain prominence. However, how well or appropriately the relevant policies are constructed and put into practice are often questioned. Within the scope of the current study, EMI policies and their various implementations within the research setting will be examined and the results of the study are expected to yield a different focus for various stakeholders such as theoreticians, policy makers and practitioners. In addition, the findings can be expected to be transferrable for various educational settings such as universities, high schools, and other educational settings where English is used as a medium of instruction. As a result, first of all, this study is carried out at an established EMI university which is very experienced in terms of implementing EMI since 19<sup>th</sup> century. Although it was established as a college for male students in 1863-Robert College-during the reign of the Ottoman Empire, it became an EMI university by law in 1971-Boğaziçi University. Therefore, the implementation of EMI as perceived by students studying at Boğaziçi University would provide insights into a sound EMI program where hundred percent EMI is implemented. Accordingly, the university setting will be explained in detail in methodology part.

Secondly, most of the EMI studies are carried out in faculties of engineering and faculties of business and administrative sciences (Kim, 2014; Li, 2020; Huang & Curle, 2021) since EMI is implemented more in these faculties all around the world. Moreover, there are also few studies, in which faculty of education is examined among other faculties within the scope of the same research (Hengsadeekul, Koul, & Kaewkuekool, 2014; Tsui & Ngo, 2017). However, this case study is one of the few studies in which only education faculty is examined extensively with respect to English medium instruction policies and implementations. Therefore, this study is expected to present a more focused perspective to the application of EMI. In addition, the faculty of education is a crucial case in Turkey in the sense that, in 1982 EMI Education Faculties were founded in Turkey in which the medium of instruction is English. The reason for opening these EMI education faculties was to educate students as teachers who could teach courses such as Science and Mathematics with EMI in Anatolian high schools. However, after the policy changes in education in Turkey which took place between 1997-2012, for instance, in some state schools such as Anatolian high schools, the teaching of content courses such as Mathematics and Science with EMI ended. In line with this, the educational policies of Turkey will also be presented in detail in the literature review section. As a result, there are some students in this study who will not teach with EMI in schools after graduation unless they work in private schools where the medium of instruction can be English for content courses such as Mathematics. In addition, there are a number of participants who will not pursue a teaching career and will work in other professions instead. These students, nevertheless, opted for a university education at an EMI institution, the reasons of which should be further explored. For instance, in the faculty of education in the Department of Mathematics and Science education, there

are several teacher education programs such as Teaching Chemistry, Teaching Mathematics, Teaching Physics, and Teaching Science at the secondary and primary school levels. At primary school level, participants will teach with Turkish medium instruction after graduation, but still they want to study at an EMI university, their reasons are expected to contribute to and constitute the significance of the study. Moreover, there are other departments in the faculty of education, where the participants after graduation will use Turkish while working. For instance, the Department of Educational Sciences offers a degree program in Guidance and Psychological Counseling. After graduation, while participants do their counseling, they will use Turkish at schools while counseling. Moreover, in the Department of Primary Education which offers a degree program in Early Childhood Education, the participants or the prospective preschool teachers may or may not use English while teaching at schools. As a result, with differences in career prospects, although the graduates of the EMI faculty may or may not need to use English in their professional lives, they still want to study at an EMI university for various reasons which will be explored in this research and which is expected to shed a significant and a different perspective to EMI research.

Third, related studies examined different aspects of EMI. For instance, some studies investigated use of English and mother tongue with respect to codeswitching (Ljosland, 2011; Karakaş, 2019). Some studies examined use of learning strategies while dealing with EMI courses (Kagwesage, 2013). However, this study makes a significant contribution to the literature by providing a multifaceted examination of EMI with respect to classroom pedagogy, use of language, instructional methods employed, academic, professional and personal development, and various other aspects such as use of foreign language skills and learning strategies.

Finally, this study makes a contribution to the literature in the sense that it not only examines EMI from the perceptions of students but also it presents suggestions of students regarding the improvement of the process. In that sense, the perceived needs of the students are voiced which can be considered to be crucial given that students are to deal not only with the content but also with the foreign language-medium with which the courses are instructed. As a result, it is critical to voice these concerns since they can be facilitative in terms of overcoming challenges and improving conditions throughout the process.

### 1.3 Aims and the research questions

There are various aims regarding the current study. First of all, it aims to explore university students' knowledge and awareness regarding the foreign language policies and EMI implementations in their university. Secondly, it explores students' perceptions regarding various aspects of EMI such as use of English, content comprehension, and classroom pedagogy. Finally, it aims to explore the effects of EMI on students' foreign language, academic, professional, and personal development.

Therefore, to realize the aims of this research, the following research questions were put forward:

- i. What do students think about EMI in their own university in terms of
  - official policies
  - EMI implementations
- ii. How do students perceive EMI in their content courses in terms of
  - language
  - content

- classroom pedagogy
- iii. How do students perceive the effects of EMI policies on their
- foreign language development
  - academic development
  - professional development
  - personal development

#### 1.4 Definition of key terms

Throughout the thesis, I frequently refer to certain terms and relevant concepts in line with the existing literature. Since I make my discussions and explanations based on these terms and concepts, I would like to clarify what I refer to when I use these key terms.

English medium instruction (EMI) refers to “the use of the English language to teach academic subjects (other than English itself) in countries or jurisdictions where the first language of the majority of the population is not English” (Macaro, 2018, p.1).

Accordingly, this study examines the effects of EMI on content courses in higher education, and I use English medium instruction (EMI) interchangeably with foreign language-medium instruction (FLMI) to refer to the function of English as a medium to teach and learn content courses. In addition, there are also other terms:

English as a lingua franca (ELF) refers to “English when it is used as a contact language between people from different first languages (including native English speakers)” (Jenkins, 2014, p. 2).

English as an international language (EIL); “EIL emphasizes that English, with its many varieties, is a language of international, and therefore *intercultural*, communication” (Sharifian, 2009, p. 2).

English as a global language is explained as follows: “a language achieves a genuinely global status when it develops a special role that is recognized in every country” (Crystal, 2003, p.3).

In accordance with these, I generally use English as a lingua franca interchangeably with the terms English as an international language and English as a global language. I use all of these terms to explain that English is used as a common international language to establish interaction among people who use it as a native language, foreign or a second language in various domains such as education, business and health. In addition, while explaining ELF and related terms such as English as an international language, global Englishes, world Englishes; there can be various definitions put forward by scholars for these concepts. However, according to Bayyurt and Dewey (2020), there are crucial overlaps between them.

Lastly, there are two other terms in line with the study; native language is defined as follows: “This refers to the first language that a child learns. It is also known as the primary language, the mother tongue, or the L1 (first language)” (Gass & Selinker, 2008, p. 7). Accordingly, I use the term native language interchangeably with native tongue, mother tongue and L1 in order to refer to the students’ native language. In addition, target language is defined as “the language being learned” (Gass & Selinker, 2008, p.7). In line with this, when I use the term target language or English; I use it for students’ and lecturers’ English language use where English is used as a lingua franca in education; in other words, as a foreign language-medium in order to teach and learn content courses.

## CHAPTER 2

### LITERATURE REVIEW

The aim of this chapter is to present the concept of internationalization initially and to explain it with reference to its reflections in education specifically in higher education context. In order to realize this, the adoption of English medium instruction with the aim of internationalization will be explained within the framework of language policy planning by approaching English from a lingua franca perspective. Then, EMI policies, implementations and research done around the world and in Turkey will be presented.

#### 2.1 Internationalization as a global process and a policy

Globalization is an undeniable phenomenon in today's world, and the effects of it are seen with internationalization efforts in various domains. In that sense, globalization and internationalization as terms can be used interchangeably however it is important to distinguish them (Jenkins, 2014). According to Altbach and Knight (2007), globalization is “the context of economic and academic trends that are part of the reality of the 21st century” (p.290); in addition, Altbach and Knight (2007) define internationalization as a term which consists of “the policies and practices undertaken by academic systems and institutions-and even individuals- to cope with the global academic environment” (p. 290). Accordingly, internationalization efforts in the global world is widely encountered in various areas one of which is education. These efforts have connections with English which is the global lingua franca of today, and which necessitate the integration of English into education policies. Firstly, “plurilingualism and multilingualism are embedded in the official policies of

the European Union and Council of Europe, and the Bologna Process for harmonizing Higher Education promises ‘proper provision for linguistic diversity’ ” (Coleman, 2006, p.1). However, in the 20<sup>th</sup> century, it is seen that in international communication, there is a change from use of various languages to dominance of English specifically in the area of science (Hamel, 2007). In accordance with this, Jenkins (2014) states that “the English language is playing a major role in the internationalization of global HE” (P.5). With this view, it becomes crucial to conceptualize English.

#### 2.1.1 The place of English in internationalization

English with its status, the opportunities it provides is used all around the world and its users are increasing day by day. According to Kachru (1990), “knowing English is like possessing the fabled Aladdin’s lamp, which permits one to open, as it were, the linguistic gates to international business, technology, science, and travel” (p.1). Accordingly, millions of people appreciate “the convenience of having a lingua franca available to serve global human relations and needs” (Crystal, 2003, p. 30). In all domains of life such as business, education, and media; the global use of English is seen and it can be considered to be a common language to establish international communication. Moreover, with its current status, people who use English as their second or foreign language currently outnumber the users of varieties such as Australian, Canadian, British, American and New Zealand (Kachru, 1990). As a result, due to the opportunities it provides in terms of accessing the world for various purposes, possessing the knowledge of English can be considered to be advantageous, and in education, the adoption of English as a medium of instruction becomes a widely encountered reality. In that sense it is important to define English

specifically English medium instruction from a language policy and planning framework.

### 2.1.2 Defining EMI within language policy and planning framework

In order to define EMI from a language policy and planning perspective, it is important to underline the effects of globalization. In that sense, “globalization is a highly complex process that has made a considerable impact on the multidimensional aspects of societies at various levels, including language policies of many countries” (Tsui & Tollefson, 2007 as cited in Kırkgöz, 2009a, p. 663). In the field of education, language policies specifically medium of instruction policies have started to be redesigned in line with the status of English as a global language since “English is considered a symbol of modernization, a key to expanded functional roles, and an extra arm for success and mobility in culturally and linguistically complex and pluralistic societies” (Kachru, 1990, p.1). As a result, in order to understand the medium of instruction policies within the scope of language policy and planning, it is important to perceive how language policy and planning is defined. Accordingly, various definitions were put forward by scholars. First of all, Cooper (1989) defines language planning as “deliberate efforts to influence the behavior of others with respect to the acquisition, structure, or functional allocation of their language codes” (p. 45). Another definition put forward by Tollefson (1991) for language planning is: “all conscious efforts to affect the structure or function of language varieties” (p. 16). In addition, language planning is also defined as “the deliberate, future-oriented systematic-change of language code, use and/or speaking, most visibly undertaken by government, in some community of speakers” (Baldauf, 2008, p. 19). As it can be understood from these definitions, language planning consists of four aspects: “status

planning (about society), corpus planning (about language), language in education (or acquisition) planning (about learning), and (most recently) prestige planning (about image)” (Baldauf, 2008, p. 18).

In line with this, according to Cooper (1989) language policy and language planning can be considered to be synonymous at times, but language policy generally addresses to the objectives of language planning. Therefore, it can be stated that language planning then leads to formation of language policies. Accordingly, Tollefson (1991) defines language policy as “language planning by governments” (p.16). In addition to this definition, Hashimoto (2013) defines language policy as “a way to protect, enhance or undermine the language rights of speakers of a given language in a society where more than one language is used in the public arena” (p. 29).

After presenting the definitions, it is important to address status planning in detail as a crucial aspect of language planning within the scope of this study. Status planning refers to “the allocation of languages or language varieties to given functions, e.g. medium of instruction, official language, vehicle of mass communication” (Cooper, 1989, p. 32). Moreover, “status planning determines which languages are to be used in various public functions such as governing, education, the media etc.” (Doğançay-Aktuna, 2004, p. 26). Therefore, it is important to determine which language(s) should be used for various public functions such as education, and in line with this, English as a medium of instruction has become widespread in numerous universities in various countries where English is not the mother language (Wilkinson, 2013). As a result, it is important to explain the status and function of English as a medium of instruction. In line with this, it can be stated that adoption of EMI in higher education

is widely seen throughout the world which requires careful revision and construction of foreign language policies.

### 2.1.3 English medium instruction as a global policy in higher education

English is used as a medium of instruction at various phases of education such as primary and secondary, in addition, one of the educational settings where English is also used as a lingua franca is higher education, and many universities throughout the world prefer to use EMI more and more in order to compete in the international field (Björkman, 2014). In this process, academic content is instructed with languages that are not the mother languages of students, but they are the languages students want to learn, and this approach is seen in all phases of schooling from pre-school to specifically to tertiary education (Shohamy, 2013). In that sense, English with its unique status as a lingua franca is seen to be the most frequently adopted medium of instruction. Moreover, EMI in higher education is a crucial growth area in which more than half of the world's international students are instructed in English, and universities offer an increasing range of courses in English (Graddol, 2006 as cited in Ball & Lindsay, 2013).

There are some reasons for introducing programs or courses that are instructed via the medium of English throughout the world. According to Coleman, these drivers can be explained with seven categories: “CLIL, internationalization, student exchanges, teaching and research materials, staff mobility, graduate employability and the market in international students” (Coleman, 2006, p. 4). As a result, in line with the internationalization efforts, language policies have started to be designed in line with international objectives. Macaro (2018) explained it further as follows:

Since the establishment of the European Union (EU) through the Maastricht Treaty of February 1992, it is possible to identify four interlocking initiatives

that have sought to develop language-related policy at a level above that of the nation state. These initiatives are: the ‘mother tongue plus two other languages’ policy, ‘Content and Language Integrated learning’, the ‘Erasmus Programme’ and the ‘Bologna Process’. (p. 46)

These initiatives can be considered to have great impact on the internationalization of higher education. Especially, the Erasmus Program and the Bologna Process can be said to be widely adopted in various universities worldwide. The Erasmus program is designed to ensure student mobility and to make students attain various skills, and the Bologna Process or the Bologna Declaration in 1999 had the aim to provide a common framework of higher education qualifications with which obstacles related to student mobility could be eliminated (Macaro, 2018). Therefore, with the Bologna Declaration, universities in Europe have been trying to increase academic mobility, and to realize this, a great number of English-taught programs are constructed; by this way, not only students could continue their studies in a university out of their own country but also lecturers could teach and do research at universities in other countries (Björkman, 2016). As a result, in Europe and in the rest of the world, there is great increase in EMI, and the mainstay of this growth can be said to be the globalization of economic structures, internationalization of education, and changing demographics, and as a result, there occurs interconnectivity which requires a language that everyone can interact without a need for interpreting services (Macaro, 2018). In addition, there can be other reasons for English’s being widely used. For instance, nearly all academic materials such as books and articles are published especially in English (Curry & Lillis, 2004; Lillis & Curry, 2010 as cited in Shohamy, 2013). Moreover, there are various advantages for using English as the medium of instruction at universities: when the language is common; in addition to easier staff and student exchanges, cooperation among universities is better, and job opportunities are more (Björkman, 2010). As it is seen, adopting EMI in education

comes with various benefits for students, lecturers, and for institutions as well.

However, in order to implement related policies efficiently, it is important to locate these policies on a sound basis by taking into consideration the internationalization process throughout the world as well. In line with this, when language policies in the European Union is considered; in the process of establishing EMI policies, a great deal of attempts and initiatives has been put forward especially in the European Union; these foreign language policies especially at tertiary level were not about a single country' situation, and the policies were put forward to establish a common framework for the universities that aim to be international throughout the world. In line with this, in the last twenty years, universities' international activities increased in dimension, aim and complicatedness; these activities include study-abroad programs which enable students to learn about different cultures, in addition, there are also programs which enable students to access to higher education in other countries, and there are also activities which provide students with opportunities to enhance their international perspectives, skills, and also activities to increase foreign language programs, and to facilitate understanding across cultures (Altbach & Knight, 2007). However, there are not only advantages related with internationalization of higher education but also some difficulties for both students and lecturers; students, in order to complete the programs, are required to do the coursework, and the lecturers are to do their teaching and research while they deal with the linguistic demands of their local environment (Björkman, 2016).

As a result, globalization necessitated internationalization efforts in education. In all levels of education, there is the international spread of EMI, and this is seen as an indispensable side effect of globalization (Piller & Cho, 2013). The use of English as the medium of instruction is spreading not only at undergraduate but also at the

graduate level in the European context, and this implementation is widely seen in various parts of the world (Cenoz & Gorter, 2012). As a result, in order to cater for the needs of education systems of the globalized world, most universities try to be an international one by adopting English as the medium of instruction. Sahan, Galloway and Mckinley (2022) describe the process as “unprecedented growth in the teaching of academic subjects through English” (p.2). However, the way EMI programs are implemented are not uniform considering the role assigned to English language (Baker & Hüttner, 2016). As a result, there are universities that offer full EMI, and there are universities offering EMI partially at varying degrees in their faculties and programs. However, criticisms related to EMI research propose that when applying EMI, English and its worldwide dominance is indispensable, but this may cause not well informed English-only EMI application policies, and in accordance with that various scholars emphasize that EMI can be implemented in a way that fosters multilingualism, and give students studying in these programs the chance to utilize their precious multilingual resources (Sahan, Galloway, & McKinley, 2022).

## 2.2. English in Turkey and EMI as a policy in education

In order to explain EMI as a policy in education, first the spread of English will be explained which is followed by the status of English in Turkey. Then, the place of English in the Turkish education system specifically in higher education will be explained along with the language policies, one of which is EMI.

### 2.2.1 The spread of English in Turkey

Due to economic and sociopolitical events, the spread of English started after World War II in the non-colonized areas through careful language planning; English

became the lingua franca in various domains such as science, technology, tourism, and trade gradually replacing French; moreover, English was integrated into the education systems of numerous countries even in areas that are officially monolingual so as to have access to information networks (Doğançay-Aktuna, 1998). In Turkey, along with the westernization and modernization actions which began after the establishment of the Turkish Republic in 1923, stronger connections with Europe, and with the French language were formed; however, in the 1950s, Turkey slowly started to move towards the power of the US and English as an international language during which the real spread of English in Turkey appears to begin because of the increasing effect of American military and economic power (Doğançay-Aktuna, 1998). As a result, the use of English was started to be seen in various domains one of which was education. Beginning in 1950s, this phase was the first phase of English spread through schooling until the late 1970s, then from the mid-1980s, the second phase of the spread took place with more contact with the free market economies, the effects were seen in Turkey also with new brands of products, new terminologies, and popular American culture and media (Doğançay-Aktuna, 1998).

### 2.2.2 The status of English in Turkey

When the sociolinguistic profile of English in Turkey is considered, it can be explained with Kachru's concentric circles framework for World Englishes (1986, 1992b): "The current sociolinguistic profile of English may be viewed in terms of three concentric circles. These circles represent the types of spread, the patterns of acquisition, and the functional allocation of English in diverse cultural contexts" (Kachru, 1992b, p. 356). Among these circles, Turkey belongs to the expanding

circle. The expanding circle consists of regions in which the performance varieties of the language are utilized mainly in EFL context; the varieties do not have any official status and are generally restricted in their uses (Kachru, 1992b). Moreover, the expanding circle consists of countries that realize the importance English as an international language. These countries were not colonized and did not give English any administrative status (Crystal, 2003). In accordance with these, English in Turkey is used as a foreign language. It is a performance variety. Performance varieties mainly consists of varieties that are used as foreign languages, they do not have institutionalized status, but they have restricted functional roles in certain contexts such as trade, tourism, education, and other international actions (Kachru, 1992a). Accordingly, in terms of education, Turkey is one of the countries in Kachru's expanding circle category, and has not been colonized by an English speaking country; however, Turkey has adopted EMI in some schools and universities in both secondary and higher education due to political and economic reasons (Macaro, 2018).

As a result, Turkish is the only official language in Turkey. Moreover, "in Turkey, English is not an official language, a national lingua franca, or a second language" (Doğançay-Aktuna, 1998, p. 31). However, English is widely taught in schools starting from kindergarten to universities. In addition, Doğançay-Aktuna (1998) explained it further as follows:

In Turkey English carries the instrumental function of being the most studied foreign language and the most popular medium of education after Turkish. On an interpersonal level, it is used as a link language for international business and for tourism while also providing a code which symbolises modernisation and elitism to the educated middle classes and those in the upper strata of the socioeconomic ladder. (p. 37)

### 2.2.3 English in education in Turkey

The official language and language of education in Turkey is Turkish, and English as a foreign language is the only language taught as a compulsory subject in all levels of education among the other foreign languages taught (Kırkgöz, 2007).

#### 2.2.3.1 English in primary education

Until 1997, primary education in Turkey was five years, then there was a three-year secondary education, and a three-year high school education, and schools were grouped under two categories as public and private; however among the state schools; Anatolian high schools had a different status in the sense that there was a centralized test to enter these schools similar to private schools, and education in these Anatolian high schools consisted of four years, with the first year allocated to English education, and following years certain courses such as Mathematics and Science were instructed with English (Kırkgöz, 2007). Then, The Ministry of National Education (MoNE) made an education reform in 1997 entitled “Improving National Education Project” with which compulsory education was extended from five to eight years, and at the same time with this reform; English language courses were promoted within the public and private primary curricula in 1998 (Selvi, 2014). As a result, English became a compulsory subject for students in compulsory education, and English began to be taught to students in fourth and fifth grades (Kırkgöz, 2007). In addition, in 2012 with another education reform, the compulsory education was extended to 12 years by Turkish Government, and with this reform, primary school students from first to fourth grade started taking foreign language courses in second grade for two hours a week, but students from fifth to eighth grade have foreign language courses four hours a week (Mone, 2012 as cited in Selvi,

2014). However, in private primary schools, English is instructed starting from the first grade for three to four hours a week as an extracurricular activity (Selvi, 2014).

#### 2.2.3.2 English in secondary education

After the establishment of the Turkish Republic in 1923, with the movements of modernization and westernization, stronger ties with Europe and with the French language took place, but in the 1950s, due to increasing effect of American economic and military powers, the spread of English in Turkey began (Doğançay-Aktuna, 1998). In the 19<sup>th</sup> century, there were schools which adopted foreign language-medium instruction. For instance, Robert College established in 1863 was the first institution teaching with EMI in Turkey. In addition, in secondary education, the first Anatolian high school was opened in 1955 (Kırkgöz, 2007). The Anatolian high schools provided students with intensive foreign language education especially in English, and they are supplemented with dual language instruction in content courses (Selvi, 2014). However, due to reasons such as lack of teachers to teach Science and Mathematics courses with English, and complaints about the fact that students instructed with EMI in these courses experience difficulty in the centralized university entrance examination which is in Turkish; The Turkish Ministry of National Education in 2002 decided that Science and Mathematics courses would start to be taught in Turkish which were previously instructed in English (Doğançay-Aktuna and Kızıltepe, 2005 as cited in Kırkgöz, 2007).

#### 2.2.3.3 English in higher education and EMI as a policy

The closer connections with USA after World War II, and Turkey's first attempts in world politics via participating the United Nations in 1945 and NATO in 1952

brought about bigger concern in English as an international in Turkey; therefore, EMI was made accessible by Turkish Government at secondary and tertiary education in 1950s, and later it was also available in private universities in 1980s (Selvi, 2014). In higher education, English is either an obligatory subject or a medium of instruction (Büyükkantarcıoğlu, 2004). Accordingly, in Turkish medium universities, when English language is integrated into the curriculum as a compulsory course; it is mostly delivered to first year students operating as a service or an auxiliary function; and the English curriculum has the aim to support students' general English knowledge providing them with the skills required to read and perceive English publications in the field they study (Kırkgöz, 2007). Moreover, “promotion policies that reinforce publication in journals listed in SSCI or other prestigious indexes push faculty members to write in English and set the tone for the role of English versus Turkish in academia in Turkey” (Doğançay-Aktuna & Kızıltepe, 2005, p. 258). Therefore, in addition to its widespread use specifically in tertiary education, English is seen as a necessity for better paid jobs and academic advancement (Doğançay-Aktuna & Kızıltepe, 2005). As a result, “English performs an array of different functions in today's Turkey, ranging from the medium of instruction in the national education system to job requirements or financial incentives in professional life” (Selvi, 2011, p. 196).

Regarding historical roots of EMI in terms of its application in the institutions of higher education in Turkey; it can be stated that the first institution teaching with EMI was Robert College founded in 1863 by an American missionary (Kırkgöz, 2007). Afterwards, Orta Doğu Teknik Üniversitesi (Middle East Technical University) was founded in 1956 which is the first EMI university in higher education (Selvi, 2014). Although Middle East Technical University which was

founded in 1956 is considered to be the first EMI university, Boğaziçi University formerly Robert College is the first institution teaching with EMI. Yildiran (2011) explained the foundation of Boğaziçi University as an EMI university and the process as follows; in 1971 with the Act no. 1750; Robert College was transferred to the Government of Turkey, and was transformed into Boğaziçi University. As a result, Boğazçi university had its origins from the first EMI institution, and therefore can be considered to be a well-established EMI university. After Boğaziçi University, Bilkent University was founded in Ankara in 1984 which was the first private foundation funded university with EMI, and the other private universities also began to teach with EMI (Selvi, 2014). As a result, while Turkish is the main language of instruction in Turkish Higher Education; Turkish Government, as part of the higher education policy, supports FLMI in English, French and German, and also competencies in English and other languages (Selvi, 2014).

#### 2.2.3.4 Macro policies and micro implementations of EMI

The Higher Education Act which is issued in 1984 entails the beginning of the macro policy regulations about the teaching of English at higher education level (YÖK, 1984 as cited in Kırkgöz, 2009a). The policy considers the political and the national goals of achieving competitiveness in science and technology; therefore, the increasing role of English and demand for EMI made the universities decide about using Turkish or English as the medium of instruction, and for Turkish medium universities, the decision was integrating English as a compulsory part of the curriculum (Kırkgöz, 2009a). As a result, the initial official action to set a list of criteria to be met by universities deciding to choose English as a medium of instruction was issued in 1996 by Higher Education Council (YÖK); the first of these

criteria were the departments' possessing sufficient number of content instructors with adequate knowledge of the foreign language to teach courses in that language; the second criterion was to establish a foreign language center (Kırkgöz, 2009a). As a result, there is English language proficiency policy to study at an EMI university. If students study at EMI universities; first, they are to prove their proficiency in English language by passing either universities' English test or the international English tests; if students cannot pass these test, then they are to study at the intensive English program of their university for a year, and at the end of it; they are to pass the proficiency test of their university to start studying in their departments (Büyükkantarçioğlu, 2004 as cited in Tezeller-Arık & Arık, 2014). As explained above; there are intensive English preparation programs for students for a year who cannot prove their proficiency in English language in the preliminary English proficiency test (Selvi, 2014). The last criterion was about the availability of resources; in that sense, departments should have sufficient number of textbooks and other relevant materials which are published in the foreign language regarding that field and which can be accessed through the department or the library of the university (Kırkgöz, 2009a). Lastly, regarding the implementation of EMI in higher education; there can be differences as full or partial EMI. For instance, there can be full or 100% EMI policy applied in a university, and there can be partial EMI in another university. In addition, within the same university there can be differences in terms of application of EMI. For instance, there can be partial EMI in one faculty, but there can be full EMI in other faculties of the same university. As a result, even though there is EMI as a macro policy, there can be different implementations of it at universities. For instance, in Boğaziçi University, medium of instruction is English except for the Faculty of Law in which the medium of instruction is at least 30%

English (See, Official Gazette, 2016, Issue 29739 for the Official Regulations of Boğaziçi University for Undergraduate Education, part two).

Lastly, in line with the previously explained policies of EMI in primary and secondary education and their relation to the EMI policies at higher education; it can be stated that regarding policies in Anatolian high schools; until 2002 content courses such as Mathematics and Science were instructed in English. However, afterwards EMI in these content courses were replaced with Turkish medium instruction. This situation was contradicting with the foundation of EMI education faculties in 1982. Accordingly, these education faculties were founded by the Council of Higher Education in 1982 in the enactment that was published in the Official Gazette dated July 20, 1982 (Yıldıran, 2011). In line with this, according to the Delegated Legislation about Organization of Higher Education Institutions and National Education Commission Report; July 20, 1982, part 3, article 13; similar to Middle East Technical University's Education Faculty, Boğaziçi University's Education Faculty was founded in order to educate undergraduate students who become teachers after graduation and who can teach at the Ministry of Education's schools where education is carried out with foreign language-medium instruction (The Delegated Legislation about Organization of Higher Education Institutions and National Education Commission Report, 1982). As a result, education faculties in EMI universities can be said to be founded in order to cater to the teacher needs of the Anatolian High Schools where the medium of instruction for content courses such as Mathematics and Science was English. However, after the policy changes in 1997, 2002, 2012 as explained previously, the EMI education faculties still exist although in Anatolian high schools; Mathematics and Science courses are no longer instructed with EMI.

## 2.3 Research on EMI

There are various studies carried out regarding EMI. First of all, studies done throughout the world will be presented. Then, studies done in the local context which is Turkey will be addressed.

### 2.3.1 Previous studies in EMI in the world

There are various studies about perceptions of stake holders on EMI. Some studies focused on students' perceptions on various aspects of EMI similar to this study (Kagwesage, 2013; Yeh, 2014; Li, 2020; Huang & Curle, 2021). However, some studies focused on lecturers' perceptions (Kılıçkaya, 2006; Ölçü & Eröz-Tuğa, 2013; Karakaş, 2016; Rowland & Murray, 2020). In addition, some studies examined both students' and lecturers' perceptions (Sert, 2008; Tatzl, 2011; Belhiah & Elhami, 2015; Baker & Hüttner, 2019).

Some of these studies were carried out at undergraduate programs similar to this study (Tsui & Ngo, 2017; Lin & Lei, 2021); however, some studies were carried out at graduate programs (Suviniitty, 2010; Ljosland, 2011; Rowland & Murray, 2020). As a result, EMI research has been carried out with different stake holders and at different levels of university education.

In terms of various aspects of EMI that were researched; some studies investigated participants' attitudes for EMI, and these studies generally indicated positive outcomes. For instance, in the study by Tsui and Ngo (2017) students' perceptions of EMI policy at a Hong Kong university were examined. The findings indicated that students generally had positive perceptions about EMI policy due to instrumental reasons. In addition, in the study by Tatzl (2011) attitudes and experiences of lecturers and students regarding EMI in masters' degree programs at an Austrian

university of applied sciences were examined. The results displayed that both lecturers and students favor EMI. Similarly, in the study by Kim, Kweon, and Kim (2017) Korean engineering students' perceptions of EMI was examined via a questionnaire survey. The results indicated that although majority of the students preferred Korean-medium instruction over EMI, most of the students stated that EMI should be maintained with changes in the school's mandatory policies. As a result, it can be stated that stake holders generally have positive perceptions regarding EMI. In addition to these studies, some studies focused on the effect of EMI on content comprehension, and in terms of the effects of EMI on content comprehension, there are varying results. For instance, in the study by Cho (2012) perceptions of lecturers, undergraduate, and graduate students were elicited regarding the implementation of EMI, and its effects on content teaching and learning outcomes at a science and engineering university in Korea. The data were collected by questionnaires and interviews. The findings indicated that EMI policy was found to be ineffective and inappropriate in delivering course content because of the limited English proficiency of professors and students. In addition, in the study by Huang and Curle (2021) current and graduated Chinese students' perceptions from an EMI Finance program were elicited regarding their EMI experience and career experience. Students' perceptions revealed that less content was taught with EMI. However, there are also studies that display the positive effects of EMI on content learning. For instance, in the study by Li (2020) perceptions of university students in China were explored regarding the teaching of principles of management using EMI. The data were collected using interviews and a survey. Students' perceptions displayed that English language was not a hindrance to their learning experience. Moreover, in the study by Yeh (2014) perceptions of Taiwanese university students about their learning

experiences and attitudes for EMI were explored. Findings displayed that students generally regarded their learning experience in EMI as satisfactory, and in the study by Rowland and Murray (2020) lecturers' and students' perceptions of EMI in a recently-implemented master's program in Biomedical Sciences at an Italian university were examined. Data were collected via interviews, and findings for students indicated that EMI enhanced their learning experience; in addition, lecturers believed that EMI did not lead to any important reduction in the quality and quantity of the course compared to the courses in Italian.

In addition to these studies, some studies focused on effects of L1 use in EMI courses. The results of the studies generally displayed that the integration of L1 is positive and necessary to facilitate learning. In the study by Li (2020) university students' perceptions were elicited regarding EMI, results indicated that students did not consider English language as an obstacle to their learning; however, students put forward that students' mother language should be used in explaining some complex issues. Similarly, in the study by Kim, Kweon, and Kim (2017) Korean engineering students' perceptions of EMI and L1 use in EMI classes were examined. Findings indicated that students were supportive of L1 use in EMI courses, and they regard L1 use as facilitative to learning. In addition, the study by Sahan, Galloway, and McKinley (2022) explored attitudes about English-only EMI. Data were collected via questionnaires and interviews. Results indicated that L1 in EMI courses in Thailand and Vietnam is considered to be a useful pedagogical tool. In addition, in the study by Rowland and Murray (2020) the findings also indicated that students have positive attitudes in terms of L1 use (Italian) in case of difficult concepts or subjects, and some of the lecturers also use Italian to ensure students' comprehension on complicated parts.

In addition to these studies, some studies focused on foreign language skills during EMI. In these studies, there are findings regarding foreign language skills development; however, there are also findings about students' experiencing difficulty in terms of speaking skill. For instance, in the study by Kim (2014) Korean engineering professors' views on English language education in relation to EMI were examined. The results displayed that lecturers regarded speaking and listening as skills that undergraduate students need to improve the most, and they regarded reading as the least problematic skill. In addition, in the study by Bolton, Botha, and Bacon-Shone (2017) the results indicated that the biggest challenge experienced by undergraduate and postgraduate students in Singapore were regarding productive language skills such as speaking and writing academic English. Similarly, in the study by Rowland and Murray (2020) students at a master's program in Italy stated that they consider speaking as their weakest language skill.

In addition to these studies, some studies focused on the effects of EMI on foreign language, academic, professional, and personal development. In these studies, there were mostly reference to the positive effects. For instance, in the study by Yeh (2014) Taiwanese students' experiences and attitudes towards EMI courses in tertiary education revealed that students generally agreed on the benefits of EMI such as improving English ability, facilitating students' employability and further studies. In addition to these benefits; a more idealistic benefit such as broadening horizons was also indicated by nearly half of the students in the study. Moreover, in the study by Tatzl (2011) attitudes and experiences of both lecturers and students at an Austrian university were examined. The findings indicated that both lecturers and students support EMI for similar reasons such as the global employability of students and the international attractiveness of the degree programs. The results also

displayed that students favor EMI mostly for the improvement of their English language skills. Similarly, in the study by Botha (2013) the views of teaching staff and undergraduate students were examined regarding EMI at a university in Macau. Results revealed that Macau students consider English as a requirement for their current and future careers in Macau. Moreover, in the study by Huang and Curle (2021) current and graduated Chinese students' perceptions from an EMI Finance program revealed that both current and graduated students were positive that EMI will/had enhanced their career prospects and choices via improving their proficiency in English. In line with this, students; therefore, think that EMI improves their proficiency in English language. In addition, students also indicated that increased English proficiency due to EMI gives students the opportunity to study abroad. Accordingly, in the study by Belhiah and Elhami (2015) the effectiveness of EMI in the Arabian/Persian Gulf was examined. The data were collected from students and lecturers via survey questionnaires and interviews. The results indicated that students considered that studying in English improved their speaking, listening, writing, and reading skills. Instructors also agreed that students' overall proficiency in English improved thanks to EMI. In addition to these, some students also put forward that due to EMI, they feel more comfortable while watching news or English-language films without the need for translation. Moreover, some studies focused on strategies students employ during EMI to overcome comprehension problems. In the study by Kagwesage (2013) the strategies used by multilingual university students in Rwanda while coping with English as language of instruction in higher education were examined. The findings revealed that students employ multiple coping strategies to complete academic tasks. For instance, code switching to the language students know well is reported to be used at

times in group work or peer support settings, and sometimes even in formal classroom situations for clarification and learning purposes. In addition, students were found to make use of mentoring and peer support among themselves. In addition, using dictionary and using the internet for additional instructional materials were among the strategies students used. Similarly, in the study by Belhiah and Elhami (2015) students reported that at times when they cannot understand what they read in textbooks, they use dictionary or ask for instructors' assistance. In addition, in the study by Yeh (2014) findings revealed that students tend to employ cognitive learning strategies such as concentrating, and taking notes in class in order to deal with comprehension problems. Lastly, in the study by Rowland and Murray (2020) lecturers reported using some strategies such as repetition, summarizing, concept checks, and provision of clear slides when they think that students experience language challenges in EMI courses.

In addition, in terms of the faculties where EMI studies are carried out, the studies are mostly carried out in the faculties of engineering, and business and administrative sciences. According to Coleman (2006), the initial courses in which English is adopted generally are courses such as Economics, Business Administration, Management, Engineering and Science; however, it is also extended to other subjects such as Mathematics and Information Technology, and the case of Humanities is less widespread. Therefore, most studies were carried out in the faculties of engineering and faculties of business and administrative sciences (Kırkgöz, 2013; Belhiah & Elhami, 2015; Baker & Hüttner, 2016).

Considering the context and focus of the current study which examines effects of EMI on content courses in the faculty of education, it can be stated that few studies were conducted in the faculty of education, or faculty of education was among the

various other faculties researched. For instance, in the research by Byun, Chu, Kim, Park, Kim and Jung (2011) English-medium teaching in Korean higher education was analyzed, and college of education was one of the various programs from which data were collected. In addition, in the research by Hengsadeekul, Koul and Kaewkuekool (2014) motivational orientation and preference for EMI programs in Thailand were analyzed. The participants were undergraduate students in nine different programs, and one of the programs was education. Lastly, in Tsui and Ngo's study (2017) students' perceptions of EMI at a Hong Kong university were investigated, and faculty of education was one of the faculties that the research was carried out. As a result, in this study, only faculty of education with its various departments were researched with an extensive focus. In addition, regarding EMI research on content courses; the study by Lin and Lei (2021) examined whether students instructed in English at a university in China performed differently in a business course from other students who are instructed in Chinese. As a result, in the study, inter-translated versions of the same syllabus, textbook, materials and exam paper were adopted for the English and the Chinese medium classes. Findings indicated that there were no significant differences in students' academic outcomes. In addition to this, the study by Li (2020) examined perceptions of university students in China regarding the teaching of principles of management using EMI. The data were collected via a survey and interviews after students completed the course. The findings displayed that case studies should be integrated while designing the course, quizzes were found to be useful, and should also be integrated in the course, and when lecturers and students find it necessary, L1 use could take place along with English.

### 2.3.2 Previous studies in EMI in Turkey

Previous research in Turkey has basically focused on historical accounts of the spread of English, language policies, and attitudes towards English (Tezeller-Arık & Arık, 2014). Accordingly, Doğançay-Aktuna (1998) provided an overview about the spread of English in Turkey and its sociolinguistic profile, Büyükkantarcıoğlu (2004) made a sociolinguistic analysis of the dimensions of English as a foreign language in Turkey, and Kırkgöz (2007) discussed English language teaching in Turkey with reference to policy changes and their implementations. In addition, Selvi (2014) provided a detailed account of the medium of instruction debate in Turkey.

Therefore, in addition to the research where political and social aspects of English as a lingua franca were examined in line with its spread and use in various domains such as work and education (Doğançay-Aktuna, 1998; Büyükkantarcıoğlu, 2004).

There are also research on the use of English in different phases of education. For instance, Selvi (2014) provided a detailed account of the role of English in the Turkish education system.

In addition to these studies, there are also studies in Turkey in higher education where perceptions of stake holders such as students and lectures about foreign language policies specifically foreign language-medium instruction policies, their implementations, and related effects on content comprehension, and various other aspects were examined (Sert, 2008; Kırkgöz, 2009b; Karakaş, 2016).

For instance, in the study by Sert (2008) perceptions of students and lecturers from the faculties of economics and administrative sciences of three universities were elicited regarding language skill development and content comprehension. Three medium of instruction approaches were under question: EMI, English aided instruction, and Turkish medium instruction. Data were collected by means of

questionnaires and interviews. The findings indicated that EMI is considered to be the most effective approach regarding language skill development. In addition, it was seen that the effective provision of the academic content was not ensured with EMI. Similarly, in the study by Kılıçkaya (2006) instructors' attitudes towards EMI in Turkey is examined. The data were collected via a questionnaire. The results indicated that lecturers agreed on the idea that Turkish medium instruction rather than English can support student learning better. In addition, in the study by Kırkgöz (2009b) perceptions of both students and lecturers on the effectiveness of the foreign language instruction regarding students' academic needs in an EMI university were examined. The study was conducted in the department of economics and business administration, mechanical engineering, and electrics-electronics engineering. The data were collected via interviews and questionnaires. The findings indicated that a skills-based English for Academic Purposes (EAP) curriculum was found to be insufficient in preparing students effectively for the academic needs. In another study by Kırkgöz (2013) students' perceptions regarding their approaches to learning in an English-medium higher education were examined. The data were collected via interviews and questionnaires. The findings indicated that there was an inclination towards surface learning in the first year, and a blend of surface and meaningful learning during the final year. In addition, deep learning was considered to be achieved via adopting a strategic learning approach by the students.

In addition to these studies, some studies focus on the place of mother tongue use within EMI instruction. For instance, in the study by Karakaş (2016) Turkish lecturers' views on the place of mother tongue while teaching content courses via English medium were examined. Data were collected via interviews with EMI lecturers. The findings displayed that lecturers mostly were in favor of integrating

Turkish into courses at varying degrees and allowing students to use it for specific purposes such as clarity and comprehensibility of content. Also, lecturers who were against using Turkish in classes emphasized the presence of international students, and the institutional policy requiring them to use English. Lastly, in the study by Ölçü and Eröz-Tuğa (2013) attitudes of university instructors for EMI in Turkey were examined. Half of the participants were from an EMI university, and the other half were from two different Turkish medium universities. Data were collected via a questionnaire. The results indicated that university instructors had not only positive but also negative attitudes towards EMI in Turkish universities. In addition, the attitudes of participants displayed that learners and classroom learning could be negatively affected by EMI. As a result, in Turkey, there are studies conducted with both lectures and/or students regarding different aspects of EMI, and with similar or different findings compared to the studies across the world.

To sum up, throughout the world and in Turkey; there are some studies which examined perceptions of stake holders such as students and lecturers about EMI, there are also studies which examined various aspects of EMI, and their effects on certain factors such as content learning, and foreign language development.

Moreover, these studies were generally carried out in the faculty of engineering, and faculty of economics and administrative sciences due to certain factors as mentioned above. Considering the gaps in the field, this study examines undergraduate students' perceptions on foreign language policies specifically EMI in the faculty of education at an EMI university in Turkey. Accordingly, the focus is on EMI, its implementation, and also the related effects of it on students.

## CHAPTER 3

### METHODOLOGY

In this section, methodological aspects of the study will be explained with reference to the underlying philosophical assumptions, and interpretative frameworks. Then, further details related to research design such as the research context, participants, data collection and analysis methods, and other considerations such as validity and reliability will be addressed.

#### 3.1 Rationale for the research

The purpose of this study is to understand the effects of foreign language policies specifically EMI policies, and to examine their further reflections in the form of implementations or practices in and out of the instructional settings, and to investigate the effects of EMI on students during education and after graduation. For this inquiry, undergraduate students studying at the faculty of education at an EMI university in Turkey were chosen to examine the effects of EMI on content courses in higher education, and in order to realize the aims of this research, the following research questions were put forward:

- i. What do students think about EMI in their own university in terms of
  - official policies
  - EMI implementations
- ii. How do students perceive EMI in their content courses in terms of
  - language
  - content
  - classroom pedagogy

- iii. How do students perceive the effects of the EMI policies on their
- foreign language development
  - academic development
  - professional development
  - personal development

The first research question is an initial step to gain an understanding about students' knowledge and awareness regarding the existing policies implemented, and to investigate the instructional practices emerging during the implementation of these policies. Afterwards, the possible effects of these policies on comprehending content courses are further questioned. Accordingly, the second research question investigates the role of pedagogical practices, use of language, foreign language skills, and learning strategies within the instruction delivered with a foreign language-medium which is English. The last question attempts to further question and understand to what extent the objectives of the implemented policies are in line with students' development while studying in their departments and after graduating from these departments.

### 3.2 Research philosophy

This study is a qualitative case study. In qualitative research; "the focus is on process, understanding, meaning; the researcher is the primary instrument of data collection and analysis; the process is inductive; and the product is richly descriptive" (Merriam, 2009, p. 14). Accordingly, regarding the role of the researcher in qualitative research, Merriam (2009) states that researchers are concerned about how individuals make sense of their experiences, how they form their worlds, and what meaning they assign to these experiences. In that sense, in this

qualitative study, the researcher constructs her knowledge with the participants' knowledge and experiences regarding EMI which were transmitted either individually, or through discussion in a socially constructed way. Moreover, since this research is a qualitative inquiry, an extensive understanding of EMI policies, and their implementations with their related effects are documented.

In addition, the method of this qualitative inquiry is case study where only education faculty with its various departments are deeply examined. As a result, for this research, an education faculty at an EMI university as a case will be analyzed regarding its FLMI policies, and specifically EMI policies with their implementations and resulting effects. According to Marshall and Rossman (2006), case studies are crucial since they explain the larger picture in a detailed way while concentrating on individuals. In addition, Duff (2008) also explains that "most definitions of case study highlight the "bounded," singular nature of the case, the importance of context, the availability of multiple sources of information or perspectives on observations, and the in-depth nature of analysis" (p.22). Therefore, case studies can be considered to provide a rich framework to understand the phenomenon under observation. Moreover, in case studies, the researcher explores a contemporary case over time via in-depth data collection, and then describes the case with its themes, and while analyzing a case it is more crucial to understand the complexity of the case than to make generalizations regarding the emerging themes (Creswell, 2013).

Accordingly, the epistemology embedded in the theoretical perspective and in the methodology is constructionism. In constructionism, the objective reality is not there to be discovered, the truth is formed when individuals engage with the facts in the world, the meaning is formed within the framework of mind and it is constructed; it

can be constructed differently by different individuals even regarding the same issue (Crotty, 2003). Moreover, constructionism is “the view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context” (Crotty, 2003, p. 42), and “one of the main tenets of constructionism is that learners actively construct and reconstruct knowledge out of their experiences in the world” (Kafai & Resnick, 1996, p. 2). In that sense, meaning making is a crucial process. Therefore, “the meaning – making activities themselves are of central interest to social constructionists / constructivists, simply because it is the meaning – making / sense – making / attributional activities that shape action (or inaction)” (Guba & Lincoln, 2005, p. 197). In accordance with this, in this research the participants’ multiple and varied perspectives were elicited through extensive interviews both individual and focus group, and meaning making process, in other words, construction of reality was achieved via interviews based on students’ knowledge and experiences while receiving instruction with EMI. Accordingly, in the individual interviews, students relied more upon their personal interpretation regarding their knowledge or experiences, even though the dialogues turned into a discussion at times between the student and the interviewer. However, especially in the focus group interview, the social constructionist view was more dominant because the knowledge and interpretations or the realities were derived from individuals’ social interaction and discussion among themselves.

In accordance with these, the theoretical perspective informing the methodology of this study is interpretivism. In interpretative research, where qualitative research is often positioned, reality is considered to be socially constructed not found; therefore,

there can be various interpretations of a single issue, and constructionism and interpretivism can often be used interchangeably (Merriam, 2009). In addition to these, before explaining the methodological elements of the actual study; the pilot data collection procedure will be explained. It was carried out using the background questionnaire and the individual interview questions before the actual interviews of this study were conducted in order to test the interview procedures; the questions, duration, and the implementation. The pilot interviews were conducted at another FLMI university where the medium of instruction is French, and at which the researcher works as an English language instructor. Since, in both universities students receive the instruction with a foreign language medium not in their native tongue, conducting the pilot interviews at a French medium university was also considered to be appropriate considering the aim of this research.

Accordingly, the medium of instruction is French in the university where the pilot interviews were conducted, and the medium of instruction is English in the university where the actual interviews were conducted. As a result, in each university the courses are instructed with a foreign language-medium.

As for the participants in the pilot interviews, there were four students in the pilot interview group. Two of them were in their third year in the Department of Economics, and two of them were in the last year in the Department of Political Sciences. The third and fourth year students were intentionally chosen considering that they could better reflect on the FLMI process since they have had so many courses instructed with FLMI. As for the language background of the participants; they speak Turkish as their native language, and they speak French and English as a foreign language. Two of the participants started learning English at primary school, and French at university in the university's French preparatory program. The other

two students have also been studying English since primary school, and they started learning French in high school years, and they did not study at the French preparatory program of the university since they proved their proficiency in French with the exams accepted by the university before starting their departments.

Regarding the faculty of the students, since there was not any faculty of education in the university where the pilot interviews were conducted, the participants were chosen from the Faculty of Business and Administrative Sciences. In relation to this, as explained previously, the faculty related to foreign language studies were not chosen because students studying at foreign language related areas take a foreign language test in addition to other tests in order to be admitted to the universities. Consequently, FLMI is not considered to create much difficulty for students studying in foreign language related departments. The similar situation is also taken into consideration in the actual data collection process during which the data were not collected from the students of Foreign Language Education Department. In other words, the data were collected from the other departments of the Faculty of Education such as Mathematics and Science Education Department, Primary Education Department, Educational Sciences Department, and Computer Education and Educational Technology Department.

### 3.3 Setting

This study is conducted at Boğaziçi University which is an EMI state university in İstanbul, Turkey. As of the 2020-2021 academic year, the university consists of faculties and institutes which offers 33 undergraduate, 67 graduate and 33 PhD programs. In addition, there are 436 full time faculty member, 142 instructor, 82 foreign lecturer, 230 research assistant and 751 administrative personnel. Moreover,

there are 13116 students enrolled in undergraduate programs. Also, under 496 agreements made with the world universities, there are approximately 380 foreign students from 40 countries.

The medium of instruction at the university is English (See Official Gazette, 2016 Issue: 29739, for Official Regulations of Boğaziçi University for Undergraduate Education). However, there is also the recently established Faculty of Law in which the medium of instruction is minimum 30% English.

In order to study at this EMI university; students are to prove foreign language proficiency in English in order to start studying at their departments. As a result, to prove their foreign language proficiency in English, there are several options. Students can take the English language proficiency test of the university and they are to get minimum 60 (C level) out of 100. In addition, there are two other exams accepted by the university which are Test of English as a Foreign Language (TOEFL IBT) and International English Language Testing System (IELTS). The minimum pass grade accepted by the university for TOEFL IBT is 79, Writing: 22 / Test of Written English (TWE): Pass. For IELTS Academic, the minimum pass grade is 6.5, Writing: 6.5 /TWE: 6.5. If students cannot get the minimum pass grade from any of these exams, they are to study at the English preparatory school of the university for a year. Accordingly, if students study at the English preparatory school, then they are to take the placement test so that they are placed in the appropriate level. The programs are classified under four categories; from program one to four. At the end of these programs, students are to prove their English language proficiency, and there is a time limit for that. If students cannot prove their English language proficiency within the time as determined by the university, they cannot start their departments or they may have to study at another university.

As for the historical background of the university, the foundation of this university dates back to Robert College which was founded in 1863. Robert College can be considered to be the first EMI institution in Turkey. Robert College was passed on to the Turkish Government with the Act No. 1750 then it was transformed to Boğaziçi University (Yıldırım, 2011). As a result, Boğaziçi University was founded in İstanbul (See Official Gazette, 1971 Issue: 13954, September 12, Act No. 1487).

In addition, this study is conducted at the Faculty of Education. The faculty consists of five departments. The Department of Educational Sciences offers a four-year long undergraduate degree in Guidance and Psychological Counseling, the Department of Computer Education and Educational Technology offers a four-year program leading to a bachelor's degree, the Department of Primary Education offers a four-year program leading to a bachelor's degree in Early Childhood Education, the Department of Mathematics and Science Education coordinating several teacher education programs including Teaching Chemistry, Teaching Mathematics, Teaching Physics and Teaching Science at the secondary and primary school levels. In addition, there is Foreign Language Education Department which offers a four-year undergraduate program leading to a Bachelor of Arts degree in English Language Education. However, students of this department are intentionally not included in this study. The reason for this is that within the scope of this study, one of the topics to be researched was the effects of EMI on comprehending content courses. Therefore, since English language proficiency level is an important factor for comprehension, and since students from Foreign Language Education Department are to take a foreign language test in the university exam in addition to some other tests to be admitted to the university, they are considered to be more advantageous in terms of English language proficiency. Therefore, they are not included in the study. In line

with this, in qualitative research, samples are generally selected purposefully and in a nonrandom way (Merriam, 2009). Similar to that, purposeful and nonrandom selection of samples were employed for this study as explained above.

As for the historical background of the faculty, the Faculty of Education was founded by the Council of Higher Education in 1982 in the enactment that was published in the Official Gazette dated July 20, 1982 (Yıldırım, 2011). In addition, according to the Delegated Legislation about Organization of Higher Education Institutions and National Education Commission Report; July 20, 1982, part 3, article 13; similar to Middle East Technical University's Education Faculty, Boğaziçi University's Education Faculty was founded in order to educate undergraduate students who become teachers after graduation then who can teach at the Ministry of Education's schools where education is carried out with foreign language-medium instruction (See The Delegated Legislation about Organization of Higher Education Institutions and National Education Commission Report, 1982). Accordingly, education faculties in EMI universities can be said to be founded in order to cater to the teacher needs of the Anatolian High Schools where the medium of instruction was English for content courses such as Mathematics and Science.

#### 3.4 Participants

As for the participants of the study, first participants of the individual interviews will be presented, and then the participants of the focus group interview will be explained.

### 3.4.1 Students in the individual interviews

Thirty-five undergraduate university students studying at an EMI state university in İstanbul, Turkey attended the individual interviews. The participants are undergraduate students in the faculty of education. There are 35 participants; 31 of them are female, and four of them are male, and their ages range between 20-27. Out of 35 participants; seven of them study at the Department of Computer Education and Educational Technology, 10 of them study at the Department of Educational Sciences in the Program of Guidance and Psychological Counseling, eight of them study at the Department of Primary Education in the Program of Early Childhood Education and 10 of them study at the Department of Mathematics and Science Education in the Programs of Teaching Physics and Teaching Mathematics at the secondary and primary school level. Moreover, all of the participants were born in Turkey, and as for their language background; out of 35 students, 32 of them speak Turkish as a native language. In addition, three of the students are bilingual in Turkish and Kurdish, in other words, they speak both Turkish and Kurdish at native language proficiency. As for the participants' foreign language proficiency; out of 35 participants; all of them have proficiency in English as a foreign language; participants have spent 10 to 18 years while learning English. Some of the participants started learning English as a foreign language in kindergarten at age four, the others at primary school ranging from year one to five. Accordingly, after entering the university, all of the participants had a year-long English preparatory education at university, and some of the participants who were not able to pass the proficiency exam after a year, spent up to three years in the English preparatory program before passing to their department. As a result, out of 35 participants who studied at the English preparatory program; eight of them graduated with B level; C1

according to Common European Framework of Reference for Languages (CEFR), 27 of them graduated with C level (B2 according to CEFR). As a result, students are to prove their proficiency in English in order to start their departments, and if they choose to take the proficiency test of the university; they are to take minimum 60 out of 100 (C level; B2 according to CEFR). In addition to speaking English as a foreign language, some of the participants also have proficiency in other foreign languages; nine of them hold proficiency in German at A1 level, five of them in French at A1 level, four of them in Spanish at A1 and A2 level, two of them in Arabic at A1 level, and one of them in Greek at A1 level according to CEFR.

As for the high schools the participants graduated from, the students graduated from different type of high schools; 15 of them graduated from an Anatolian High School, seven of them from an Anatolian Teacher Training High School, four of them from a Basic High School, two of them from an Open Education High School, two of them from an İmam Hatip Anatolian High School, and one participant from each high school; Anatolian Technical High School, Anatolian Vocational High School, Anatolian Vocational High School for Girls, Anatolian Technical and Vocational High School for Girls, and Vocational High School for Girls.

#### 3.4.2 Students in the focus group interview

Out of 35 students who attended the individual interviews, five of them took part in the focus group interview. The native language of the participants is Turkish. Four of them are 24, and one of them is 23 years old. They are all female. As for the type of high school they graduated from; four of them graduated from an Anatolian Teacher Training High School, and one of them graduated from an Anatolian High School. They have been learning English since primary school, fourth grade; four of the

participants for 14 years, and one of them for 13 years. In terms of the department which they study at university, they study at the department of Mathematics and Science Education in the program of Secondary School Mathematics Education. The participants are in their fourth/final year in their department. In terms of English preparatory education, all of the participants attended the English preparatory program of their university, and they spent a year or two before passing to their departments. Out of five participants; four of them graduated with C level (B2 according to CEFR), and one of them graduated with B level (C1 according to CEFR) from the university's English language proficiency test. As for the foreign languages they speak and their proficiency levels; four of the participants speak English at B2 level, and one of them at C1 level, and three of the participants speak a second foreign language such as German or Spanish at A1 level.

### 3.4.3 The researcher

As for the researcher of this study, I am a PhD candidate, and an instructor teaching English at different levels at a French medium state university in İstanbul, Turkey. Moreover, I hold B.A. and M.A. degree in English Language Teaching, and I have been teaching English for 18 years.

As for the topic of this research which is effects of EMI on content courses in higher education, my interest to research this topic dates back to my secondary and high school years. In the secondary and high school where I studied, Mathematics and Science courses were instructed in English. In those years, I had difficulty in understanding these courses when they were instructed with a foreign language-medium. Although I did not experience any difficulty regarding the foreign language courses such as English, English literature, I remember experiencing difficulty when

content courses such as Mathematics, Physics or Chemistry were instructed in English, in other words, courses instructed with FLMI. Consequently, after class, when the same courses were explained to me by a friend of mine in Turkish; my native language, I could easily understand these courses. As a result, this was my starting point, when I decided to do this research. Moreover, throughout my studies at university as a student, the medium of instruction has always been English, and in the universities I have been teaching there is also FLMI either English or French. Therefore, I wanted to examine the effect of FLMI on content courses even more, and after taking the course of Language Policy and Planning during my PhD study, I decided to conduct a research with both a friend and colleague of mine as part of the course requirement. In that research, we analyzed two state universities where FLMI is implemented. The thing about the study was although the universities were both FLMI universities; one university was an EMI university, and the other was a French medium university; however, the challenges experienced by students while taking the content courses with a foreign language-medium were found to be similar. In addition, as part of reflexivity, I also would like to talk about how these previous experiences with FLMI shaped my interpretation of the phenomenon. Reflexivity can be defined as the position of the researcher within their writings, and within the framework of this concept, the writers consciously bring their experiences, values to their studies (Creswell, 2013). As a result, although I experienced difficulty in my secondary and high school years with Science and Mathematics courses instructed with EMI, in the following years during my B.A., M.A., and PhD studies, my ideas changed a lot thinking that receiving the instruction in a foreign language-medium if presented with well-defined policies, objectives, and implementations can turn out to be quiet beneficial with lots of academic or personal developments for students.

Therefore, it was my wish to carry out an extensive research about this topic after conducting a preliminary research in one of my PhD courses as I explained above. Finally, as for my role in this study, I was present in all phases of this research from data collection to analyses and all other stages. Lastly, my decision to examine the faculty of education as a case was about the fact that various studies about EMI have been carried out in the faculty of engineering, faculty of economics and administrative sciences. Therefore, in order to shed a different focus regarding EMI, I conducted my research at the faculty of education.

### 3.5 Data collection tools and procedures

The data collection methods designed in line with the research questions are a background questionnaire, semi structured interviews in the form of both individual and focus-group, and a document analysis as a supplementary tool.

The data is a pre-pandemic data, in other words, the data were collected before the pandemic process, where there was face to face education at universities. As a result, students' perceptions regarding EMI were based on face to face classes that were carried out before the pandemic process.

Before starting the data collection process, as a crucial step, approval forms/consent forms were prepared to obtain approval from the university's ethics committee to do this research, and also from the participants for data collection. According to Miller and Boulton (2007), informed consent is "a concept which attempts to capture and convey what is regarded as the appropriate relationship between researcher and research participant" (p. 2199). In addition, before collecting the actual data, there were some preliminary steps such as piloting the data collection tools. As a result, the background questionnaire, and the semi structured individual interview were

piloted with students at another FLMI university as explained previously. By this way, the background questionnaire and the individual interview questions were revised several times by the researcher before the actual data collection process.

### 3.5.1 Background questionnaire

First of all, there is a background questionnaire implemented before the interviews. The background questionnaire consists of eight questions. The questionnaire includes questions about students' educational and linguistic background (See Appendix A for background information questionnaire for students). The Turkish version of the background information questionnaire for students is also given (See Appendix B).

### 3.5.2 Individual interviews

Before conducting the individual interviews, document analysis was employed as a supplementary tool while preparing some interview questions which are constructed to understand students' knowledge and awareness related to foreign language policies of the university. The document analysis took place in the form of examining the university's and some other universities' online policy documents such as official regulations which were in the universities' own webpages, and also online policy documents regarding language policies implemented in education in Turkey such as official regulations, codes and an official report including codes and legal decisions related to language policies in education in Turkey. As a result, I, as the researcher, was able to acquire knowledge regarding foreign language policies of the university and the language policies in Turkey while constructing and interpreting some of the interview questions. In addition, with document analysis, I was able to triangulate the interview findings. According to Bowen (2009),

documents can function as a complementary research data, and information obtained from those sources can add to a knowledge base, and further explains that when researchers examine data collected employing different methods, they can confirm findings across data sets, and also reduce the effect of potential biases that may exist in a study.

Accordingly, there are two semi structured interviews namely individual interviews and a focus group interview. The semi structured interview is “sufficiently structured to address specific topics related to the phenomenon of study, while leaving space for participants to offer new meanings to the study focus” (Galletta, 2013, p. 24).

The individual interview consists of 21 questions. They are conducted with 35 undergraduate students from the Faculty of Education from the following departments, namely Mathematics and Science Education Department, Primary Education Department, Educational Sciences Department, and Computer Education and Educational Technology Department. The interviews lasted from 45 minutes to 90 minutes. The individual interviews provide detailed information about students’ perceptions regarding various aspects of EMI such as linguistic, methodological, and developmental (See Appendix C for semi structured individual interview questions for students). The Turkish version of the semi structured individual interview questions for students is also given (See Appendix D).

### 3.5.3 Focus group interview

The second semi-structured interview made was the focus group interview. The distinctive feature of focus group is the apparent use of group interaction to elicit insights which would not be easy to attain in the absence of an interaction existing in a group (Morgan, 1997). Therefore, in order to elaborate on the individual interview

findings more, and to further examine the research topic, a focus group interview was conducted after analyzing the findings of the individual interviews. In line with this, there are additional advantages of focus group interviews as explained by Marshall and Rossman (2006): “this method is socially oriented, studying participants in an atmosphere more natural than artificial experimental circumstances and more relaxed than a one-to-one interview” (p.114).

The focus group interview was conducted with five students from the Faculty of Education, Department of Mathematics and Science Education. The interview lasted for 140 minutes. The focus group interview consists of 17 questions grouped under several categories which are official policies and EMI implementations, content comprehension, foreign language skills, speaking, methodology, and the process during and after EMI (See Appendix E for semi structured focus group interview questions for students). The Turkish version of the semi structured focus group interview questions for students is also given (See Appendix F).

Lastly, the time allocated for conducting both individual and focus group interviews is 1734 minutes (28.9 hours). As a result, both the individual and focus group interviews were transcribed for analyses. The transcription process lasted for six months, and the data analyzed consisted of approximately 600 pages.

### 3.6 Data analysis

During the data analysis, a grounded theoretical approach was employed. “A grounded theory consists of categories, properties, and hypotheses that are the conceptual links between and among the categories and properties” (Merriam, 2009, p. 199). The framework associated with this theory for the data analysis is the constant comparative method. Willis, Jost, and Nilakanta (2007) summarized this

method based on comments from Glaser (1978) and Bogdan and Biklen (1998) in six steps: collecting the data, organizing the data into units such as sentences, paragraphs, identifying similar units, and forming categories, searching for relationships between the categories, developing more extensive, and general explanations from the categories, and their connections, and repeating the process (Glaser, 1978; Bogdan & Biklen, 1998 as cited in Willis, Jost, & Nilakanta, 2007). Based on this grounded theoretical approach; while interpreting the interviews; the interview questions and the responses given were approached from a content analysis perspective.

In addition, during the analyses, in order to be more familiar with the data, to internalize it more, and not to overlook any detail, manual coding was applied which was the informed choice of the researcher.

In addition, data analysis can be said to take place along with data collection in qualitative research. In that sense, the analysis process is ongoing since thematic patterns are identified as they appear, and it is iterative as the analyser check the data over over to ensure meaning (Galletta, 2013). Accordingly, initial data analysis with emerging patterns started during the data collection process. The data in the transcribed texts were analyzed first through coding then by organizing these codes within themes. As put forward by Creswell (2013) the basic steps of qualitative data analysis is that first the data is coded, in other words, reducing the data into meaningful parts, and giving names to these parts, then the codes are collected under bigger categories or themes, then showing and comparing the findings in the tables or charts. These steps were also employed while analyzing the data of this study. In the analysis process, while coding, instead of using predetermined categories or codes, the codes which emerged during the analyses were used, and the names of the

codes were given by the researcher which she thinks explains the situation in the best way. A similar view is outlined in Merriam (2009) as follows: during the analysis process of qualitative research, findings are obtained inductively, in other words, the related variables are not known beforehand.

As a result, as explained above, there were mainly two cycles in coding; first cycle was the descriptive coding phase and the second cycle is the pattern coding phase. In line with this, after employing first cycle coding in which the segments of data are summarized; then pattern coding is applied; a second cycle coding during which the summaries attained after first cycle coding are grouped into a smaller number of categories, themes, or constructs (Miles, Huberman, Saldana, 2014).

After naming the codes, counting the frequency of codes was another important step to identify the recurring patterns, later organizing them into themes. As a result, deriving meaning by making appropriate interpretations and connections among codes and themes was very crucial for the analyses and the discussion phases.

According to Creswell (2013), themes are “broad units of information that consist of several codes aggregated to form a common idea” (p. 186). In line with this, the analyses required an ongoing revision process because as the data were examined over and over, new codes which were not spotted at first sight were seen afterwards, or another theme emerged by rereading the context that the codes emerge. In addition, counting the frequencies of the codes from the most frequently occurring to least frequently occurring also led to various different findings. Therefore, while analyzing the qualitative data, “the researcher engages in the process of moving in analytic circles rather than using a fixed linear approach” (Creswell, 2013, p. 182). As a result, within the framework of this research, there was also the non-linear

approach where the researcher examined and re-examined the data by going back and forth.

### 3.6.1 Pilot analyses

Before conducting the actual analyses, a pilot analysis was conducted first with pilot interview data, then with the samples from the actual interview data, one interview from each department of the faculty were chosen. The reason to make a pilot analysis was first to get familiar with the data, and to have some ideas about the preliminary codes and possible themes. Secondly, the preliminary analyses gave the researcher a chance to practice coding and identifying the initial themes. The pilot analyses lasted for about a month.

### 3.6.2 Actual analyses

The actual analysis consisted of two main parts; the analyses of the individual interviews and the analysis of the focus group interview. First of all, individual interview analyses were completed. During these analyses, instead of a linear analysis, the data were analyzed multiple times. Accordingly, some of the interview questions were reanalyzed seeing a new emerging code. As a result, inductive analysis was employed in this research in which there were not predetermined categories used in coding or labelling. In addition, while analyzing the data, two independent coders also analyzed some samples from the data to achieve inter-rater reliability, and 90 percent agreement was achieved by assigning same codes and themes for the data. Accordingly, with the feedback of the independent coders, the name of a category was changed, in other words, renamed along with some slight

revisions. As a result, when there are multiple coders, there is the chance to evaluate inter-subjectivity (Vogt, Vogt, Gardner, & Haeffele, 2014).

After the analyses of the individual interviews were completed, the focus group interview questions were analyzed. Since the focus group interview was made to elaborate more on the findings of the individual interviews, there were questions both identical or similar to the individual interviews and there were also related new questions to further examine the findings of the individual interviews. As a result, the focus group interview questions were prepared, and analyzed after the analyses of the individual interviews were completed with the same methods as the individual interviews.

### 3.7 Validity and reliability

Validity and reliability are very crucial constructs in terms of the conceptualization of a study, also in terms of data collection, analysis; and interpretation and presentation of findings, and accordingly, concepts related to validity and reliability should be in line with the philosophical assumptions (Merriam, 2009). In line with this, “this may even result in naming the concepts themselves differently, as Lincoln and Guba (1985) did” (Lincoln & Guba, 1985 as cited in Merriam, 2009, p.211).

Therefore, “credibility, transferability, dependability and confirmability, substitutes for internal validity, external validity, reliability, and objectivity have become widely adopted in qualitative research” (Merriam, 2009, p. 211).

As a result, in this research, names of the concepts related to validity and reliability were used as explained in Merriam, 2009.

### 3.7.1 Internal validity (Credibility)

Internal validity is about congruency of findings with reality, and in qualitative research, it is hard to capture an objective reality. Therefore, one of the known methods to attain internal validity is triangulation (Merriam, 2009). Denzin discussed four ways of triangulation that are employing multiple methods, sources of data, investigators, or multiple theories so as to validate findings (Denzin, 1978 as cited in Merriam, 2009). In line with this, interviews are often employed in case studies and they are used with some methods such as document analysis and participant observation; by this way, triangulation is achieved while developing a deep understanding of the phenomena (Denzin & Lincoln, 2000; Lincoln & Guba, 1985 as cited in Talmy, 2010). In addition to these; Marshall and Rossman (2006) defines triangulation as “the act of bringing more than one source of data to bear on a single point” (p. 202).

As a result, within the framework of this research; validation is achieved through triangulation. For this purpose, different data sources such as a background questionnaire, individual interviews, a focus group interview, and document analysis as a supplementary tool for constructing and interpreting some interview questions were all used to validate the findings. Secondly, independent coders analyzed samples from the data. The concept of employing multiple coders can be evaluated from the perspective of not only internal validity but also from the perspective of reliability. In line with this, reliability in qualitative research is defined as “the stability of responses to multiple coders of data sets” (Creswell, 2013, p. 253). Therefore, in order to achieve reliability, inter coder agreement was applied. During the data analyses, the researcher herself analyzed the data and come up with emerging categories and themes. Then, two other coders also analyzed some samples

from the data. For this process, the researcher met with each coder twice; first for codes, then for themes. As a result, the codes and themes were compared to see if the coders were in agreement, in other words, the coders assigned the same codes or themes for the passages or the extracts. As a result, the percentage of agreement was calculated among the three coders for the selected parts, and 90% agreement of coding was achieved among coders. In accordance with this “intra – and / or intercoder agreement should be within the 85% to 90 % range, depending on the size and range of the coding scheme” (Miles, Huberman, & Saldana, 2014, p. 85).

Thirdly, member checks were employed. Member checks, in other words, getting feedback from participants was crucial to confirm findings during and after the data collection process. According to Miles and Huberman (1994) feedback can also be elicited during the data collection process. As a result, member checks were employed where feedback was requested from some of the participants not only during the interviews but also within the analysis phase after data collection. By this way, the researcher was able to clarify information about some methods, applications, and even spelling of some of the words as explained by participants during the interviews, and by this way, the researcher was able to check her interpretation of the data as well. Fourth, adequate engagement is sought where the researcher came to a point at which no new information seem to appear any more during the data collection process.

### 3.7.2 Reliability (Consistency)

Reliability can be defined as “the extent to which research findings can be replicated” (Merriam, 2009, p. 220). In accordance with this, in qualitative studies; multiple realities and different perspectives can explain a phenomenon, and in line

with this, there are certain strategies to attain reliability which are triangulation, peer examination, investigator's position, and the audit trail (Merriam, 2009). Within the framework of this study, some of the methods of reliability were employed such as triangulation which was achieved via employing certain methods as explained in the previous section. Secondly, periodic revision was realized under the supervision of the thesis committee.

### 3.7.3 External validity (Transferability)

External validity can be defined as “the extent to which the findings of a study can be applied to other situations” (Merriam, 2009, p. 223). In that sense, the concept of generalizability can be evaluated differently within the framework of qualitative research. If we can apply or transfer what is learnt in a particular situation to similar situations, then generalizability can be achieved. In this study, there are suggestions in line with findings that can be employed in similar settings such as an EMI university or any university adopting FLMI. Moreover, transferability can be achieved by selecting the research sample carefully, in other words, ensuring maximum variation in the sample (Merriam, 2009). For this research, although the case examined was the faculty of education, the participants were selected from the four different departments to ensure variation.

### 3.8 Ethics

When conducting a research, in addition to ensuring validity and reliability, taking into consideration the ethical issues are also indispensable and crucial. In accordance with this, there are certain issues that should be applied within a research which are “the protection of subjects from harm, the right to privacy, the notion of informed

consent, and the issue of deception” (Merriam, 2009, p. 230). As a result, permission was taken from the university’s ethic committee by presenting a detailed report of the study (See Appendix G for the ethical approval for the study). In addition, a letter to request permission for the study was prepared for the university that the data collection took place (See Appendix H for the sample letter to request permission for the study). Also, informed consents were taken from the participants (See Appendix I for consent form for students). The Turkish version of the consent form for students is also given (See Appendix J). Finally, as discussed above, ensuring the elements of validity and reliability throughout the research was among the major concerns for the researcher.

## CHAPTER 4

### RESULTS

In this chapter, the findings will be explained in three phases in the same order of the research questions. The first phase is about the first research question regarding students' perceptions of official language policies and EMI implementations. For the first phase, findings were derived from the following data collection instruments: document analysis, a background questionnaire, and semi structured individual interviews and the focus group interview.

The second phase is about the second research question regarding students' perceptions of EMI in content courses in terms of language, content and classroom pedagogy which are explained further under five components of EMI with respect to content comprehension as use of English, foreign language skills, learning strategies, classroom pedagogy, and English as a medium of instruction. For the second phase, the findings were derived from semi structured individual interviews and the focus group interview.

The third phase is about the third research question regarding students' perceptions in terms of the developmental aspects of EMI such as foreign language, academic, professional, and personal. For the third phase, the findings were derived from semi structured individual interviews and the focus group interview.

In addition, while presenting the findings in line with the research questions, first individual interview findings will be displayed followed and supported by the presentation of the focus group interview findings for each research question respectively.

#### 4.1 Students' perceptions of official policies and EMI implementations

The first phase of the study has the aim to explore students' perceptions regarding official policies and EMI implementations with the first research question:

What do students think about EMI in their own university in terms of

- official policies
- EMI implementations

##### 4.1.1 Analyses of individual interviews

In this part, analyses of the individual interviews will be presented in line with the first research question regarding students' perceptions of official policies and EMI implementations.

###### 4.1.1.1 Official policies

As for the official policies, students reported various official policies implemented in their university which are given in Table 1 below:

Table 1. Students' Awareness and Knowledge in terms of Official Policies

Official policies	N	%
100% EMI (courses' delivery, presentation, materials being 100% English)	35	35.71
Compulsory Adv. Eng. courses for ss. graduated with C level from the Eng. prof. exam	19	19.38
Taking HSS and complementary courses for ss. graduated with A and B level from the Eng. prof. exam	13	13.26
Compulsory second foreign language for some departments	9	9.18
Turkish and History courses instructed in L1	9	9.18
Not studying in the university unless ss. prove foreign language prof. in English	5	5.10
Effect of English language proficiency grade in Erasmus applications	3	3.06
A limit in ss.' taking the university's prep. prog. English proficiency exam	2	2.04
Existence of a year-long English prep. education in the university	1	1.02
Graduation with C level from the English proficiency exam unless ss. pass all the sections at once	1	1.02
Exemption from English language proficiency test when applying a grad. program at the university within two years after graduating from the university	1	1.02

As it is seen Table 1, all of the participants displayed knowledge and awareness regarding the official language policies of their university. Out of 101 responses, the most frequently reported policy is 100% EMI (courses' delivery, presentation, materials being 100% English); 35 times (35.71%), followed by other policies respectively; compulsory Advanced English courses for students graduated with C level from the English proficiency exam; 19 times (19.38%), taking HSS and complementary courses for students graduated with A and B level from the English proficiency exam; 13 times (13.26%), compulsory second foreign language for some departments, Turkish and History courses instructed in L1; nine times each (9.18%), not studying in the university unless students prove foreign language proficiency in English; five times (5.10%), effect of English language proficiency grade in Erasmus applications; three times (3.06%), a limit in students' taking the universities

preparatory program English proficiency exam; two times (2.04%), existence of a year-long English preparatory education in the university, graduation with C level from the English proficiency exam unless students pass all the sections at once, and exemption from English language proficiency test when applying a graduate program at the university within two years after graduating from the university each reported once (1.02%).

As indicated in Table 1, students showed their knowledge and awareness by naming official EMI policies of their university, and the accuracy related to the existence of these official policies were confirmed, in other words, triangulated by the analyses of the official policy documents. It is seen that 100% EMI policy with 34.65% was the one that student talked about most. This awareness may be considered to be linked with their choice to study at an EMI university. One of the students explained it with the following words:

After the university exam, when I was trying to choose the department I was going to study, one of the most important criteria was the medium of instruction's being English at this university, and I also knew that when students graduated from this university, they had good proficiency in English. As a result, I chose this university to study my field with EMI. Therefore, I was knowledgeable about this policy. (Individual Interview, Participant 1)

However, it can also be stated that for some of the students, this awareness related to official policies specifically the EMI policy had already existed even before they were trying to choose the university they wished to study. One of the students explained it with the following words: "I chose this university because I wanted to learn the content in English. Actually, I had already known that the medium of instruction was English even when I was at high school" (Individual Interview, Participant 21).

The comment indicated that the awareness related to official policies can be said to exist within the minds of some students even in high school years, and this can be an important factor when choosing the type of university students wish to study.

In addition, the policy related to compulsory advanced English courses for students who graduated with C level from the English proficiency exam of the university was the second policy most frequently reported by students with 18.81% which can be considered to be in line with some of the students' own experiences since they graduated with C level from the English proficiency test of the university, and had to take the advanced English courses as mentioned by one of the students: "Since I passed the English proficiency test with C level, I took advanced English courses for two semesters" (Individual Interview, Participant 30). It can be understood from the quotation that knowledge of some policies are acquired within the process by students in their EMI programs. In addition, the policy of compulsory second foreign language for departments such as Department of Translation and Interpreting studies with 8.91% of the responses also attaches significance in the sense that although participants do not study in these departments, they are still knowledgeable in terms of some policies that are not related with their departments. One student explained it with the following words: "I have some friends studying at different departments where there are compulsory foreign language courses apart from English" (Individual Interview, Participant 3). However, the policy of a year-long English preparatory program was only mentioned in one of the responses by one student: "Students are to study at the English Preparatory program if they cannot pass the English language proficiency test of the university" which indicates that even though all of the participants in this study studied at the English preparatory program at their

university, they might not have considered it as a policy but rather an implementation of EMI.

As for the students' awareness and knowledge in terms of the foreign language proficiency criteria accepted by the university, all of the students displayed awareness and knowledge in terms of the policies related to English language proficiency criteria of their university. All of the students reported the names of at least one of the international exams accepted by their university such as TOEFL or IELTS in addition to their university's own English language proficiency test.

As for students' perceptions regarding the existence of facilities offered to support English language development to understand content courses, out of 35 students, 19 of them (54.28%) reported that there are facilities offered by their university to support their foreign language development so that they can understand content courses more. Moreover, the type of facilities as reported by students were grouped under two categories; out of 19 responses, 13 of them (68.42%) point to the advanced English courses (AE courses) and six of them (31.58%) point to the writing center of their university as a facility. However, it is seen that although there are facilities offered by the university such as a writing center or advanced English courses, these facilities were not found to be equally contributing to students during the EMI process. As a result, the facility of the writing center was generally found to be quite beneficial as explained by one of the students: "In our university, there is a writing center, I used this center in my English preparatory year, and I found it very beneficial in terms of improving my writing" (Individual Interview, Participant, 6). However, another student talked about the facility of advanced English courses and stated that they are not in line with the content courses in their departments with the following words: "I took one of the advanced English courses which was about

English literature, the course did not contribute to my English while dealing with content courses in the department, but the course enhanced my knowledge about English literature” (Individual Interview, Participant 6). Another student also talked about a similar situation with the following words:

In advanced English courses, students come from different departments. The topics are not related with the departments studied. I took two advanced English courses; one was more about literature, the other was more about history. In other words, they were not similar to our departmental courses in terms of content. (Individual Interview, Participant 4)

These comments indicated that the advanced English courses with their topics may not be effective to contribute to the students’ process while dealing with the content courses which may explain the 45.72 % of the responses indicating absence of the facilities. One of the student explained her needs in terms of facilities with the following words:

In terms of the facilities that can be offered by the university, if I was asked, I would definitely want something about speaking because even if we study at the English preparatory program for a year, some of us still experience problems related to speaking to a great extent. Therefore, more should be done for speaking in the form of workshops or extracurricular activities. (Individual Interview, Participant 6)

Another student also emphasized the need for more speaking with the following words:

There should be more focus on speaking starting from the English preparatory program to the undergraduate program because when I want to express myself during courses, I still experience difficulty at times even if it is my final year in the department. (Individual Interview, Participant 8)

These comments clearly indicate that there should be more focus and support for speaking skill starting from the English preparatory program to the undergraduate program. These comments and suggestions are also in line with the ones given in Table 2 in which out of 35 students; 28 of the students put forward 35 suggestions to improve their English language proficiency so that they can understand the content

courses more. Accordingly, some students put forward a single suggestion, some put forward up to two or three suggestions. As a result, these suggestions were grouped under six categories which are given in Table 2 below:

Table 2. Suggestions to Improve Foreign Language Proficiency and Field Knowledge

Suggestions	N	%
A speaking course in undergraduate program	12	34.28
A terminology course in undergraduate program	7	20
A departmental warm up course in terms of content and skills required in undergraduate program	6	17.14
A speaking course in the English preparatory program	5	14.30
Speaking section added into the university's Eng. prof. exam	3	8.57
The university's offering extracurricular speaking activities under a speaking club or a center	2	5.71

As it is seen in Table 2, suggestions put forward by students are grouped under six categories, namely a speaking course in undergraduate program (35 times; 34.28%), a terminology course in undergraduate program (seven times; 20%), a departmental warm up course in terms of content and skills required in undergraduate program (six times; 17.14%), a speaking course in the English preparatory program (five times; 14.30%), speaking section added into the university's English language proficiency exam (three times; 8.57%), the university's offering extracurricular speaking activities under a speaking club or a center (two times; 5.71%).

As it can be understood from Table 2, the first three responses for facilities that students would like to be offered, are mainly about support for speaking, L1 terminology, and academic skills that students need to use such as writing a paper and reading an article. One of the students explained it with the following words: "When I started my department, I had difficulty in terms of speaking. So, if there was

a compulsory speaking course in the English preparatory program that would be really helpful” (Individual Interview, Participant 7).

The comment clearly indicated the need to support speaking skill since it is a crucial skill that students need to use effectively during the courses in order to ask a question, or make a comment. In addition, another student explained her need for a warm up course, in other words, a course to orient students in academic skills, with the following words: “If one of the advanced English courses were about how to write a paper, read a research article, or make a presentation about our field that would be very helpful” (Individual Interview, Participant 4).

In addition, students also outlined the need for a terminology course in the undergraduate program (20%) as shown in the following extracts:

If there was a transition course in the first year about departmental terminology such as a terminology class for Mathematics students that would make the transition process from English preparatory program to the department rather easy because especially in the first year, when I was studying something from an English source, I had difficulty about understanding because there were a lot of terms that I did not know. Therefore, I used to study the same subject from a Turkish source first, then read back the content from the English source again. (Individual Interview, Participant 16)

I finished the prep program, and started my department, it was the very first mathematics course we had, and I did not know any of the mathematics terms, the teacher was constantly saying integers or numbers, and I was not able to understand anything, most of us failed from that course because we did not even know the basic terms about our field. (Individual Interview, Participant 20)

These comments showed that possessing field terminology both in English and in L1 is a crucial element in terms of understanding content, and this need should be addressed within the undergraduate program so that field terms do not act like a linguistic barrier in the courses.

As a result, these comments showed that there is a need for extra support for speaking, terminology, and academic skills that students use during their

undergraduate studies. However, regarding the least frequent suggestions put forward by students such as the universities offering extracurricular speaking activities under a speaking club or a center, it is clear that more students think that speaking should be supported in the form of compulsory courses in the English preparatory and/or the undergraduate programs as explained by one of the students: “There should be compulsory speaking courses in the undergraduate program so that we can deal with our content courses better” (Individual Interview, Participant 8). In addition, one of the students also put forward her suggestions regarding the content of the speaking courses with the following words: “The speaking course should be at undergraduate level and in that course; all students in class should actively participate in class discussion instead of one student who does the presentation and others listen” (Individual Interview, Participant 35).

These comments indicated that it is important to add speaking courses, but how these courses should be designed also attaches significance.

#### 4.1.1.2 EMI implementations

As for the existence of EMI implementations, students reported various implementations related to EMI process which are given in Table 3 below:

Table 3. EMI Implementations

EMI implementations	N	%
Lecturers' short code switching to L1 to explain a crucial or unclear point	25	32.89
Students' L1 use when they cannot explain sth. in English if teachers allow	20	26.31
Lecturers' providing brief summary in L1 at the end of the lesson	12	15.78
Lecturers' telling L1 equivalents of some very crucial terms	5	6.57
Lecturers' providing students with post course activities such as problem solving or lab sessions	5	6.57
Lecturers' using visuals (simulations and slides) to support the instruction	3	3.94
Lecturers' turning on subtitles in English/Turkish while showing a video	2	2.63
Lecturers' suggesting a Turkish source for suggested readings	1	1.31
Students' L1 use within group discussions before presenting sth. to the class	1	1.31
Students' asking the instructors non-area vocabulary items in exams	1	1.31
Students' writing the L1 equivalent of unknown words in quotation in exams	1	1.31

As it is seen in Table 3, out of 76 responses, 11 categories emerged for EMI implementations which are lecturers' short code switching to L1 to explain a crucial or unclear point (25 times; 32.89%), followed by students' L1 use when they cannot explain something in English if teachers allow (20 times; 26.31%), lecturers' providing brief summary in L1 at the end of the lesson (12 times; 15.78%), lecturers' telling L1 equivalents of some very crucial terms, and lecturers' providing students with post course activities such as problem solving or lab sessions (each five times; 6.57%), lecturers' using visuals (simulations and slides) to support the instruction (three times; 3.94%), lecturers' turning on subtitles in English/Turkish while showing a video (two times; 2.63%), lecturers' suggesting a Turkish source for suggested readings, students' L1 use within group discussions before presenting something to the class, students' asking the instructors non-area vocabulary items in

exams, and students' writing the L1 equivalents of an unknown words in quotation in exams (each once; 1.31%).

As indicated in Table 3, most EMI implementations include L1 use which is Turkish in the context of the study. Use of L1, if lecturers allow, are mostly seen in crucial or unclear parts. One student exemplified it with the following words: "When lecturers think that we do not understand a certain part during a course, some of the lecturers can switch to Turkish for a short time" (Individual Interview, Participant 35). Other students also explained L1 use with the following words: "When lecturers explain something, there can be a lot of terminological words; therefore, it can be hard to understand the content. At those moments, when lecturers recognize that we experience difficulty, some of them explain that part in Turkish" (Individual Interview, Participant 34). Another student further exemplified the implementation of limited L1 use with the following words:

Lecturers begin the lesson by explaining everything in English; however, at times, there is a moment of blockage or an unclear part. Then, some of the lecturers, only with a single sentence, explains the subject in Turkish, and continues to explain the rest in English. (Individual Interview, Participant 19)

As it can be understood from these comments, L1 use even in a limited way is a supportive tool to facilitate understanding. In addition, as indicated in Table 3, although the implementation regarding lecturers' providing students with post course activities such as problem solving sessions or lab sessions appeared only with 6.57%, it is also a significant implementation regarding comprehension. The problem solving session are presented either in English or in Turkish, and some of the students put forward that problem solving sessions especially the ones instructed in L1 are very supportive in terms of comprehending content courses. One student explained it with the following words:

I attend the problem solving sessions in Turkish because I find it beneficial to listen to content once again in my mother tongue; Turkish after class, and in those problem solving sessions, I can also ask my questions in Turkish.  
(Individual Interview, Participant 19)

As a result, it can be understood from these comments that use of L1 even in a limited sense can be quite facilitative to learning in content courses.

#### 4.1.2 Analysis of the focus group interview

In this part, analysis of the focus group interview will be presented in line with the first research question regarding students' further perceptions of official policies and EMI implementations.

##### 4.1.2.1 Official policies

Students in the focus group are also considered to be aware and knowledgeable about the official foreign language policies of their university, the official language policies are displayed in Table 4 below:

Table 4. Students' Awareness and Knowledge in terms of Official Policies – Focus Group

Official policies
Existence of a year-long prep education
English preparatory program's not being specific to departments (general English for all departments)
100% EMI (courses' delivery, presentation, materials being 100% English)
A limit in taking the Eng. prof. exam of the university

As it is seen in Table 4, students displayed knowledge and awareness in terms of official policies, they reported various official policies of their university such as the existence of a year-long prep education, English preparatory program's not being specific to the departments (general English for all departments), 100% EMI

(courses' delivery, presentation, materials being 100% English), and a limit in taking the English proficiency exam of the university at the end of the English preparatory program.

As indicated in Table 4, similar to the individual interview participants; students in the focus group interview are also aware and knowledgeable about the official policies of their university, but they further commented on some challenges they experienced regarding these policies. For instance, they talked about the English preparatory program's being too general, and not including any department specific content as indicated by one of the students:

In the English preparatory program, the classes consist of students coming from all departments. Therefore, we were not able to learn the terms related to Mathematics, and had a lot of difficulty when we started our departments in the first year. (Focus Group Interview, Participant 4)

The comment displayed that English preparatory program's being too general may create difficulties for students when they start their departments since they are not familiar with their field terminology when they start their departments. In addition, students have further comments about the English preparatory program. Accordingly, preparatory education is a year-long program, and at the end of it students take the English proficiency test of the university, but if students cannot pass the proficiency test, then they can take the exam again, but they have to study on their own. As a result, the students stated that for the students who cannot pass the English proficiency test after studying in the preparatory program for a year, extra support should be offered in the form of being given the right to attend courses at the preparatory program for one more year. One student explained it with the following words:

We should have the right to attend the English preparatory program for one more year when we cannot pass the English proficiency test at the end of the English preparatory program because in order to pass the proficiency test, we

either study on our own which may not be enough, or we attend private courses, but we have to pay for them. As a result, the necessity to pass the English proficiency test and self-studying instead of attending courses in the English preparatory program creates stress. (Focus Group Interview, Participant 3)

Another student also explained the situation as follows:

The English proficiency test is like a mini university entrance examination, and it creates stress, in the sense that if we cannot pass, we cannot start studying in our departments, and there is also a limit in taking the English proficiency test. (Focus Group Interview, Participant 4)

The comments displayed that students who cannot pass the proficiency test after studying in the preparatory program for a year may experience difficulty and stress stemming from the possibility of failure in the English proficiency test again and the difficulty related to self-studying, in other words, not being supported by the English preparatory program any more. Therefore, it might be necessary to offer additional support for the students who cannot pass the English proficiency test.

In addition to these, students also talked about the existence of 100% EMI policy.

Although they have positive perceptions regarding this policy, they regard not learning L1 terminology as a challenge that they may come across in the national exams they may take after graduation. One student exemplified it with the following words: “After graduation, if we think of attending national exams, then we may experience difficulty related with not possessing L1 terminology at sufficient level; English and Turkish terms can be quite different” (Focus Group Interview, Participant 5).

#### 4.1.2.2 EMI implementations

In addition to official policies, students also displayed knowledge and awareness regarding EMI implementations which are displayed in Table 5 below:

Table 5. EMI Implementations – Focus Group

EMI implementations
Lecturers' providing students with post course activities such as problem solving sessions in English/Turkish
Lecturers' re-explaining the subject in English
Lecturers' short code switching to L1 to explain a crucial or an unclear point
Lecturers' suggesting a Turkish source for suggested readings
Lecturers' integrating some L1 materials (articles, videos) in case of country specific current issues
Lecturers' showing content related in-class videos in English and in L1
Lecturers' telling L1 equivalents of some very crucial terms

As it is seen in Table 5, students reported various EMI implementations; lecturers' providing students with post course activities such as problem solving sessions in English/Turkish, lecturers' re-explaining the subject in English, lecturers' short code switching to L1 to explain a crucial or an unclear point, lecturers' suggesting a Turkish source for suggested readings, lecturers' integrating some L1 materials (articles, videos) in case of country specific current issues, lecturers' showing content related in-class videos in English and in L1, and lecturers' telling L1 equivalents of some very crucial terms.

As indicated in Table 5, students in the focus group also talked about various EMI implementations similar to the participants in the individual interviews. Most of the implementations included limited L1 use. The limited L1 use may take place if lecturers allow and in the absence of international students. As a result, the implementations which entail limited L1 use are as follows; lecturers' providing students with post course activities such as problem solving sessions in English or in Turkish, lecturers' short switch to L1 to explain a crucial or an unclear part, lecturers' showing content related in class videos in English or in Turkish, and lecturers' telling L1 equivalents of some very crucial terms. As a result, students find

these implementations facilitative to learning and comprehension. One student explained it with the following words: “Some lecturers may explain the subject in Turkish briefly if they feel that we do not understand” (Focus Group Interview, Participant 4). It can be understood from the comment that L1 use can be facilitative to solve comprehension problems occurring at specific moments.

#### 4.2 Students’ perceptions of EMI in their content courses in terms of language, content and classroom pedagogy

The second phase of the study has the aim to explore students’ perceptions regarding the evaluation of content courses in terms of language, content and classroom pedagogy which were further explained under the heading of components of EMI such as use of English, foreign language skills, learning strategies, classroom pedagogy and English as a medium of instruction with the second research question: How do students perceive EMI in their content courses in terms of

- language
- content
- classroom pedagogy

##### 4.2.1 Analyses of individual interviews

In this part, analyses of the individual interviews will be presented in line with the second research question regarding students’ perceptions of EMI in their content courses in terms of language, content and classroom pedagogy which will be further analyzed and presented under the heading of components of EMI with five categories use of English, foreign language skills, learning strategies, classroom pedagogy and English as a medium of instruction.

#### 4.2.1.1 Use of English

Students were asked to report their perceptions about use of English by their lecturers and by themselves during the EMI process. As for lecturers' use of English, out of 35 students, 32 of them (91.42%) regarded majority of their lecturers' use of English during EMI as sufficient, and three of them (8.58%) as insufficient.

As for students' perceptions regarding their own English; out of 35 students, 33 of them (94.28%) regard their English as generally sufficient for the EMI process, and two of them (5.72%) regard it as insufficient. One of the students explained the situation with the following words: "I generally understand the lectures, and I also understand the content while reading" (Individual Interview, Participant 4). The comment indicated that students generally understand the content delivered with EMI.

#### 4.2.1.2 Foreign language skills

As for students' perceptions about the foreign language skills which need to be further improved, speaking is identified as the skill students would like to improve most followed by other skills which is given in Table 6 below:

Table 6. Foreign Language Skills Need to Be Improved

Foreign language skills	N	%
Speaking	21	75
Vocabulary	3	10.71
Listening	2	7.15
Reading	1	3.57
Writing	1	3.57

As it is seen in Table 6, in terms of the foreign language skills which need to be improved, out of 28 answers, 21 of them (75%) displayed that speaking is the skill

where most improvement is required. It is followed by other foreign language skills; vocabulary (three times; 10.71%), listening (two times; 7.15%), reading and writing (each once; 3.57%). One student explained it with the following words: “I understand the majority of the things I read or listen; however, in terms of speaking, I can say that I feel less proficient compared to other skills” (Individual Interview, Participant 29). It can be understood from the quotation that students should be supported more in terms of speaking.

#### 4.2.1.3 Learning strategies

In this part, first, learning strategies employed by the students is addressed with respect to EMI and comprehension generally. Second, learning strategies used by the students are explained in line with each foreign language skill.

As for the relationship between comprehension and EMI, students were asked to evaluate the effect of EMI on their comprehension; out of 35 students; 27 of them (77.15%) reported holding positive perceptions about the effect of EMI on comprehension, and eight of them (22.85%) reported holding negative perceptions.

Although students hold positive perceptions regarding the effect of EMI on comprehension, they also talked about some challenges they experienced during EMI which are given in Table 7 below:

Table 7. Students with Positive Perceptions about EMI and the Challenges Experienced

Challenges about comprehension	N	%
Decrease in comprehension	5	27.77
Extra work needed to comprehend better	5	27.77
Difficulty in comprehension	3	16.66
Gradual increase in comprehension	3	16.66
Difficulty in matching concepts/terms with L1 equivalents	2	11.11

As it is seen in Table 7, although students hold positive perceptions about the effects of EMI on comprehension, they also reported experiencing some challenges at times in terms of EMI instruction. Out of 18 responses; two categories (each, 27.77%) point to decrease in comprehension, and extra work needed to comprehend better followed by two other categories (each, 16.66%) which point to difficulty in comprehension, and gradual increase in comprehension, and one category (11.11%) points to difficulty in matching concepts/terms with L1 equivalents.

As indicated in Table 7, although 77.15% of the students reported holding positive perceptions about EMI, they also reported that challenges existed. With respect to comprehension, one student explained it with the following words:

The content is instructed with English. It is not our mother language. So, especially in the first year, we may experience some difficulty in terms of comprehension, but after the first year, we get used to EMI. Therefore, we know how to study, and know what to do if we experience comprehension problems. (Individual Interview, Participant 7)

Another student explained her experience with the following words: “Sometimes, I do not understand the subject, so I searched the content from the internet or L1 materials. After understanding the subject, I continue to study from the course materials” (Individual Interview, Participant 19).

The comments displayed that sometimes students can experience comprehension problems since content is not instructed with students’ native language. However, it is clear that students overcome these challenges by employing some learning strategies. In addition, it is understood that the comprehension problems tend to decrease as students get used to being taught with EMI. However, some students also reported holding negative perceptions about the effect of EMI on comprehension, and they put forward their reasons for that which are given in Table 8 below:

Table 8. Students with Negative Perceptions about EMI and Their Reasons

Students' with negative perceptions and their reasons	N	%
Decrease in comprehension	5	41.66
Difficulty in comprehension	3	25
Extra work needed to comprehend better	2	16.66
Difficulty in matching concepts/terms with L1 equivalents	2	16.66

As it is seen in Table 8, the reasons for students' holding negative perceptions about the effect of EMI on comprehension is as follows; out of 12 responses; five of them (41.66%) point to decrease in comprehension, three of them (25%) point to difficulty in comprehension, two of them (16.66%) point to extra work needed to comprehend better, and another two responses (16.66%) point to difficulty in matching concepts/terms with L1 equivalents.

As a result, 22.85% of the students reported holding negative perceptions about EMI, and the reasons were similar to the challenges reported in Table 7 which were mostly about comprehension problems as explained by one of the students: "I hardly pass the English proficiency test of the university. So, I have difficulty in expressing myself in English during the courses. Therefore, since I cannot ask the questions in my mind, I do not understand" (Individual Interview, Participant 13). Another student exemplified her situation as follows: "English terms and Turkish terms can be quite different. Therefore, I have problems about possessing knowledge of L1 equivalents of terms which may create problems if I take the national tests after graduation" (Individual Interview, Participant 34).

The comments indicated that comprehension problems due to not expressing oneself in English sufficiently, or problems about not possessing field terminology in L1 may create stress and negative perceptions related with EMI.

Accordingly, as for the actions students take when they do not understand the course content during the lesson and after the lesson; Table 9 below presents students' actions when they do not understand the content during the lessons.

Table 9. Students' Actions When They Do Not Understand the Content during the Lesson

Students' actions during the lesson	N	%
Nothing	20	48.78
Asking a friend	9	21.95
Asking the lecturer	6	14.63
Using translation apps	4	9.75
Using the internet	1	2.43
Looking at the course material	1	2.43

As it is seen in Table 9, out of 41 actions that students perform to understand the course content during the lesson, 20 of them (48.78%) points to doing nothing, followed by asking a friend for nine times (21.95%), asking the lecturer for six times (14.63%), using translation applications for four times (9.75%), and using the internet and looking at the course material; each for once (2.43%).

As indicated in Table 9, when students do not understand the content during the lesson, most of the responses with 48.78% point to doing nothing as explained by one of the students: "If I do not understand something during the lesson, I do not do anything at that moment, but I deal with it after class" (Individual Interview, Participant 19). The comment displayed that some students do not prefer to do anything during the courses. However, other student may prefer to ask a friend sitting next to her or him. Accordingly, the strategy of asking a friend is the second most frequently employed strategy with 21.95% in that sense, peer help or peer feedback was identified as the method that students often refer to. This can be due to the fact that students may feel themselves more comfortable when asking something to their

friends, or it can be more practical to ask something to a friend sitting next to you, and they also have chance to ask their questions in their mother tongue when they are talking with their friends. One of the student exemplified it as follows:

During the lesson, if it is not a crowded mass course, when I do not understand something, I ask the lecturer. However, if the class is too crowded, in order not to distract the attention of so many students, I generally ask a friend of mine to explain it, or read it from the course materials.  
(Individual Interview, Participant 28)

From this extract, it can be understood that students can make use of various learning strategies to overcome comprehension problems, and asking peers/friends is a crucial strategy for students which they employ often to overcome their comprehension problems during and after the courses. In addition to these, there are other strategies students use such as using the internet, and translation applications to overcome translation related problems during the courses as explained in the following extract:

“When I do not understand a course content; at first, I panic. Then, I use applications for translation. After translating, I try to understand the subject generally. Then, I examine the materials in my course pack” (Individual Interview, Participant 2).

The comment displayed that students may use multiple learning strategies at the same time to overcome their comprehension problems.

There are also actions students take when they do not understand the content out of the lesson which are given in Table 10 below:

Table 10. Students’ Actions When They Do Not Understand the Content out of the Lesson

Students’ actions out of the lesson	N	%
Studying from the course materials	21	28
Searching content from the internet	15	20
Discussing content with peers	13	17.33
Studying from L1 (Turkish) sources	9	12
Using apps. for translation	9	12
Asking lecturers’ at the end of the lesson / in their office hours	8	10.66

As it seen in Table 10, out of 75 actions that students perform to understand the course content out of the lesson, 21 of them (28%) point to studying from the course materials, followed by searching content from the internet for 15 times (20%), discussing content with peers for 13 times (17.33%), studying from L1 (Turkish) sources and using applications for translation; each for nine times (12%), and asking lecturers at the end of the lesson/in their office hours for eight times (10.66%).

As indicated in Table 10, strategies students employ out of the lesson to understand the content slightly differ from in-class strategies. For instance, studying content from course materials with 28% is the most frequently employed strategy followed by searching content from the internet. One student explained it with the words: “After class, I first start studying from the course book to read the content in detail, and there is no time limit” (Individual Interview, Participant 12). Another student explained it with the following words: “I searched the internet to look for additional sources about the content” (Individual Interview, Participant 23). The comments displayed that after class, students mostly rely on their own resources such as their course materials or the internet to study the course content, especially in the age of technology, internet use for learning something is indispensable, and therefore it is employed by the students. However, the least frequently reported strategy which is asking lecturers at the end of the lesson or in their office hours with 10.66% may indicate that in order to comprehend more, students prefer to rely on their own resources while studying.

In addition to these, as for the language skills students experienced most difficulty with, out of 35 students; 28 of them (80%) regard speaking as the most challenging one. In terms of the language skills students experienced least difficulty during EMI, out of 35 students, 14 of them (40%) regard reading, and 13 of them (37.15%) regard

listening, eight of them regard writing (22.85%) as the foreign language skill they experience least difficulty.

In the following parts, each foreign language skill is addressed with respect to its effect on comprehension, and with respect to learning strategies students employ when using each foreign language skill during EMI courses.

As for students' experience about reading EMI materials, students were asked whether they experience any difficulty or not, out of 35 students, 15 of them (42.85%) reported experiencing no difficulty with reading, 13 of them (37.14%) reported experiencing difficulty from time to time, and seven of them (20%) reported experiencing difficulty with reading. Accordingly, students were also asked about whether they use any strategies in case of comprehension problems related to reading. As a result, they reported using several strategies for reading as displayed in Table 11 below:

Table 11. Strategies Students Use while Reading EMI Materials

Strategies for reading	N	%
Using online dictionary	20	46,51
Using translation apps for translating sentences or paragraphs	7	16.27
Discussing content with peers	7	16.27
Searching content from the internet from similar sources in English or in L1	7	16.27
Asking lecturers	2	4.65

As it is seen in Table 11, 43 strategies were reported by the students when reading EMI materials, 20 of them (46.51%) point to using online dictionary, followed by three categories, namely using translation applications for translating sentences or paragraphs, discussing content with peers, and searching content from the internet for

similar sources in English or in L1; each seven times (16.27%), and asking lecturers; two times (4.65%).

As indicated in Table 11, the strategies student reported using while reading EMI materials were mostly about using online materials such as online dictionaries (46.51%), or translation applications (16.27%) as explained by one of the students: “I do not experience much difficulty with reading. However, if I do not understand something while reading, I look up words from the dictionary, and I continue” (Individual Interview, Participant 22). Another student explained it with the following words: “Sometimes, I experience difficulty while reading. At that moment, I either search the concept from the internet, or write the sentence into the translation application. If I still do not understand, I ask a friend of mine to explain it” (Individual Interview, Participant 3). The comments displayed that if students experience difficulty while reading EMI materials, they generally use online dictionaries or translation applications which is understandable in the age of technology. In addition, discussing content with peers is also another frequently reported strategy (16.25%) instead of asking the lecturers (4.65%) since students may find it easier to access to their friends when they need. As a result, discussing content with peers, in other words, peer discussion is among the most frequently employed strategy in terms of reading, and students were found to make use of peer discussion in their EMI process while reading or discussing the subject matter. One student exemplified it with the following words: “When I have difficulty with a reading, I ask one of my classmates who was in that lesson, but sometimes when we search the same topic from the internet, we realize that we both misunderstand the subject” (Individual Interview, Participant 9).

As it can be understood from this comment; in order to overcome difficulties related with reading, students often use peer discussion; however, this strategy by itself may not be enough. In addition, students tend to make use of various strategies at the same time to overcome their comprehension problems.

As for students' experience about listening, students were asked whether they experience any difficulty or not; out of 35 students; 26 of them (74.28%) reported experiencing difficulty from time to time with listening in EMI courses, seven of them (20%) reported experiencing no difficulty, and two of them (5.71%) reported experiencing difficulty in terms of listening. Accordingly, students were also asked about whether they use any strategies in case of comprehension problems related to listening. As a result, they reported using several strategies as displayed in Table 12 below:

Table 12. Strategies Students Use in case of Comprehension Problems due to Listening

Strategies for listening	N	%
Reviewing the subject after class from course materials or other materials from the internet	30	44.77
Discussing content with peers	19	28.35
Asking lecturers	18	26.86

As it is seen in Table 12, out of 67 responses; 30 of them (44.77%) point to reviewing the subject after class from course materials or other materials from the internet, followed by 19 of them (28.35%) which point to discussing content with peers, and 18 of them (26.86%) point to asking lecturers.

As indicated in Table 12, there are mainly three strategies students employ in case of comprehension problems while listening to their lecturers. Students mostly prefer to self- study either from the course materials or from the internet as explained by one

of the students: “If I do not understand something while listening to the lecturers, I search the content from the internet after class” (Individual Interview, Participant 21). In addition, asking friends (28.35%) and asking lecturers (26.86%) were also employed methods. One student exemplified it with the following words:

If I do not understand something during the lessons, I try to ask my question to the lecturer in English at first, if I cannot explain myself, and if the lecturers allow, I ask my question in Turkish during the class or after the class. (Individual Interview, Participant 24)

As it is seen, students may also ask their friends or lecturers, but if they ask to their friends, they ask it in L1. However, when asking their lecturers, they are to use English, or they can use L1 if their lecturers allow.

As for students’ experience about writing; students were asked whether they experience any difficulty or not, out of 35 students; 21 of them (60%) reported experiencing no difficulty with writing, 12 of them (34.28%) reported experiencing difficulty from time to time, and two of them (5.71%) reported experiencing difficulty with writing. Accordingly, students were also asked about whether they use any strategies in case of comprehension problems related to writing. As a result, they reported using several strategies as displayed in Table 13 below:

Table 13. Strategies Students Use to Overcome Problems Related to Writing

Strategies for writing	N	%
Paraphrasing	14	34.14
Writing unknown words in L1 in quotation in exams	12	29.26
Taking notes in L1	6	14.63
Using translations apps. for translating sentences or paragraphs	5	12.19
Taking notes of keywords	4	9.75

As it is seen in Table 13, out of 41 responses; 14 of them (34.14%) point to paraphrasing, 12 of them (29.26%) point to writing unknown words in L1 in

quotation in exams, six of them (14.63%) point to taking notes in L1, five of them (12.19%) point to using translations applications for translating sentences or paragraphs, and four of them (9.75%) point to taking notes of keywords.

As indicated in Table 13, students may sometimes experience difficulty with writing. Among the strategies, students use after paraphrasing (34.14%), other strategies include L1 use such as writing the words they do not know in quotation in exams in L1 (29.26%), or taking notes in L1 (14.63%) as explained by one of the students with the following words:

While writing something, I do not experience much difficulty, but if I do not know the word, I look up from the online dictionary, then continue writing, but in the exams if I cannot remember a word, I write that word in Turkish in quotation, but this happens very rarely. (Individual Interview, Participant 31)

The comments indicated that students make use of various strategies at the same time such as paraphrasing and using online dictionaries. However, L1 use can also be seen if students feel that they cannot find a specific word especially in exams since they cannot make use of online dictionaries or translation applications during exams.

As for students' experience about speaking; students were asked whether they experience any difficulty or not; out of 35 students; 26 of them (72.28%) reported experiencing difficulty regarding speaking, and nine of them (27.72%) reported not experiencing any difficulty. Accordingly, students were also asked about whether they use any strategies in case of comprehension problems related to speaking. As a result, they reported using several strategies as displayed in Table 14 below:

Table 14. Strategies Students Use when They Have Difficulty about Expressing Themselves in English

Strategies for speaking	N	%
Giving up / avoid speaking	21	44.68
Codeswitching (from English to Turkish)	10	21.27
Asking questions to lecturers at the end or out of the lesson	6	12.76
Discussing unasked questions with peers after class	5	10.63
Paraphrasing	5	10.63

As it is seen in Table 14, out of 47 responses; 21 of them (44.68%) point to giving up or avoiding speaking, 10 of them (21.27%) point to codeswitching (from English to Turkish), six of them (12.76%) point to asking questions to lecturers at the end or out of the lesson, five of them (10.63%) point to two categories; discussing unasked questions with peers after class and paraphrasing.

As indicated in Table 14 and previously also; speaking as a foreign language skill is the one students reported experiencing the biggest difficulty. Accordingly, avoiding speaking is the strategy (44.68%) that students mostly employed. As a result, 44.68% of the students talked about the fact that they avoided speaking during the courses.

One reason could be linguistic problems. However, there can be other factors behind it such as affective factors. For instance, in crowded classes, students may have anxiety while they are trying to express themselves in English in the classroom. One of the student exemplified this problem as follows: “If you ask me to write down a question, I can formulate it in ten different ways, but when I try to ask it in class, in front of so many people, I shy away from it” (Individual Interview, Participant 5).

Another student exemplified the problem as follows:

Before I ask a question, I think about the question for a few minutes, I try to formulate the sentences in my mind. I try to be courageous, I make my internal talk like I can start this way. Then, I attempt to ask, but then if I feel that I will not be able to ask. So, I give up. It is not like our mother tongue like you immediately ask what springs to your mind at that moment. (Individual interview, Participant 32)

As it can be understood from these quotations, some students avoid talking especially in crowded classes, in order not to break the flow of the lesson since they think that it will take too much time for them to ask a question. Therefore, these comments indicated that speaking should be given a special focus considering the affecting factors which are not only linguistic but also affective. In that sense, factors such as motivation and encouragement may play a crucial role. For instance, when lecturers encourage and motivate students to speak English, students reported that they try harder to speak and express themselves in English. In that sense, lecturers' approach gains importance as explained by one of the students in the following extract:

My speaking was not good until the end of the third year in the department but one of our lecturers really encouraged all of us to speak English during the lessons. So, I and a friend of mine started speaking during that lesson, and talked throughout the semester. I was saying something, then my friend was making a comment about what I said. Seeing us, some other students started speaking English as well. As a result, if we overcame our speaking problem, it was thanks to our lecturer. (Individual Interview, Participant 6)

The comment displayed that motivation and encouragement as affective factors play a crucial role in encouraging students to speak. In addition, implementation of 100% EMI policy with no place for L1 may be avoided and students should be given the opportunity to use L1 even if it is in a limited sense because during lessons, some students also mentioned code switching to their mother tongue when they cannot express themselves fully in English if the lecturers allow them which they consider to be necessary and beneficial to for their comprehension process as explained in the following extract:

When lecturers' apply "only English" policy very strictly like they do not let us express ourselves in L1, it is demotivating since we cannot participate all the time although we know the answers. In those cases, we tend to sit at the back rows, and we say "I don't know" even if we know the answer because we think that we will not be able to express ourselves fully in English. (Individual Interview, Participant, 18)

As a result, it can be understood from the extract that if students are given permission to express themselves in L1 unless they cannot do it in English in that specific moment, students may not give up listening and participating. Accordingly, code switching from English to Turkish is another frequently employed strategy as exemplified by one of the students: “In the class, I try to ask my questions first in English, I really try hard, but if I cannot, I ask permission from the lecturer to ask it in Turkish” (Individual Interview, Participant 4).

Lastly, students were asked what strategies they employ when they come across a vocabulary item that they do not know in the lesson and out of the lesson as displayed in Table 15 below:

Table 15. Strategies Students Use for Unknown Vocabulary Items in and out of the Lesson

Strategies for vocabulary	N	%
Using online dictionary	35	62.50
Guessing from the context	12	21.42
Discussing with peers	6	10.71
Asking the lecturer of the course	3	5.35

As it is seen in Table 15, when students come across a vocabulary item that they do not know, the strategies they reported using are as follows; using online dictionary for 35 times (62.50%), followed by guessing from the context for 12 times (21.42%), asking a friend for six times (10.71%), and asking the lecturer of the course for three times (5.35%).

As indicated in Table 15, when students do not know the meaning of a word, in the age of technology, students mostly reported using online dictionaries (62.50%). One student explained it with the following words: “First, I try to understand the word from the context but if I cannot, I directly look it up from the online dictionary”

(Individual Interview, Participant 21). Another student exemplified it as follows: “If I do not understand the word, I try to guess it from the context” (Individual Interview, Participant 5). The comments indicated that in case of words students do not know, they try to understand them from the context first. If they cannot understand, they prefer to look them up from online dictionaries which is an easy and a quick way to understand unknown words. In addition, although not reported much, students also discussed the unknown words with their friends (10.71%), and also ask their lecturers (5.35%) if they cannot understand by themselves, or by using an online dictionary because sometimes looking up a word from a dictionary may not be enough to understand the meaning of a term. At those moments, although not very frequent, students may also ask their lecturers for some explanation (5.35%). As a result, when students come across a vocabulary item that they do not know, there is no difference between the strategies that they use in and out of the lesson. In addition to this, when students are asked whether they do anything special to learn the field terminology, they reported doing nothing special, and stated that they learn the terminology during the lessons by listening to their lecturers, and by reading course materials.

#### 4.2.1.4 Classroom pedagogy

Classroom pedagogy and the effect of it on content comprehension in EMI is examined with respect to lecturers’ methodology, implementations, and the place of L1 (Turkish) within the instruction.

Students were asked about their lecturer’s successful implementations which contributed to their understanding of the course content. The successful

implementations of the lecturers as reported by students are displayed in the Table 16 below:

Table 16. Lecturers' Successful Implementations in EMI Courses

Lecturers' successful implementations	N	%
Supporting instruction with visuals (charts, pictures)	12	21.42
Integrating hands on learning activities (designing, drawing)	10	17.85
Code switching to L1 (to explain a crucial point or to make a mini summary)	8	14.28
Giving examples	7	12.50
Integrating group work and discussion activities	6	10.71
Checking comprehension (quiz, post-test, games, asking)	5	8.92
Repetition through paraphrasing, and re-explaining	4	7.14
Writing keywords on the board	2	3.57
Turning on subtitles while watching videos	2	3.57

As it is seen in Table 16, there are 56 responses for the successful implementations of lecturers in EMI courses as reported by students; 12 of them (21.42%) point to supporting instruction with visuals (charts, pictures), followed by 10 of them (17.85%) which point to integrating hands on learning activities (designing, drawing), eight of them (14.28%) point to code switching to L1 (to explain a crucial point or to make a mini summary), seven of them (12.50%) point to giving examples, six of them (10.71%) point to integrating group work and discussion activities, five of them (8.92%) point to checking comprehension via quiz, post-test, game and asking, four of them (7.14%) point to repetition through paraphrasing and re-explaining, and 2 of them (3.57%) point to writing keywords on the board, and the other two (3.57%) point to turning on subtitles while watching videos.

As indicated in Table 16, the most successful implementations of the lecturers as reported by students mostly related with supporting the instruction. For instance, supporting the instruction with visuals such as charts and pictures (21.42%), supporting it with hands on learning activities such as designing and drawing.

Students exemplified these successful implementations with the following words:

“When explaining something some lecturers accompany their speech with the effective use of mime and gestures for us to understand better. In addition, they show us some graphs and charts which ease our comprehension process” (Individual Interview, Participant 18). Another student explained with the following words:

In some courses, a lecturer may put a picture of a well-known artist which reflects a specific art movement. Then, we try drawing it as well, or we try to make toys out of recycled materials. Those activities contribute to our learning process to a great extent. (Individual Interview, Participant 32)

The comments indicated that when students’ active participation is ensured via certain activities, then more learning can be said to take place. In addition, code switching to L1 to explain a crucial part (14.28%) also seem to contribute to the students’ learning process. One student explained it with the following words:

“During lectures, there can be some complicated parts, and when lecturers realize that we do not understand that part, then some lecturers may say a single sentence in L1, and that complicated part becomes clear for us” (Individual Interview, Participant 20). It can be understood from this comment, in this part and in the previous section, L1 use even it is used in a limited way can facilitate comprehension. In addition, integrating group work and discussion activities also play a crucial role in ensuring students’ comprehension as explained by one of the students: “Some lecturers bring tasks or cases to be solved. Then, they ask us to work in groups, and then we share the results by actively participating in class discussions, and when we actively participate, we learn more” (Individual Interview, Participant 3). Another student also commented on the benefits of active participation during the courses with the following words: “I do not forget the things I learn in class during which I actively participate by making comments” (Individual Interview, Participant 32). These comments indicated that in addition to supporting instruction with visuals

by the lecturers, it is also important to ensure students' active participation through hands on learning activities, group works, and discussions. In addition, regarding the least frequently given responses such as lecturers' repetition through paraphrasing and re-explaining (7.14%), writing key words on the board, or turning on subtitles while watching videos, there is still the same idea which is supporting the instruction with extra explanations such as keywords and subtitles which indicates that supporting the instruction with additional tools and methods are facilitative to comprehension when instruction is delivered with a foreign language medium. In addition to these successful implementations, students also reported some implementations that students benefit less, and these implementations were displayed in Table 17 below:

Table 17. Lecturers' Implementations Students Benefit Less

Lecturers' less successful implementations	N	%
Lecturing via only reading from the slides	18	64.28
Too much repetition for clarification	3	10.71
Lack of comprehension checks	3	10.71
Turning off subtitles in videos	2	7.14
Lack of visual support	2	7.14

As it is seen in Table 17, there are 28 responses for the less successful implementations of lecturers in EMI courses as reported by students. 18 of them (64.28%) point to lecturing via only reading from the slides, three of them (10.71%) point to too much repetition for clarification, another three (10.71%) point to lack of comprehension checks, and two of them (7.14%) point to turning off subtitles in videos, another two (7.14%) point to lack of visual support.

As indicated in Table 17, the implementations of the lecturers which were considered to be contributing less to the learning process of the students are generally about the

cases when instruction is not supported which is explained with the category of lecturing via only reading from the slides (64.28%) as explained by one of the students:

In one of the courses, the lecturer used to put everything in the slides and reading the slides, and after a while, I would get distracted, and stop listening. However, in another course, the lecturer would bring some tools, and deliver them to us. Then, there were tables at which four people could work as a group. Then, in these groups, I remember that we made triangles with those tools in one of the classes. It is better than only reading from the book, and trying to understand from it. As a result, when we use a tool with our hands, and discover it ourselves, we understand how we acquire a specific knowledge. By this way, we learn to teach students with similar methods where they would also learn through discovery by actively using or doing something. (Individual Interview, Participant 14)

Similarly, the idea behind the least reported implementations that students cannot benefit much such as lack of comprehension checks (10.71%), turning off subtitles in videos and lack of visual support (each; 7.14%); it was seen that not supporting the instruction either through visuals or tools is not considered to support comprehension process of students.

In addition, as for lecturers' and students' use of L1 (Turkish) within EMI; students reported that there are lecturers who use English with limited L1 use (Turkish), and there are also some lecturers who only use English. There are several reasons for some lecturers limited L1 use which are explained in Table 18 below:

Table 18. Reasons for Some Lecturers' Limited L1 Use

Reasons	N	%
Lecturers' spotting ss.' lack of comprehension	20	44.44
Lecturers' explaining a crucial point	17	37.77
Lecturers' providing a mini summary at the end of the lesson	5	11.11
Lecturers' explaining L1 equivalent of a culture specific term	3	6.66

As it is seen in table 18, there are several reasons for some lecturers' limited L1 use, in other words, Turkish. L1 use was reported to occur when lecturers' spot students' lack of comprehension for 20 times (44.44%) followed by lecturers' explaining a crucial point for 17 times (37.77%), lecturers' providing a mini summary at the end of the lesson for five times (11.11%), and lecturers' explaining L1 equivalent of a culture specific term for three times (6.66%).

As indicated in Table 18, if lecturers do not apply 100% EMI policy strictly, there can be place for limited L1 use by some of the lecturers especially for the situations when they spot that students do not understand a certain part (44.44%), and when they think that there is a crucial part that should be further explained, students find these limited L1 use beneficial to increase their comprehension and motivation. One student exemplified it with the following words:

Some lecturers start explaining the subject, and they start asking questions for clarification. Then, when they cannot get the answers for their questions; with a short summary in L1, they explain the topic once again, and at these moments since we start to understand that complicated part, we restore our attention, and continue to listen with more motivation. (Individual Interview, Participant 12)

As indicated by the comment, short switch to L1 in complicated parts can be an effective way to restore the attention of the students ensuring their comprehension. In addition, regarding the least frequently reported responses such as lecturers' providing a mini summary at the end of the lesson (11.11%) and lecturers' explaining L1 equivalents of culture specific terms (6.66%), the idea behind them is still the same which is increasing students' comprehension as explained by one of the students:

If the topic of that day is a bit complicated, and when lecturers spot that we are tired and cannot listen attentively anymore; towards the end of the lesson, some of the lecturers make a little summary in L1 in the form of making explanations regarding what we have learnt that day. After this little summary

in L1, it becomes easier to understand what to study after class. (Individual Interview, Participant 11)

Another student also explained L1 use in line with motivational effects with the following words:

Some lecturers ask us questions in L1 such as “how do you do?” or “what have you been doing recently?” before they start their lectures, those questions act like a warm up activity for us which increases our interest towards the course more. (Individual Interview, Participant 23)

The comments indicated that L1 use is not only a facilitative tool to increase comprehension, but also a motivating tool which increases students’ interest towards the courses.

#### 4.2.1.5 English as a medium of instruction

Students’ perceptions of English as a medium were elicited in terms of language of course materials, and the language with which courses are instructed. Students’ preferences were asked as to which language they would choose if they were to decide the language of course materials, and the language by which the courses are instructed.

As for the language of course materials, out of 35 students, all of them (100%) reported that the language of course materials such as books and articles is English, and if they were to decide for the language of course materials, their preferences and reasons for their choices are as follows, out of 35 students; 29 of them (82.85%) stated that the language of course materials should be English, and three of them (8.57%) stated that it should be Turkish in order to comprehend better, and the other three participants (8.57%) suggested integrating some Turkish materials in addition to English materials to understand more, to be more knowledge about the country’s context, and to learn the L1 equivalents of field terms especially for the students who

think about taking the national exams after graduation to be appointed to state schools. As a result, majority of the students (82.85%) reported that they would prefer the language of course materials to be English for several reasons as displayed in Table 19 below:

Table 19. Reasons for Students' Preference for Course Materials in English

Reasons	N	%
Reaching more and various resources available in English (all sources are not translated into Turkish)	11	30.55
Improving English	10	27.77
English's being the lingua franca in education and various fields	9	25
English's being necessary for graduate studies	3	8.33
Learning from original/primary sources not translated ones	2	5.55
Following worldwide trends/improvements in the field	1	2.77

As it is seen in Table 19, six reasons were put forward by the students who think that the language of the course materials should be English if they were to decide. Out of 36 responses; 11 of them (30.55%) point to reaching more and various resources available in English because all sources are not translated into Turkish, 10 of them (27.77%) point to improving English, nine of them (25%) point to English's being the lingua franca in education and various fields, three of them (8.33%) point to English's being necessary for graduate studies, two of them (5.55%) point to learning from original/primary sources not translated ones, and one of them (2.77%) points to following worldwide trends/improvements in the field.

As indicated in Table 19, 82.85% of the students would prefer to have course materials in English if they were to decide, in other words, as it is due to the benefits of English as a lingua franca. First of all, the biggest reason (30.55%) was about the

availability of more resources in English. One student explained it with the following words:

When I research something, I search it in English because I find more resources in English, and it is hard to find resources that are translated into Turkish. I wish that Turkish translations for most of the resources existed, but actually most resources are published in English. (Individual Interview, Participant 17)

Another important reason was improving English (27.77%) as exemplified by one of the students:

I would prefer to have course materials in English, in other words, as it is because when they are in English, we are exposed to these materials to a great extent while we deal with EMI in and out of the classroom. If they were not in English, I would not make so much effort to understand them. As a result, our English improves more, the more we are exposed to these materials in English. (Individual Interview, Participant 23)

As for the less frequently reported reasons such as learning from original sources not translated ones (5.55%) and following worldwide improvements in the field (2.77%), they also emphasize English's being the lingua franca of today in the sense that it is the common language in education via which students acquire information about the latest developments in their field with their knowledge of English. One student explained it with the following words: "When there is a scientific development somewhere in the world, the relevant information is generally presented in English although the native language of the researchers may not be English" (Individual Interview, Participant 29). Another student also explained English's being the lingua franca also in the sector of information technology with the following words: "In the sector of information technology, knowledge of English is very necessary for professional purposes; therefore, if I were to decide; I would also want course materials to be as it is, in other words, in English" (Individual Interview, Participant 24). As it can be understood from the quotations; English is the lingua franca in

various fields. Therefore, students generally support the use of English in course materials.

As for the language of content courses; out of 35 students, all of them (100%) reported that the language via which the courses are instructed is English; however, if they were to decide for the language of courses, their preferences are as follows: out of 35 students; 23 of them (65.71%) preferred English, in other words, as it is, eight of them (22.85%) preferred English and Turkish, and four of them (11.44%) preferred Turkish. After eliciting students' preferences for the language of content courses, students were asked about their reasons for these language preferences. Accordingly, Table 20 below presents students' reasons for English in content courses.

Table 20. Students' Reasons for English in Content Courses

Students' reasons for only English	N	%
English is the global language to access the world in every field	8	28.57
Accessing wide range of sources	8	28.57
Educational and career opportunities in their own country and abroad	7	25
Improving English	5	17.85

As it is seen in Table 20, the reasons students put forward for why content courses should be instructed with English is as follows: out of 28 responses; eight of them (28.57%) point to English's being the global language to access the world in every field, another eight response (28.57%) point to accessing wide range of sources, followed by seven of them (25%) which point to educational and career opportunities in their own country or abroad, and five of them (17.85%) point to improving English.

As indicated in Table 20, 65.71% would prefer to have content courses instructed in English, in other words, as it is. Students' reasons were similar to the ones explained in the previous section for preference in English for course materials such as English's being the lingua franca in various fields (28.57%), and accessing wide range of resources (28.57). However, it was seen that 22.85% of the students prefer to have English and Turkish as a medium of instruction, and their reasons are presented in Table 21 below:

Table 21. Students' Reasons for both English and Turkish in Content Courses

Students' reasons for both English and Turkish	N	%
To comprehend more and to be more proficient in the field	4	40
To be more proficient in L1 terminology	4	40
To acquire more knowledge about the national context	2	20

As it is seen in Table 21, the reasons students put forward for why content courses should be instructed not only in English but also in Turkish is as follows: out of 10 responses; four of them (40%) point to comprehending more and being more proficient in the field, the other four (40%) point to being more proficient in L1 terminology, and two of them (20%) point to acquiring more knowledge about the national context.

As indicated in Table 21, students' reasons for English and Turkish medium instruction were grouped under three categories. The first one is to comprehend more because there are few students who tend to experience comprehension problems due to their foreign language proficiency. Secondly, there are also some students who think of taking the national exams after graduation to be appointed to state schools as teachers. Therefore, to be proficient in L1 terminology is quite necessary for them as explained by one of the students: "In the national exams, the questions are in

Turkish, and since I do not know the Turkish equivalents of some of the terms, I think I would probably experience difficulty while answering the questions in these exams” (Individual Interview, Participant 12). Another student also exemplified the necessity of integrating some content in L1 with the following words:

It is not necessary to have a course entirely instructed with Turkish, but for some topics; I also want to be informed about what is done in the local context. For this purpose, some integration of local content integrated into one of the courses would be enough. (Individual Interview, Participant 33)

It can be understood from the quotations that the students who prefer to have Turkish in addition to English want to have Turkish medium instruction integrated at a limited sense in order to acquire knowledge of Turkish terminology or to be informed about the field in terms of the local context. As a result, some integration of L1 content integrated in one or two courses would be enough in line with the purposes explained.

Lastly, there are four students (11.44%) who would prefer to have Turkish medium instruction in content courses if they were to decide. The only reason they put forward was to comprehend better and more.

#### 4.2.2 Analysis of the focus group interview

In this part, analysis of the focus group interview will be presented in line with the second research question regarding students’ further perceptions of EMI in their content courses in terms of language, content, and classroom pedagogy which will be presented under two headings as content comprehension and foreign language skills.

##### 4.2.2.1 Content comprehension

Students in the focus group also put forward their perceptions about components of EMI, and their relation to content comprehension. Firstly, regarding one of EMI

implementations which is lecturers' providing students with post course activities such as problem solving sessions in English/Turkish, and its relation to content comprehension, the participants stated that they generally prefer the problem solving sessions in their L1 which is Turkish, and they put forward several reasons for that which are listed in Table 22 below:

Table 22. Reasons for Preferring Problem Solving Sessions in L1 – Focus Group

Reasons
To understand the unclear points
To understand better
To understand more
To internalize more
To be able to ask questions

As it is seen in Table 22, students put forward several reasons as to why they generally prefer to attend the problem solving sessions in Turkish. These reasons are to understand the unclear points, to understand better, to understand more, to internalize more, and to be able to ask questions.

As indicated in Table 22, in terms of L1 use, it can be used in a limited sense, but also L1 use can take place more during the problem solving sessions as an extra-curricular activity after class. These problem solving sessions are also offered in English, and students can attend either the English or the Turkish version. However, students generally prefer to attend the problem solving session in Turkish due to several reasons as explained by students with the following comments:

After class, there can be problem solving sessions either in English or in Turkish, I generally attend the Turkish sessions because during the lessons, I am taught with English, and there are parts that I miss during the classes. I think that I might compensate for them in the Turkish sessions. In addition, to listen to the same content in L1 once again is very beneficial because I feel that I understand every single word that I hear. (Focus Group Interview, Participant 4)

Another student explained it with the following words:

I also preferred the problem solving sessions in Turkish because although I understand content when I listen to it in English, I have difficulty in terms of speaking. As a result, in the Turkish session, I can ask my questions in Turkish. As a result, if I can ask my questions, then I can comprehend more. Moreover, it becomes harder to ask the same question in crowded classes in front of so many people. (Focus Group Interview, Participant 3)

It can be understood from the comments that similar to individual interviews; use of L1 even in a limited sense by lecturers or by students can be considered to be a facilitative tool to help and increase comprehension. As a result, in the Turkish problem solving sessions, students find the chance to express themselves in their L1. By this way, they can ask all the questions in their minds easily. Moreover, there is one more issue regarding speaking similar to the individual interview findings; for instance, students may ask their questions in English. However, affective factors also display themselves at times such as feeling anxious to talk in a crowded classroom, and they may not be able to ask their questions in English. As a result, it can be understood that speaking problem is caused by not only linguistic factors but also affective factors.

In addition, as for the place of L1 (Turkish) within the instruction, and its effect on comprehension, first of all, students put forward that courses, materials are presented in English, but they also report that a limited use of L1 or a codeswitch to L1 can take place by not all but some lecturers and students from time to time, and they generally regard their lecturers' codeswitching from English to Turkish as positive and natural. They add that this codeswitching generally occurs in the form of using an English term in a Turkish sentence. Moreover, they say that when lecturers codeswitch to L1, this increases their comprehension and motivation. As for students L1 use, for instance, a student may have difficulty in asking a question, then they can get a permission to ask in L1. Moreover, students explained that when lecturers

observe that their students show signs of not understanding, or asking so many questions, or giving no reaction to the questions, limited L1 use can be seen in certain situations as listed in Table 23 below:

Table 23. Instances of Lecturers' Limited L1 Use – Focus Group

Instances of limited L1 use
Explaining a complicated subject
Explaining terminological equivalents in L1
Providing a mini summary at the end of the lesson
Doing comprehension check

As it is seen in Table 23, when explaining a complicated subject, explaining terminological equivalents in L1, providing a mini summary at the end of the lesson, and doing comprehension check, some lecturers tend to use L1 or code switch to L1 in a limited way.

As indicated in Table 23, some lecturers may prefer to use limited L1 when they explain a complicated subject. When they explain a terminological equivalent of a crucial term, or when they provide a mini summary at the end lesson, students find these limited L1 uses as quite necessary. One student explained it with the following words:

Sometimes, the classroom becomes very silent, nobody responds, or students may try to ask so many questions in Turkish to understand if lecturers allow. At these moments, lecturers also understand that we do not understand. Then, with a couple of words or sentences, they explain the subject in Turkish.  
(Focus Group Interview, Participant 4)

Another student also exemplified limited L1 use with the following words: “There can be crucial terms that students may not have heard previously. For these terms, lecturers may explain it once again in Turkish after they explain them in English”

(Focus Group Interview, Participant 2). In addition, another student also commented about this situation with the following words:

Towards the end of the lesson, some lecturers can make a short summary regarding the content. These short summaries in L1 can be quite beneficial because during the lessons, there can be some moments when we lose our attention, or miss some parts. As a result, after listening to that short summary, we can catch up the lesson, and we know what to study after class. (Focus Group Interview, Participant 1)

The comments displayed that similar to the individual interviews, L1 use by lecturers can be beneficial and facilitative to help students comprehend the content more especially at times of confusion, or when students lose their concentration.

As a result, the students view EMI and use of English positively; however, they also support the limited L1 use or code switching to L1 for the reasons explained above.

In addition, different from the individual interviews, the participants in the focus group talked about the challenges in terms of comprehending verbal and non-verbal courses. Regarding the differences between verbal and non-verbal courses in terms of understanding content; majority of the participants reported that understanding content courses in non-verbal courses are more difficult compared to the verbal courses. They listed several reasons as such that in non-verbal courses, the content itself could be rather difficult, even a single word can change the solution or the method. On the contrary, verbal courses can be more discussion oriented; therefore, not understanding a single word does not lead to lack of comprehension, and comprehension can be achieved through the context as put forward by one of the students: “In verbal courses, you can understand the content gradually from the context as lecturers explain. However, in non-verbal courses such as Mathematics or Physics, even a single word can change the meaning, or the way we solve a problem”

(Focus Group Interview, Participant 4). The comment displayed that there can be differences in terms of understanding verbal and non-verbal courses. Especially in

non-verbal courses since even a single word can change the meaning, it seems to be harder to deal with the non-verbal courses instructed with EMI. In addition, participants also put forward that the effort they make to understand the non-verbal courses can also be more. For instance, some participants reported more reliance on L1 sources in non-verbal courses to comprehend the content as explained by one of the students:

I took one of the Physics courses three times. After taking that course twice and failing twice, I asked a friend of mine from another university who took the same course with Turkish medium instruction to suggest me some Turkish resources. After studying from the Turkish resources and also watching videos related to course content from the internet which were also in Turkish, I realized that the course was not that difficult, and I managed to pass it in the third trial. (Focus Group Interview, Participant 3)

The comment displayed that use of L1 as also mentioned previously can be a facilitative tool in terms of comprehension. Similarly, students tend to make use of L1 sources as self-study materials to understand the course content more, and to understand the parts they missed during the lessons.

In addition, regarding the process of transition from English preparatory program to the departments, the participants reported experiencing difficulty in the first year of their undergraduate studies due to the fact that they lack the field terminology. They see this as a major challenge affecting their comprehension, and the solution they offer for this is to have a terminology class either in the preparatory program or in their first year in their department. One student explained the process with the following words:

When we start our department after the English preparatory year, we experience difficulty because we not only try to understand the content, but we also try to learn the terminology. Therefore, if there was a terminology course in the first term of the first year, it would be very helpful since we would learn the terms and the content at the same time. (Focus Group Interview, Participant 5)

Another student also put forward her suggestions for a terminology course in the preparatory program with the following words: “I think, a terminology course in the preparatory program would be good because when we start our departments, we would be knowledgeable about field terminology” (Focus Group Interview, Participant 4). The comments indicated that students experience difficulty when they start their department after the preparatory program, and students think that the biggest reason for that difficulty is not knowing the field terminology.

Apart from these reasons, participants reported additional reasons for their comprehension problems, and they also suggested some solutions. The reasons for students’ comprehension problems are given in Table 24 below:

Table 24. Reasons for Students’ Comprehension Problems Related to Content – Focus Group

Reasons
Lecturers’ methodology
Students’ foreign language proficiency
The difficulty of the academic language
The difficulty of the content itself

As it is seen in Table 24, students put forward several reasons regarding their comprehension problems which are lecturers’ methodology, students’ foreign language proficiency, the difficulty of the academic language, and the difficulty of the content itself.

Regarding lecturers’ methodology, students put forward some suggestions in terms of their lecturers’ methodologies so that they can comprehend the courses more.

These suggestions are lecturers’ giving concrete examples, lecturers’ solving more sample questions, and lecturers’ supporting instruction with more visuals.

Students also put forward solutions for comprehension problems which are displayed in Table 25 below:

Table 25. Solutions for Students' Comprehension Problems Related to Content – Focus Group

Solutions
Studying from L1 resources
Watching videos from the internet about the course content
Discussing content with peers
Attending problem solving sessions

As it is seen in Table 25, the solutions put forward by the students to overcome comprehension problems are studying from L1 resources, watching videos from the internet about the course content, discussing content with peers, and attending problem solving sessions.

As indicated in Table 25, students find solutions to their comprehension problems mostly by relying on their own resources instead of asking their lecturers. One student exemplified it with the following words: “When I do not understand the content of a lesson, I discuss it with my friends after class where each person talks about what s/he has understood from the lesson” (Focus Group Interview, Participant 3). Students further exemplified their strategies with the following words: “I attend problem solving sessions after class during which I listen to the content once again, and understand the subject more” (Focus Group Interview, Participant 2). Similar to the individual interviews, students were found to employ similar strategies to comprehend more as exemplified by one of the students: “If I do not understand the content of the lesson, I search for videos about course content from the internet after class. If I still cannot understand, I study the content from L1 sources” (Focus Group Interview, Participant 4). As a result, similar to the individual interviews, the

comments displayed that students, in order to understand the content, students may employ various strategies such as discussing content with peers, searching content related material from the internet and studying from materials in L1.

#### 4.2.2.2 Foreign language skills

Students in the focus group also reported their perceptions regarding use of foreign language skills in the process of EMI. However, the main focus was on the speaking skill similar to the individual interview findings.

As for the foreign language skills which students need to improve most; all of the participants reported speaking as the foreign language skill that needs to be improved most. They all reported experiencing difficulty related to this skill. They put forward several reasons and solutions about the issue. The reasons they put forward for why they have problems about speaking skill are as follows; first of all, in the English preparatory program, there is no speaking course, and speaking is not tested in the English proficiency exam of the university. Therefore, students do not focus on this skill as much as other language skills. Secondly, students have some anxiety about not speaking fluently and accurately. One student exemplified it with the following words: “When we try to speak, there is a view that I should speak faultlessly which creates stress, but actually we should not focus on the idea of being faultless, and we should speak as much as we can” (Focus Group Interview, Participant 4). As a result, it can be understood from the comments that speaking is the skill that students need to improve most, but behind the speaking problem, there are not only linguistic factors, but also affective factors as mentioned in both the individual interviews and the focus group interview. As a result, students are to overcome this through more support and more practice.

In line with this, students suggested some solutions to improve their speaking which are given in Table 26 below:

Table 26. Students' Suggestions to Improve Their Speaking Skill – Focus Group

Suggestions
A pass/fail speaking course in undergraduate programs
A speaking course with no grade in undergraduate programs
A speaking course in the Eng. prep. program
A speaking part in the English proficiency test of the university
Revision of the prep program by integrating speaking
Establishing a speaking club

As it is seen in Table 26, students put forward several suggestions to improve their speaking which are integrating a pass/fail speaking course in undergraduate programs, a speaking course with no grade in undergraduate programs, a speaking course in the English preparatory program, a speaking part in the English proficiency test of the university, revision of the English preparatory program by integrating speaking, and establishing a speaking club. As a result, most of the suggestions to improve speaking was made to be implemented in the preparatory program. One student explained it with the followings words:

I think about the tasks and assignments in the preparatory program, we used to read texts or write essays, but I do not remember making a presentation that much, and when we start our departments, we were to make presentations, express ourselves during the courses during which we experience difficulty. As a result, if we practice these skills in the preparatory program, we would not experience so much difficulty in our departments. (Focus Group Interview, Participant 3)

Another student also commented about the content of the suggested speaking courses: “It should not be in the form of a compulsory course with grades, but it can be in the form of a pass or fail course, or a speaking club where we practice this skill without feeling stressed” (Focus Group Interview, Participant 4). The comments

indicated that speaking skill should be supported more in the form of compulsory courses or in the form of voluntary extra-curricular activities such as a speaking club. In addition, with respect to foreign language use of lecturers and students themselves, all of the students regarded their lecturers' English language use as sufficient. In addition, regarding students' perceptions about their own English language use, they regarded their own English as sufficient as well; however, they put forward that speaking is the area that they need to improve more in terms of fluency and colloquial English.

As for the effect of speaking on class participation and comprehension; students reported that if they cannot express themselves fully in English, ask their questions, or make comments, then their class participation is also affected along with their comprehension. As a result, they put forward that problems about speaking can be a reason for the decrease in their class participation; therefore, decrease in comprehension, and some of the students added that they would participate more if the instruction was in L1. One student explained speaking problem and reduced class participation with the following words: "I believe that my class participation decreases because I have problems about speaking; I do not want to talk during the lessons. If the courses were instructed with Turkish, I might participate more" (Focus Group Interview, Participant 4). The comment indicated that due to problems about speaking, students may not participate to the class discussions as much as they want.

#### 4.3 Students' perceptions of EMI in terms of developmental aspects during education and after graduation

The third phase of the study has the aim to explore student perceptions' regarding the effects of EMI during education and after graduation with respect to developmental

aspects such as foreign language, academic, professional and personal development, and with the aim the third research question were put forward:

How do students perceive the effects of EMI policies on their

- foreign language development
- academic development
- professional development
- personal development

Effects of EMI on students were handled with respect to the process during education and after graduation. Accordingly, first of all, effects of EMI on students' foreign language development is examined which is followed by effects of EMI on students' academic, professional, and personal development. Afterwards, EMI is presented with respect to its challenges and achievements which are then followed by suggestions put forward by students.

#### 4.3.1 Analyses of individual Interviews

In this part, analyses of the individual interviews will be presented in line with the third research question regarding students' perceptions of EMI in terms of developmental aspects during education and after education. Accordingly, four developmental aspects such as foreign language, academic, professional and personal will be presented which will be followed by the presentation of students' perceptions regarding challenges of EMI and their suggestions for EMI.

#### 4.3.1.1 Foreign language development

As for the effects of EMI on students' foreign language development, all of the students reported that EMI contributes to their English language development positively which is displayed in Table 27 below:

Table 27. Effects of EMI on Foreign Language Development

Effects of EMI on foreign language development	N	%
Positive	35	100

As it is seen in Table 27, out of 35 students, all of them (100%) reported that EMI had positive effects on their English language development. One student explained it with the following words: "Since we are exposed to English to a great extent in our undergraduate programs, our foreign language develops constantly" (Individual Interview, Participant 9).

#### 4.3.1.2 Academic development

As for the effects of EMI on students' academic development, all of the participants reported that EMI had positive effects on their academic development, and they put forward several reasons for that which are displayed in Table 28 below:

Table 28. Effects of EMI on Academic Development

Effects of EMI on academic development	N	%
Accessing educational resources more with more research opportunities	23	39.65
More educational opportunities in and out of the country at graduate and undergraduate level	21	36.20
Following current trends and developments in the field studied	7	12.06
Possessing field knowledge and terminology in two languages	5	8.62
Accessing primary sources without a need for translation	1	1.72
Possessing the ability to discuss the field with people all around the world	1	1.72

As it is seen in Table 28, the students reported that EMI contributes to their academic development, and put forward various reasons, out of 58 responses regarding the effects of EMI on their academic development; 23 of them (39.65%) point to accessing educational resources more with more research opportunities, 21 of them (36.20%) are about more educational opportunities in and out of the country at graduate and undergraduate level, seven of them (12.06%) are about following current trends and developments in the field studied, five of them (8.62%) are about possessing field knowledge and terminology in two languages, one of them (1.72%) is about accessing primary sources without a need for translation, and the other (1.72%) is about possessing the ability to discuss the field with people all around the world.

As indicated in Table 28, accessing educational resources more with more research opportunities (39.65%) was the biggest reason indicating positive effects of EMI in terms of academic development. One student exemplified the situation as follows: “You can access to educational materials more when you search it in English. Therefore, EMI is quite beneficial in the sense that it enables extensive access to information in terms of resources” (Individual Interview, Participant 5).

The comment shows that with EMI, students have easy access to information, educational resources or research, and they consider this situation as an advantage. The second most frequently reported reason was more educational opportunities in and out of the country at graduate and undergraduate level (36.20%) as explained by one of the students: “After graduation, I wanted to do my M.A. abroad. As a result, since I have been taught with EMI, I do not think I would experience difficulty while doing my M.A. abroad” (Individual Interview, Participant 8). Another student exemplified the benefits of EMI on academic development as follows: “Since I studied with EMI, this knowledge encourages me to attend Erasmus Program or to go abroad for educational purposes” (Individual Interview, Participant 4). As it can be understood from the comments that being taught with EMI is considered to be beneficial in terms of creating educational opportunities during undergraduate education and after graduation for graduate studies. In addition, the less frequently reported reasons; following current trends in the field studied (12.06%), accessing primary sources without a need for translation, and possessing the ability to discuss the field with people all around the world (each; 1.72%) also indicate the positive effects of EMI in which English’s being the lingua franca of today is also emphasized.

#### 4.3.1.3 Professional development

As for the effects of EMI on students’ professional development, all of the participants reported that EMI has positive effects on their professional development, and the put forward several reasons for that which are listed in Table 29 below:

Table 29. Effects of EMI on Professional Development

Effects of EMI on professional development	N	%
Job opportunities in and out of the country	28	54.90
Job opportunities out of the field studied	9	17.64
Career opportunities at university	8	15.68
Access to resources for professional development	5	9.80
Rise in salary	1	1.96

As it is seen in Table 29, the students reported that EMI contributes to their professional development, and they put forward various reasons, out of 51 responses related to the effect of EMI on professional development, 28 of them (54.90%) point to job opportunities in and out of the country, nine of them (17.64%) point to job opportunities out of the field studied, eight of them (15.68%) are about career opportunities at university, five of them (9.80%) are about access to resources for professional development, and one of them (1.96%) points to rise in salary.

As indicated in Table 29, the students also considered EMI to have positive effects on their professional development, and the reasons they put forward were mostly in line with career prospects in and out of the country (54.70%). One student explained it with the following words: “Since I was taught with EMI, I can find jobs not only in my country but also abroad” (Individual Interview, Participant 28). Another student also exemplified it with the following words: “I can work as a Mathematics teacher at an EMI high school in Turkey, but I can also work at a school abroad where the medium of instruction is English” (Individual Interview, Participant 15). Moreover, as indicated in one of the categories; job opportunities out of the field studied (17.64%), it can be understood that even knowledge of English by itself puts the students at an advantageous position in terms of job prospects. One students explained it with the following words: “Knowledge of English is very important and required in many sectors. Therefore, if I do not work in the field I study, I can still

find a job in a different area since I am proficient in English” (Individual Interview, Participant 8). It can be understood from the comment that since English is the lingua franca of today, knowledge of English by itself can provide students with various job opportunities. Moreover, accessing resources for professional development (9.80%) was also an important reason indicating positive effects of EMI in terms of professional development. In that sense, students can have job opportunities in EMI schools since they can deliver the instruction in English. In addition, students can also work at schools where the medium of instruction is Turkish; however, even if the medium of instruction is Turkish in state schools, they can still make use of resources published in English in addition to the ones published in Turkish while preparing the course content as explained by one of the students with the following extract:

After graduation, for instance, if I work as a Physics teacher, to explain a subject, I can use Turkish sources, but I may need to use additional resources to explain it further, or to talk about a newly discovered thing in the world which is not translated into Turkish yet. As a result, I may need to use some extra sources published in English in addition to the local ones while preparing course content. (Individual Interview, Participant 13)

Another student also exemplified the situation with the following words:

After graduation, I think about working as a Mathematics teacher at primary school where the medium of instruction is Turkish. Therefore, I will not use English while teaching the content, but I will use the resources that are published in English while preparing the course content. (Individual Interview, Participant 20)

Another student also exemplified a similar situation with the following words: “In the Program of Guidance and Counselling, I will use Turkish during my interactions with students, but for professional development, I will need to use English resources to follow the latest developments and trends in my field” (Individual Interview, Participant 10). It can be understood from the comments that even if students may

not use English after graduation while teaching or counselling, they regard their knowledge of English as crucial to access to resources for professional development.

#### 4.3.1.4 Personal development

As for the effects of EMI on students' personal development; all of the participants hold positive perceptions regarding the effects of EMI on their personal development, and they put forward several reasons for that which are listed in Table 30 below:

Table 30. Effects of EMI on Personal Development

Effects of EMI on personal development	N	%
Interacting with people from different countries and cultures	10	17.85
Gaining self-confidence to live and study in another country	8	14.28
Doing research in any field	8	14.28
Gaining a different perspective	7	12.50
Accessing information from primary sources without a need for translation	7	12.50
Developing brain, cognition, and thinking skills	6	10.71
Learning and understanding different cultures	4	7.14
Learning another foreign language easily	4	7.14
Following the current trends and developments in every field	2	3.57

As it is seen in Table 30, the students reported that EMI contributes to their personal development, and put forward various reasons, out of 56 responses related to the effect of EMI on personal development; 10 of them (17.85%) point to interacting with people from different countries and cultures, two categories with eight responses (each, 14.28%) is about gaining self-confidence to live and study in another country, and doing research in any field, another two categories with seven responses (each, 12.50%) point to gaining a different perspective, and accessing information from primary sources without a need for translation, six of them

(10.71%) are about developing brain, cognition, and thinking skills, two categories with four responses (each, 7.14%) are about learning and understanding different cultures, and learning another foreign language easily, and two of them (3.57%) point to following the current trends and developments in every field.

As indicated in Table 30, all of the students considered EMI to have positive effects on their personal development, and they put forward several reasons accordingly.

The biggest reasons were about facilitating experiences with other countries such as interacting with people from different countries and cultures (17.85%), gaining self-confidence to live and study abroad (14.28%). These reasons emphasize the importance of accessing the world for various purposes with the knowledge of English thanks to EMI. One student explained it with the following words:

“Although people have different native languages, with the knowledge of English, I can easily interact with people all around the world since English is the *lingua franca*” (Individual Interview, Participant 34). Another student also exemplified a similar situation as follows: “I can live in any country abroad even if the official language of that country is not English because in various countries, people speak English as a foreign or a second language” (Individual Interview, Participant 9). The comments indicated that being taught with EMI, and therefore possessing knowledge of English enable students to interact with the world. Moreover, some students stated that being instructed with EMI has positive effects on their brain, cognition, and thinking skills as shown in the following extract:

When you try to understand something in a foreign language, it is said that different areas of the brain are activated. In other words, I feel that my brain works more when I try to learn something in English. Actually, when you try to learn something new, it is difficult, and when you try to learn something in another language, it becomes more difficult. There is more load in the brain. However, I can say that, in the beginning, there can be extra load, but I tend to develop different perspectives out of that learning. (Individual Interview, Participant 27)

As it can be understood from the extract; students considered EMI to be beneficial for themselves in many ways including its positive effect on brain and cognition. As for the least frequently stated reasons such as learning another foreign language easily (7.14%) and following the current trends in every field (3.57%) emphasize the fact that students also perceive other benefits of this process with a multifaceted focus in various areas of their lives. One student explained it with the following words: “It does not have to be something about my field, with my knowledge of English, I can read the things I am interested in any field such as football” (Individual Interview, Participant 22). Another student also exemplified it with the following words: “I am interested in cooking. So, I like searching the internet for different recipes that belong to different countries” (Individual Interview, Participant 10). As a result, it is seen that students generally view the effects of EMI on their foreign language, academic, professional, and personal development positively.

#### 4.3.1.5 Challenges of EMI and suggestions for EMI

Some of the students also think that when content courses are instructed with EMI, there can be some challenges which are displayed in Table 31 below:

Table 31. Challenges Experienced during EMI

Challenges	N	%
Superficial learning (difficulty in terms of internalizing)	10	25.64
Terminological transfer problems in professional life (difficulty in expressing field knowledge in L1)	8	20.51
Experiencing difficulty in national exams due to terminological difficulty	7	17.94
Experiencing difficulty in terms of comprehension (spending more time to understand content)	7	17.94
Gaps in field knowledge	7	17.94

As it is seen in Table 31, out of 39 responses related to challenges of EMI, 10 of them (25.64%) point to superficial learning, in other words, difficulty in terms of internalizing, eight of them (20.51%) point to terminological transfer problems in professional life, in other words, difficulty in expressing field knowledge in L1, and there are three categories with seven responses (each, 17.94%) which point to experiencing difficulty in national exams due to terminological difficulty, experiencing difficulty in terms of comprehension, in other words, spending more time to understand content, and gaps in field knowledge.

As indicated in Table 31, although students have positive perceptions regarding EMI, they also talk about some challenges. The biggest challenge was about the difficulty in terms of internalizing (25.64%). Although students did not report experiencing major problems regarding comprehension, some of them reported experiencing problems about internalizing the knowledge at times as explained by one of the students: “The instruction is not in our mother tongue. That is why, at times it is hard to understand it hundred percent” (Individual Interview, Participant 17). Another student also explained a similar situation with the following words:

Especially in the first year, since we do not have much experience with EMI, it becomes difficult to understand how to study or deal with the materials, but after the first year, we get used to be taught with EMI, and we do not experience comprehension problems much. (Individual Interview, Participant 20)

The comments indicated that especially in the first year in the undergraduate programs, students may not be that efficient in dealing with the academic skills required in EMI. However, in the following years since their familiarity and experience increase, these comprehension problems tend to decrease to a great extent. Another significant challenge reported is experiencing difficulty in the national exams due to terminological difficulty (17.94%) which has been voiced

throughout the study by some of the students who were thinking of taking these exams. In that sense, L1 terminology can be a challenge which needs to be supported. One student explained it with the following words:

I think about taking the national exams after graduation, but I do not feel knowledgeable about L1 terminology. Therefore, if L1 terminology is integrated in one of the undergraduate courses in the first or the last year that would be very beneficial. (Individual Interview, Participant 13)

In addition, as for the achievements of EMI considering the planned goals and objectives, majority of the participants regarded the process of EMI successful as displayed in Table 32 below:

Table 32. The System's Achievements in terms of Its Goals and Objectives

The system's achievements in terms of its goals and objectives	N	%
Successfully achieves	29	83
Partially achieves	6	17

As it is seen in Table 32, out of 35 participants; 29 of the students (83%) think EMI successfully meets the objectives, and six of them (17 %) think EMI partially meets the objectives due to the challenges listed in Table 31 above.

Lastly, students were asked to evaluate the process of EMI, and put forward suggestions to improve the process more. These suggestions are presented in Table 33 below:

Table 33. Suggestions for EMI before and during Implementation

Suggestions for EMI before and during implementation	N	%
A speaking course in the English preparatory program	12	22.22
A terminology course in undergraduate programs	10	18.51
A speaking exam in the English proficiency test of the university	9	16.66
A speaking course in undergraduate programs	7	12.96
An orientation course in undergraduate programs	6	11.11
More focus on speaking in the English preparatory program and undergraduate programs	5	9.25
Extra-curricular speaking activities	4	7.40
More support for remedial students in the English preparatory program	1	1.85

As it is seen in Table 33, there are 54 responses put forward by participants for EMI before and during implementation; 12 of them (22.22%) point to a speaking course in the English preparatory program, 10 of them (18.51%) point to a terminology course in undergraduate programs, nine of them (16.66%) point to a speaking exam in the English proficiency test of the university, seven of them (12.96%) point to a speaking course in undergraduate programs, six of them (11.11%) of them point to an orientation course in undergraduate programs, five of them (9.25%) point to more focus on speaking in the English preparatory program and undergraduate programs, four of them (7.40%) point to extra-curricular speaking activities, and one of them (1.85%) points to more support for remedial students in the English preparatory program.

As indicated in Table 33, although students have positive perceptions regarding EMI, they also put forward some suggestions to improve the program. The suggestions were grouped under three main themes; support for speaking, terminology, and academic skills. First of all, the most frequently reported suggestion was about speaking; a speaking course in the English preparatory program (22.22%). One student explained it with the following words: “In the English preparatory program,

there can be a speaking course to improve speaking. It can be a general English course, and it does not need to be in line with the content of the undergraduate program I study” (Individual Interview, Participant 3). In addition, a speaking course in the undergraduate program (12.96%) was also among the suggestions as exemplified by one of the students: “If there was a specific speaking course where we can do presentations, or make discussions about topics of our field in the undergraduate program, that would improve our speaking to a great extent” (Individual Interview, Participant 23). The comments indicated that there is a need to support speaking as a foreign language skill within the university education. As a result, as suggested by students, it could be in the English preparatory program and/or in the undergraduate program, or in the form of extra-curricular speaking activities (7.40%). In addition, suggestions indicated support for terminology especially in the undergraduate program (18.51%) as explained by one of the students: “If we have a separate course allocated for departmental terminology in the first year of the undergraduate program that would make our learning process easier throughout the whole undergraduate program” (Individual Interview, Participant 11). Lastly, an important suggestion was about an orientation course in the undergraduate program (11.11%). One student explained it with the following words: “If there was a course where we learn how to read an article about our field, or how to write a paper especially in the first year, I would definitely attend it” (Individual Interview, Participant 35). As a result, it can be understood from all of these comments that support for speaking, terminology, and academic skills is very crucial to make the EMI process more beneficial for students, and if they are planned to be offered especially in the first year of the undergraduate program, this would help the students even more.

#### 4.3.2 Analysis of the focus group interview

In this part, analysis of the focus group interview will be presented in line with the third research question regarding students' further perceptions of EMI in terms of developmental aspects during education and after graduation. However, before presenting these findings, findings regarding challenges experienced during the practicum process by students will be displayed.

##### 4.3.2.1 Challenges experienced during practicum

First of all, as for some of the students' practice teaching experience in some schools where the medium of instruction is Turkish, students stated that in their university, courses are instructed via EMI; however, in students' practice teaching experience, they can be assigned to schools where the medium of instruction is Turkish, and there can be some challenges associated with this situation as reported by students which are given in Table 34 below:

Table 34. Challenges Related with Different Mediums of Instruction during Practicum – Focus Group

Challenges
Preparing multiple lesson plans (in L1 and in English)
Finding Turkish terminological equivalents of the English terms
Lack of practice teaching experience in English

As it is seen in Table 34, when the medium of instruction at the university, and the medium of instruction in the schools where students do their practicum are different, there can be some challenges as reported by students such as preparing multiple lesson plans (in L1 and in English), finding Turkish terminological equivalents of the English terms, and lack of practice teaching experience in English, in other words, in

the language the students are taught with in their undergraduate programs. The challenges are exemplified by the students with the following words:

During practicum, if we teach at a Turkish medium school, we prepare two lesson plans; one for the university which is in English, the other for the school which is in Turkish. In addition, when I do not teach with EMI, I do not feel as though I fully apply what I learn at university. (Focus Group Interview, Participant 1)

Another student further explained it with the following words: “During practicum, I was teaching in a Turkish medium school. So, I could not use English while teaching, but I would really want to challenge myself to teach via EMI if I had the chance” (Focus Group Interview, Participant 3). The comments displayed that since all of the students cannot do their practice teaching in EMI schools, they tend to experience some challenges such as preparing multiple lesson plans in two languages; English and Turkish. However, there is something more important than that which is students’ desire to experience teaching with EMI, in other words, to reflect what they learn at university in their professional lives, and in that sense, practice teaching can be considered to be the initial step for that.

#### 4.3.2.2 Effects of EMI in terms of developmental aspects

The effects of EMI in terms of the developmental aspects will be presented in the following order; foreign language, academic, professional and personal. As for the effects of EMI on students’ foreign language development, students in the focus group also reported that EMI contributes to their foreign language development positively which is displayed in Table 35 below:

Table 35. Effects of EMI on Foreign Language Development – Focus Group

Effects on foreign language development	N	%
Positive	5	100

As it is seen in Table 35, all of the students in the focus group (100%) reported that EMI contributes to their English language development in a positive way.

As a result, all of the participants hold positive perceptions in terms of the effect of EMI on their foreign language development. They also state that their foreign language proficiency improves in terms of all language skills, but the most improvement occurs in the areas of listening, pronunciation, and reading.

As a result, student explained the positive effects of EMI on their foreign language (English) development with the following words: “Our English definitely improves since we are taught with EMI. However, the biggest improvement occurs in the areas of listening and pronunciation” (Focus Group Interview, Participant 4). Another student also explained foreign language development with the following words: “I believe that in addition to listening, our reading develops as well since we use these skills often during our undergraduate studies” (Focus Group Interview, Participant 5). The comments displayed that EMI has positive effects of students on students’ foreign language development (English), but most improvement can be said to be in the skills students often use in their departments such as listening, reading and pronunciation. Moreover, they also add that with EMI, since their English improves, it becomes easier to get high scores from the international English language proficiency tests which could be required while applying for graduate programs in Turkey and abroad.

As for the effects of EMI on students’ academic development, all of the participants hold positive perceptions regarding the effects of EMI on their academic development, and students put forward their reasons for that which are displayed in Table 36 below:

Table 36. Effects of EMI on Academic Development – Focus Group

Effects on academic development
Possessing field terminology and knowledge in two languages (English and Turkish)
Educational opportunities abroad in graduate level (M.A., PhD)
Accessing all resources worldwide
Accessing resources that are not translated into Turkish
Gaining knowledge about international education systems

As it is seen in Table 36, students listed various reasons regarding positive effects of EMI on their academic development such as possessing field terminology and knowledge in two languages (English and Turkish), educational opportunities abroad in graduate level (M.A., PhD), accessing all resources worldwide, accessing resources that are not translated into Turkish, and gaining knowledge about international education systems. One of the students explained these positive effects of EMI on their academic development with the following words: “We possess the knowledge about our field in two languages; English and Turkish” (Focus Group Interview, Participant 2). Another student also talked about the positive effects as follows: “Since we are educated with EMI, it becomes easier to continue graduate studies abroad” (Focus Group Interview, Participant 1). Another student exemplified it with the following words:

We can access to various resources due to our proficiency in English, and with the sources we use in the undergraduate program, we were able to learn what is done in our field in the world. In that sense, the education we get is like an international one. (Focus Group Interview, Participant 2)

The comments indicated that being taught with EMI puts students at an advantageous position in various areas; when they are applying to graduates programs abroad or in their country, and when accessing various educational resources which are published in English and which give students the chance to acquire information about current developments and implementations regarding their field. In addition, possessing the

knowledge of their field in English and in L1 also enables students to teach or explain their field in two languages.

As for the effects of EMI on students' professional development; all of the participants hold positive perceptions regarding the effects of EMI on their professional development, and students put forward several reasons for that which are displayed in Table 37 below:

Table 37. Effects of EMI on Professional Development – Focus Group

Effects on professional development
Job opportunities in EMI schools in Turkey
Job opportunities in TMI schools in Turkey
Job opportunities at universities in Turkey and abroad

As it is seen in Table 37, students listed various positive effects of EMI on their professional development such as job opportunities in EMI schools in Turkey, job opportunities in Turkish medium instruction schools in Turkey, and job opportunities at universities in Turkey and abroad.

As a result, it is seen that the participants hold positive perceptions regarding the effects of EMI on their professional development. One student explained it with the following words: “If we are planning a career abroad, being educated with EMI makes it more possible” (Focus Group Interview, Participant 2). Another student also exemplified the positive effects with the following words: “In terms of career prospects, we are presented with more opportunities. For instance, we can work at EMI schools, and we can also work at Turkish medium schools” (Focus Group Interview, Participant 5). The comments displayed that being taught with EMI provides students with various job opportunities abroad or in their country.

Moreover, even though some students will not need to use English in their work

place, they believe that they can still make use of their knowledge of English for professional development as explained by one of the students: “After graduation, if I work at a Turkish medium school, I will teach in Turkish, but since I am instructed with EMI, I can use English resources while preparing my lessons” (Focus Group Interview, Participant 4). However, the only challenge that students mention about EMI regarding professional development is that after graduation, some students are thinking of attending the national exams to be appointed to state schools in Turkey, and in those exams, due to terminological differences between English and Turkish, students think that they may experience difficulty.

As for the effects of EMI on students’ personal development; all of the participants hold positive perceptions regarding the effects of EMI on their personal development, and they put forward various reasons which are displayed in Table 38 below:

Table 38. Effects of EMI on Personal Development – Focus Group

Effects on personal development
Gaining the ability to do research in different and various fields
Watching and reading materials without subtitles
Following news from primary sources
Accessing materials that are not translated into Turkish.

As it is seen in Table 38, students put forward various reasons regarding the positive effects of EMI on their personal development such as gaining the ability to do research in different and various fields, watching and reading materials without subtitles, following news from primary sources, and accessing materials that are not translated into Turkish.

As indicated in Table 38, students reported positive effects of EMI on their personal development, and one of the students explained the positive effects of EMI on their personal developments with the following words: “I can research something not only in my field, but also out of the field I study, and I can easily understand the content presented in English” (Focus Group Interview, Participant 5). Another student also exemplified the positive effects with the following words: “I can watch documentaries which do not have Turkish subtitles, and I can understand them which is a great advantage” (Focus Group Interview, Participant 1). In addition, another student also commented on the benefits with the following words: “We can learn the latest developments in any field from primary sources” (Focus Group Interview, Participant 4). It can be understood from the comments that students view the effects of EMI on their personal development positively because with the knowledge of English, they can have access to information in any field since resources are mostly presented or published in English which is the lingua franca of today.

As a result, similar to the students in the individual interviews, students in the focus group interview also reported that EMI has positive effects on their foreign language, academic, professional and personal development.

## CHAPTER 5

### DISCUSSION

This chapter presents the discussion of the findings reported in the results chapter based on analyses of individual interviews, the focus group interview, background questionnaire, and document analyses. Accordingly, discussion will be made first by evaluating the results of the individual interviews, and then synthesizing these results with the findings of the focus group interview. As a result, discussion will be made based on students' perceptions regarding official policies and EMI implementations in their university. In addition, students' perceptions of EMI in their content courses in terms of language, content and classroom pedagogy will be further discussed under the heading of components of EMI such as use of English, foreign language skills, learning strategies, classroom pedagogy, and English as medium of instruction. Lastly, discussion will be made based on students' perceptions regarding the effects of EMI during education and after graduation with respect to developmental aspects such as foreign language, academic, professional, and personal development.

#### 5.1 Students' perceptions of official policies and EMI implementations

In the first phase of the study, with the first research question, the aim was to understand whether students were aware and knowledgeable about their university's official policies and EMI implementations. The data were collected and interpreted via document analysis based on official policy documents, a background questionnaire, individual interviews and the focus group interview, and the results

were reported in Chapter 4. Below is the discussion of the results regarding students' perceptions of official policies and EMI implementations in their university.

As for students' perceptions regarding their knowledge and awareness in terms of official policies, all of the students displayed knowledge and awareness in terms of official policies of their university and specifically EMI policies. Students talked about the existence and application of various policies such as the ones explained in the official regulations of the university. Accordingly, all of the students talked about the application of the policy called 100% EMI which is about courses' delivery, presentation, and materials being 100% English. Then, not all but most of the students displayed knowledge and awareness in terms of various other policies such as the policies of taking compulsory advanced English courses for students passing with C level from the university's English proficiency test, and taking compulsory second foreign language courses for some departments. In addition, all of the students showed knowledge and awareness regarding English language proficiency criteria of their university by naming at least one of the international English proficiency tests accepted by their university in addition to naming English proficiency test of their university. As a result, in this study, the undergraduate students were found to be quite aware and knowledgeable in terms of their university's official policies. Moreover, it can be stated that for some students, this awareness related to official policies specifically EMI policies had already existed even before students were admitted to the university. In other words, the university's 100% EMI policy was the reason why some students preferred to study in this university. As a result, the awareness related to official policies can be said to exist within the minds of some students even in high school years, and this can be an important factor when choosing the type of university students wish to study.

However, regarding the implementation of some policies, some problems and challenges can be said to exist. First of all, regarding the existence of a year-long English preparatory program, there can be some challenges and therefore a need for revision of the program in terms of some aspects. First of all, there can be challenges for students who cannot pass the English proficiency test of the university after studying and completing the English preparatory program. If students complete the English preparatory program, but fail the test, they are not allowed to attend the courses in the English preparatory program any more. As a result, they are to study by themselves or attend private courses where they are to pay. While studying on their own, the only support students can get is about writing from the writing center of their university as mentioned by the students. As a result, students want to be supported in terms of other foreign language skills such as reading and listening, and since they cannot continue to attend the class in the English preparatory program of their university, they suggested that they could be offered some support at least via online materials. However, it could be better if they are given the right to attend the English preparatory program for one more year. In addition, if students have problems about English language proficiency, they are expected to solve them in the English preparatory programs of universities, and if students cannot prove their proficiency in English, they either continue to study at the same university if there is the same program offered with Turkish medium instruction, or if there is not such a program, then they are transferred to another university for the same program but with Turkish medium instruction. Being taught with Turkish medium instruction can also be regarded as a beneficial experience, but for the ones who wish to continue to be taught with EMI, they are to prove English language proficiency. As a result, it is necessary to offer more foreign language support for the students in order to pass the

English proficiency test and start their departments. However, another issue comes foreground in the sense that it can be too late for students to solve their foreign language proficiency problems at this stage. As a result, it might be better if these foreign language proficiency-related problems are handled and solved in advance during students' previous education starting from K-12 education.

As for students' perceptions regarding EMI implementations, in other words, the practices that are not written in the official regulations, but mostly present themselves during the application of EMI, it can be stated that students also display knowledge and awareness regarding the EMI implementations. They listed various implementations that they come across during their courses either applied by their instructors or by the students themselves such as lecturers' short code switching to L1 to explain a crucial or an unclear part, students L1 use when they cannot explain something if lecturers allow, and lecturers' providing students with post course activities such as problem solving sessions. As a result, almost one third of the students (32.89%) talked about the implementation regarding some lecturers' short code switching to L1 to explain a crucial or an unclear part. Accordingly, the students generally perceive the use of L1 as a beneficial tool that facilitates comprehension and learning. Therefore, it can be stated that limited L1 use can facilitate comprehension in complicated parts. In addition, students also talked about the existence of various other EMI implementations regarding L1 use as such that students may also use L1 when they cannot explain something in English if their lecturers allow, or some lecturers may tell L1 equivalents of some very crucial terms. As a result, students are aware of EMI implementations which take place during the EMI process, and it is seen that these implementations are generally about L1 use which may indicate that the implementations are generally implemented to support

comprehension process with the integration of limited native language use. As a result, students hold positive perceptions about the EMI implementations since they help students to understand content more. However, there can be some challenges regarding some implementations regarding some policies. For instance, the implementation of English only policy very strictly by some lecturers can be considered to create some challenges. It can be stated that when lecturers use only English, and also expect students to use only English, this may create some problems. As mentioned in the results part, when some lecturers use limited L1 to explain a crucial or a complicated part, students generally find this very beneficial to increase their comprehension and also their motivation because during the courses students may lose their attention while listening to their lecturers, and at those moments, even a short switch to L1 in the form of a little explanation, summary, or the L1 equivalent of a term may be very helpful for students. Moreover, students also stated that at times they may not be able to express themselves as much as they want when asking a question or when making a comment. In these moments, if their lecturers do not let students express themselves in L1 after they try expressing themselves in English, then students may not be able to comprehend that part since they cannot ask their questions, and they may also give up listening as well. In addition to these, some students who think of taking the national exams after graduation may also want to learn the L1 equivalents of the terms to understand the questions in these exams because students also talked about the fact that terms in English and Turkish can be quite different, and it may be a big challenge to understand the questions including terms in L1 in these exams. As a result, application of English only policy very strictly may lead to some problems as

explained above. Therefore, it might be good to have some room for L1 if there are not any international students in the class.

Similar to the individual interviews, participants in the focus group also displayed knowledge and awareness in terms of official policies, and EMI implementations.

They generally hold positive perceptions regarding these policies. However, in terms of one of the official policies, which is about a limit in taking the English proficiency test of the university, students expressed similar concerns with the individual interview participants about what they experience if they cannot pass the English proficiency test of the university. Accordingly, students are to prove English language proficiency in order to start studying in their departments, and there is a limit in taking the English proficiency test. Therefore, they talked about the stress and other problems they had until they passed the proficiency test, and they emphasized the fact that if they cannot pass this test, they cannot start studying in their departments, and they may have to study at another university. As a result, although EMI is viewed positively by students, the policy of a limit in taking the English proficiency test of the university, and the process they go through until they prove their English language proficiency either via their university's English proficiency test, or via other international English proficiency tests accepted by their university may create stress, and other problems because students cannot continue to study at their EMI university unless they prove proficiency in English language. As a result, it is important to equip students with adequate foreign language background even before admitting them to these programs since university phase can be too late to overcome these foreign language proficiency problems. In accordance with this, some students (54.28%) in the individual interviews also talked about the existence of the facilities offered by their university to support English language development

so that students can understand content courses more such as advanced English courses in the first year of the undergraduate program, and the writing center of the university. However, even though there were such facilities, students stated that these facilities did not contribute to their English language development at the same level. In that sense, student generally reported finding the writing center of their university quite beneficial. However, they also stated that the advanced English courses were beneficial to a certain extent since they were not very related with the content of the field courses. Therefore, students stated that if the topics and academic skills were more related with the topics and academic skills required in their undergraduate courses, then these advanced English courses would be more beneficial for them. In that sense, some students suggested a revision in terms of the content of these advanced English courses. In addition, students also suggested some revision in terms of the English preparatory program in terms of integrating courses including foreign language skills that are more in line with the skills students are to use in their content courses such as making a presentation or a discussion under a speaking course, or how to read an article. As a result, some students (45.72%) talked about the absence of such facilities. Therefore, students were further asked to talk about the facilities they wish to be offered by their university. An important number of the students put forward the need for a speaking course in the undergraduate program, and speaking course in the English preparatory program. Therefore, the need to support speaking skill is considered to be crucial in the sense that students need to use this skill effectively during content courses in order to ask a question, or make a comment.

In addition, regarding speaking, students put forward further suggestions; they stated that a speaking section should be added into the university's English proficiency test,

and the university should offer extra-curricular speaking activities under a speaking club or a center. As it is seen, most of the suggestions regarding facilities are related with speaking. This can also be related with the fact that when asked, majority of the students (75%) evaluated their speaking as the foreign language skill that they experience most difficulty during EMI courses. As a result, speaking skill should be emphasized more not only within the curriculum of the English preparatory program but also in the undergraduate program so that students can improve speaking skill in English to express themselves better during the courses when asking a question, making a comment, or making a presentation. By this way, the transition process from the English preparatory program to the departments may become easier for students.

In addition, students also outlined the need for a terminology course in the undergraduate program. Since possessing field terminology both in English and in L1 is a crucial element in terms of understanding content, and this need should be addressed within the undergraduate program so that field terms do not act like a linguistic barrier during courses and in the national exams after graduation.

Moreover, students also emphasized the need for a departmental warm up course which involves content and skills required in undergraduate programs because when students start their department, they are not familiar with the topics and terminology of their program, and this situation creates difficulty for students. As a result, it is clear that academic skills, foreign language skills, and terminology should be supported in EMI programs because these factors can be considered to be the sources of comprehension problems. Similarly, in the study by Tatzl (2011) students regarded vocabulary and technical terminology as a major challenge during EMI. Also, in the study by Kırkgöz (2009b) vocabulary was regarded as a common source

of difficulty that influences students' speaking fluency, and hindering reading comprehension.

In line with these, similar to the individual interviews, participants in the focus group interview also put forward similar concerns regarding the terminological difficulty. They talked about the fact that they may experience difficulty related to terminology when taking the national exams to be appointed to state schools as teachers after graduation. As a result, in EMI universities, the medium of instruction is English, but the national exams are in Turkish, and the terminological equivalents of the terms can be very different from the English versions. In that situation, when students do not know the terms in Turkish, they either cannot answer the questions, or they may experience difficulty while answering them. Similarly, in the study by Huang and Curle (2021) findings indicated that for some participants who plan to continue their postgraduate studies in their country, in other words, in China, students had some difficulty related to the content knowledge element of the United National Graduate Entrance Examination since with EMI, students were taught and tested in English, but not in Chinese. Moreover, the difficulty related to terminology is not only considered as a problem for students after graduation, but it is also a problem for students especially in the first year of the undergraduate program. Since there is no department specific instruction in terms of vocabulary or reading in the English preparatory program, students experience difficulty in understanding content when they start studying in their departments because they do not possess the knowledge of terms about their fields. As a result, these concerns regarding terminology are voiced both in the individual interviews and in the focus group interview, and these concerns are later reflected in the suggestions part as a need for a terminology course either in their English preparatory program or in the first year of the undergraduate

program. As a result, there can be a need for more focus on terminology either with a single course allocated for this purpose or integration of field terminology as part of a course. Such a course may not only facilitate comprehension during education but it can also help students answer questions in the national exams after graduation and when using these terms in their professional lives.

## 5.2 Students' perceptions of EMI in their content courses in terms of language, content, classroom pedagogy

In the second phase of the study, with the second research question, the aim was to understand students' perceptions of EMI in their content courses in terms of language, content, and classroom pedagogy. The data were collected based on individual and focus group interviews, and the results were reported in Chapter 4.

Below is the discussion of the results regarding students' perceptions of EMI in their content courses in terms of language, content and classroom pedagogy which were further discussed under the heading of components of EMI such as use of English, foreign language skills, learning strategies, classroom pedagogy, English as a medium.

### 5.2.1 Use of English

As for use of English by lecturers and students, when students were asked to evaluate their lecturers' use of English, and their own English, majority of the students (91.42%) reported that their lecturers' use of English was sufficient. Similarly, in various studies, students also have a favorable opinion of their instructors' English ability. For instance, in the study by Yeh (2014) students had a favorable opinion of the instructor's English ability. Similarly, in the study by Kim, Kweon, and Kim

(2017) more students evaluated the instructor's English ability positively. Lastly, in the study by Rowland & Murray (2020) students also considered language proficiency of their lecturers sufficient.

As for students' self-evaluation regarding their own English during the EMI process, majority of the students (94.28%) evaluated their English language proficiency as sufficient, but they also stated that they need to improve foreign language skills in which they experience difficulty. Among those language skills, speaking (75%) was reported as the skill in which students need to improve themselves most.

Accordingly, speaking can be a major problem in terms of comprehending the courses because during the lessons in order to understand the content, students are to ask and/or answer questions, they need to make comments. Therefore, it is crucial for students to overcome their problems related to expressing themselves in English.

The other foreign language skills such as reading, listening, writing and vocabulary, all together make up only 25% of the responses. In line with this, in the study by Rowland and Murray (2020) students regarded speaking as their weakest language skill. Similarly, in the study by Bolton, Botha, and Bacon-Shone (2017) the findings from undergraduate and postgraduate students in Singapore revealed that the biggest difficulty was experienced by students with productive language skills, namely speaking and writing academic English. In the study by Kim (2014) in which Korean engineering professors' views were investigated, it was also found that lecturers regarded listening and speaking as skills that undergraduate students need to improve most, and they regarded reading as the least problematic skill.

However, some students also emphasized some important points regarding the reading skill in the English preparatory program. For instance, they stated that some reading texts in the reading courses during the English preparatory program were

about psychology or sociology which were similar to their departmental readings in their undergraduate program. As a result, the type of texts, students read or analyze in the English preparatory program can be beneficial for students to familiarize them with their field topics or readings in the undergraduate programs. Therefore, in the English preparatory program, if the topical diversity within the reading materials are increased, then the familiarity students gain in terms of the departmental content may make the transition process from the English preparatory program to the departments rather easy. Accordingly, the students stated that it was the first year of their undergraduate studies that they experience the most difficulty about how to deal with course requirements like reading articles or writing papers. Therefore, to make this transition process from the English preparatory program to the undergraduate programs rather easy, some students even highlighted the need for a warm-up course about how to deal with EMI, how to do the readings, or write a paper which was also outlined in the previous sections.

### 5.2.2 Foreign language skills

It is seen that among all foreign language skills, speaking was found to create the biggest difficulty for students. Therefore, it is important to reexamine the speaking skill. Accordingly, it is clear that more place should be allocated for it starting from the English preparatory program. Some students stated that speaking problem starts from the English preparatory program because although speaking is done during the courses, there is not a specific or a separate speaking course in the program. Speaking is like an element within the courses of reading or listening in the English preparatory program. Therefore, students outline the need for more focus on speaking especially within the preparatory program. In addition, students also think

that speaking should be tested in the English proficiency test of the university such as writing, listening, or reading. As a result, it is clear that more focus should be given to speaking starting from the English preparatory program so that students may have less difficulty in expressing themselves during the courses in their departments.

In addition, students also stated that when extra-curricular speaking activities such as a speaking center or a club within the university are encouraged or established, then this would be very helpful for students to improve their speaking. In addition, some students also talked about the positive effects of Erasmus experience on their speaking and their academic development since it can be a good opportunity to speak English and to improve it. However, it is important to underline that speaking problem may not only stem from linguistic factors but also from affective factors which can be considered to affect this process. For instance, when lecturers encourage and motivate students to speak English, students reported that they try harder to speak and express themselves in English. In that sense, lecturers' approach gains importance. In that sense, motivation and encouragement as affective factors play a crucial role in encouraging students to speak. However, even if lecturers try to encourage students to speak English during the classes, affective factors such as anxiety and crowded classes act like a barrier for students while they are trying to express themselves in English in the classrooms. Accordingly, some students reported that they avoided talking especially in crowded classes in order not to break the flow of the lesson since they think that it will take too much time for them to ask a question. As a result, when students cannot express themselves in English, they either give up and do not ask their question, or they tend to ask it in Turkish if the lecturers allow. Therefore, speaking as a skill should be taken into consideration more, and more should be done for students who experience problems with this skill

because problems about speaking skill in English is an obstacle for attending class discussions and accordingly for better comprehension. In the study by Ölçü and Eröz-Tuğa (2013) both lecturers from EMI universities and Turkish medium universities stated that English medium instruction affects learners' attention, creativity, and participation negatively. Students in this study also voiced similar concerns regarding less participation due to their problems about speaking skill. Similarly, in the study by Kırkgöz (2009b) findings displayed that most students reported their effectiveness in class discussions were low; in addition, students' comments revealed that lack of practice in speaking hinders students' class participation and interaction with lecturers. Moreover, the findings also emphasized the inadequacy of a skills-based EAP program to prepare students effectively for the academic requirements in their undergraduate studies. Accordingly, similar findings were attained in this study in the sense that the English preparatory program can be revised in terms of some aspects such as speaking skill. As a result, in this study, the participants in the focus group also emphasized the need to improve their speaking skill. First of all, all of the participants in the focus group regarded their lecturers' English language use as sufficient. Students also regarded their own English as sufficient; however, they put forward that speaking is the skill that they need to improve most especially in terms of fluency and colloquial English. As a result, all of the participants reported experiencing difficulty related to speaking skill in English. They also put forward several reasons and solutions about the issue. The reasons they put forward about the causes of the speaking problem was similar to the ones reported in the individual interviews as such that in the preparatory program, there is not a separate speaking course such as reading or writing courses. Secondly, speaking is not tested in the English proficiency test of the university. Therefore,

students do not focus on this skill as much as the other foreign language skills.

Thirdly, some students have anxiety about speaking fluently and accurately. As a result, they put forward some suggestions to improve their speaking problem. These suggestions were integrating a speaking course into the English preparatory program and/or the undergraduate program the content of which may consist of making presentations and discussions. Moreover, students also suggested inserting a speaking part in the English proficiency test of the university, and establishing a speaking club.

As for students' perceptions regarding the relation between class participation and EMI, students in the focus group also reported that their class participation is affected in a negative way. They put forward that problems about speaking in English can be a reason for the decrease in their class participation, and some of them added that they would participate more if the instruction was in L1 (Turkish). As a result, if they can solve this problem of speaking, students think that they can participate in class discussions more, be more successful in tasks like asking, and answering questions, making presentations, and therefore they can comprehend the courses more. However, students in both individual and focus group interviews reported that EMI does not affect their comprehension negatively although it presents some challenges during the process.

In accordance with these, as for the effect EMI on content comprehension, there are different results. For instance, in some studies (Yeh, 2014; Li, 2020; Rowland & Murray, 2020) negative effects of EMI on content comprehension were not reported similar to this study. For instance, in the study by Yeh (2014) students generally regarded their learning in EMI courses as satisfactory. In the study by Li (2020) students stated that with EMI, they did not consider that English language was a

hindrance to their learning process. In addition, in the study by Rowland and Murray (2020) findings indicated that students in a master's program at an Italian university reported that EMI did not reduce their ability to comprehend the course content. Lastly, the results of the study by Lin and Lei (2021) revealed that there were no significant differences between the English and the Chinese taught students in terms of the academic outcomes. As a result, negative effects of foreign language-medium instruction on content learning were not reported. However, in some studies (Sert, 2008; Cho, 2012; Arkin, 2013); negative effects of FLMI on comprehension were reported. In the study by Sert (2008) the aim was to identify the effectiveness of the use of English in terms of the acquisition of both language skills and the academic content. There were three different approaches to language instruction which were EMI, English aided instruction, and Turkish medium instruction. The findings indicated that EMI was found to be the most effective instruction among the three in terms of language skills development. However, it was also found that EMI fails to provide the academic content effectively. In that sense, different from Sert's study (2008), most of the students did not report major problems regarding the effectiveness of EMI on comprehending the course content in this study. However, negative effects on comprehension were also reported in some other studies. For example, in the study by Chang (2010) results revealed that Taiwanese students did not consider that they had a high level of comprehension during EMI courses. In addition, the findings of a study by Cho (2012) revealed that EMI policy implemented at a science and engineering university in Korea was found to be ineffective because of the limited English proficiency of lecturers and students. Similarly, in the study by Arkin (2013) the findings showed that disciplinary learning is perceived to be negatively affected because of the limited foreign language skills

of students, and in the study by Huang and Curle (2021) students agreed that with EMI, less content is taught. In addition, in the study by Kılıçkaya (2006) instructors agreed that instruction in Turkish, in other words, in L1 can be better for student learning. Similarly, in the study by Kim, Kweon and Kim (2017) more students felt insufficient regarding their English ability, and most of the students stated that they preferred Korean-medium instruction over EMI. As a result, similar to this study, there are positive results regarding the effects of EMI on comprehension. However, there are also studies which put forward that EMI affects content comprehension in a negative way.

### 5.2.3 Learning strategies

#### Foreign language skills and learning strategies

Before moving onto students' experience with each foreign language skill and use of learning strategies in detail, first students' use of learning strategies when they do not understand the content during and after the courses will be presented generally. Even though 100% EMI policy is perceived positively by the participants, some students also stated that during courses, a general comprehension can be achieved related to the content; however, hundred percent comprehension or internalization of the subject matter can be hard to achieve at times. As a result, there can be comprehension problems although they are not major ones, and in order to overcome comprehension problems, or to understand the content more, students use some strategies both during the courses and after the courses. As for learning strategies that students employ when they do not understand the content in the classroom during the courses, first of all, doing nothing (48.78%) was the most frequently reported strategy followed by asking a friend (20%), and asking lecturers (14.63%). In that

sense, peer help or peer feedback was identified as the method that students often refer to. This can be due to the fact that student may feel themselves more comfortable when asking something to their friends, or it can be more practical to ask something to a friend sitting next to you, and they also have chance to ask their questions in their mother tongue when they are talking with their friends.

Accordingly, students can make use of various learning strategies to overcome comprehension problems, and asking peers/friends is a crucial strategy for students which they employ often to overcome their comprehension problems not only during the courses but also after the courses. In addition to these, there are other strategies students use such as using the internet and translation applications to increase their comprehension during the courses.

However, when students try to overcome their comprehension problems after courses, the strategies they use may slightly differ. The most frequently employed strategy as reported by students was studying from the course materials (28%), followed by searching content from the internet (20%), and discussing content with peers (17.33%). As can be seen from these responses, after courses when students do not understand something about the course, they generally rely on their own sources by self-studying with the course materials, or searching content from the internet. In addition, the strategy of peer discussion can also be regarded as an important strategy since students often make use of it to overcome their comprehension problems.

Similarly, in the study by Kırkgöz (2013) it was found that most of the students constructed disciplinary knowledge in groups with their friends. For instance, they share topics, each student explains one subject, they complement the knowledge of one another. By this way, they learn from each other. Similarly, in the study by Kagwesage (2013) students made use of mentoring and peer support among

themselves. For instance, students who are more knowledgeable about a subject can explain it to their friends in their L1 in the absence of a lecturer.

As a result, in this study, and in various other studies; asking peers, peer discussion and peer feedback were among the most frequently employed strategies by students to increase content comprehension.

Other methods students employ are as follows respectively: studying from L1 sources and using applications for translation (each; 12%), and asking lecturers questions at the end of the lesson or in their office hours (10.66%). Among these strategies, the least frequently employed one is asking questions to lecturers after class. This finding may suggest that when students do not understand something they may want to use their mother language to ask questions. Therefore, this might be the reason why some students do not ask their questions to the lecturers during the lessons, but after class using L1. Accordingly, in the study by Kırkgöz (2013) some students reported searching disciplinary knowledge from L1 sources to attain some introductory knowledge. In line with this, similar strategies were reported to be employed by some of the students in this study as well. They stated that they referred to L1 sources if they do not understand the sources in English. In addition, in terms of other strategies students in this study employ, searching content from the internet to overcome comprehension problems, and using applications for translation were among the learning strategies students use. As a result, students may use multiple learning strategies for the same task to overcome their comprehension problems. Similarly, in the study by Kagwesage (2013) in addition to various strategies students use, using dictionary for the words they do not know, and using the internet for finding additional instructional materials were among the strategies students

employed. In line with this, in the study by Belhiah and Elhami (2015) students' frequent use of dictionaries for translation was reported.

Accordingly, students use a wide variety of strategies at the same time when they do not understand the content delivered with a foreign language-medium, and these strategies can be said to be similar or different depending on whether they are in classroom or out of the classroom.

As a result, it is seen that students may have some comprehension problems; however, it is seen that in most cases, students try to find solutions to their comprehension problems with their own strategies. As for these strategies, similar to the individual interview findings, students in the focus group interview were found to solve their comprehension problems mostly by discussing with peers, studying from L1 sources, watching videos from the internet about the course content, and attending problem solving sessions provided by their departments. In addition, when the sources of these comprehension problems are questioned, the focus group participants put forward several reasons such as lecturers' methodology, students' foreign language proficiency, the difficulty of the academic language, and the difficulty of the content itself, but they think the most prominent reason is problems about their foreign language proficiency and their foreign language skills especially speaking.

Similarly, in the study by Yeh (2014) it was found that students make use of various learning strategies to compensate for comprehension problems such as concentrating in class, taking notes during the courses, spending more time reviewing texts; moreover, asking help from peers, forming study groups, and raising questions in class were among the other strategies employed by students.

In accordance with these, in terms of comprehension, the focus group participants also talked about the effects of EMI on comprehending the verbal and the non-verbal courses. Students stated differences exist in terms of understanding these courses. As a result, majority of the participants in the focus group reported that understanding content in non-verbal courses like Mathematics is more difficult compared to the verbal courses. They listed several reasons as such that in non-verbal courses, the content itself could be rather difficult, even a single word can change the solution or the method. On the contrary, students stated that verbal courses can be more discussion oriented; therefore, not understanding a single word does not lead to big comprehension problems, and the content can be achieved from the context through discussion. Accordingly, participants in the focus group also put forward that the effort made to understand the non-verbal courses can be more, and in line with this, some participants reported more reliance on L1 sources to understand the content in non-verbal courses compared to verbal ones.

So far, students' comprehension problems and the learning strategies to overcome these problems are explained generally without referring to each foreign language skill and learning strategy use. However, in the following part, the challenges students experience regarding each foreign language skill, and the learning strategies they use to overcome the challenges will be discussed.

First of all, when students were asked as to whether they experience any difficulty while reading EMI materials, 37.14% of the students reported experiencing difficulty from time to time, and 20% of them reported experiencing difficulty. As a result, it can be concluded that more than half of the students can be said to experience difficulty with reading skill at varying degrees. In addition, when they are asked what they do to overcome difficulties related with reading, the most frequently employed

strategy was using online dictionary (46.51%), followed by using translation applications, discussing with peers, searching the internet for similar sources in English or in L1 (each, 7%). It can be stated that in reading; vocabulary may be one source of difficulty. In that sense, it may explain the use of online dictionaries as the most frequently employed strategy in reading with 46.51%. In line with this, when students are asked to report what they do when they come across a vocabulary item they do not know, for instance, when reading course materials, the students can be said to employ mainly two strategies which were using online dictionaries (62.50%) and guessing from the context (21.42%). These strategies do not differ in and out of the lesson.

As a result, in order to overcome reading difficulties, similar to difficulties with vocabulary, the most frequently used strategy by students is using online dictionary. Accordingly, resorting online sources within the age of technology can be said to indispensable. In addition, another widely used strategy as mentioned earlier can be said to be peer discussion. Students were found to make use of peer discussion within their EMI process often while reading or discussing the subject matter.

As for listening skill, majority of the students (74.28%) reported experiencing difficulty from time to time, and when they are asked what they do to overcome the difficulties, they reported using the following strategies: reviewing the subject after class from course materials or the internet (44.77%), followed by discussing the content with peers (28.35%) and asking lecturers (26.86%). In terms of listening, students can be said to employ various and multiple strategies. In line with this, peer discussion plays a significant role in overcoming comprehension difficulties not only in reading but also in listening.

In terms of writing skill, majority of the students (60%) reported that they did not experience any difficulty related to writing when they write answers in the exams, write a paper, or when they take notes during the lessons. Similar to this finding, students in the study by Belhiah and Elhami (2015) stated that English language does not present an obstacle in terms of understanding examination instructions or answering questions. Similarly, in the study by Tatzl (2011) students' perceptions regarding no challenges in examination situations received the highest count. In the study by Rowland and Murray (2020) majority of the students also did not report any difficulty during the examination process.

However, there were also few students who reported experiencing difficulty from time to time (34.28%), and who reported experiencing difficulty (5.71%) in terms of writing. When the strategies they used were asked, they reported using several strategies such as paraphrasing, writing the unknown word in L1 in quotation, and taking notes in L1.

As it is seen, limited L1 use for better comprehension or expression in terms of writing or other foreign language skills can be said to be indispensable since the medium that the instruction is not delivered with students' mother language.

Therefore, for better comprehension, there can be a clear need for L1 use even if it used at a limited sense either by lecturers or students themselves.

Lastly, as for speaking skill which has also been discussed from multiple angles throughout this study, it can be stated it is the skill that majority of the students (72.28%) reported experiencing difficulty, and when the students were asked about the things they do when they cannot express themselves fully, the most frequently applied strategy is giving up or avoidance of speaking (44.68%). As mentioned earlier, more should be done to encourage students to talk. This can be realized

initially with the integration of speaking in the form of a speaking course and a speaking exam within the English preparatory program curriculum, and later supporting speaking more within the undergraduate program with further speaking courses, and activities. However, it should be noted that in the undergraduate courses, lecturers' encouragement and motivation is also crucial to help students speak during the classes. Moreover, if students are given permission to express themselves in L1 if they cannot do it in English in that specific moment, students may not give up listening and participating.

In line with this, another strategy employed by some students is that they tend to ask their questions to the lecturers at the end of the class or in office hours, or they tend to discuss these questions with their peers after class due to their speaking problem. As a result, in order for students to comprehend the courses better, their active participation to the courses during the lessons should be ensured because if students cannot make a comment, cannot ask or answer a question, it is hard to expect a sound learning process to take place for them. Therefore, it is clear that a special focus should be given to speaking skill.

#### 5.2.4 Classroom pedagogy

As for the implementations of lecturers regarding classroom pedagogy within EMI, students reported various successful implementations of their lecturers due to which they can comprehend the content courses more. First of all, students mentioned the importance of supporting the instruction with visuals such as pictures, charts and videos (21.42%), this is followed by the successful integration of hands on learning activities such as designing and drawing depending on the nature of the courses (17.85%). In addition to these, group work and discussion activities were also

reported to be beneficial in terms of learning. As a result, these implementations outline the need to support the instruction delivered in a foreign language-medium in multiple ways where visuals are used, and learners' active participation is ensured through discussion or hands-on learning activities.

In accordance with these, while delivering the instruction, the language used by lecturers is also very important. For instance, when lecturers paraphrase what they say, check their students' understanding from time to time through asking, or when they give examples to clarify the points discussed, or when they use L1 in a limited way in the form of a short code switching to L1 to explain a crucial or a complex point, or to provide a mini-summary at the end of the lesson, students reported finding all of these methods of their lecturers about language use very contributing for their learning process. Similar to this study, in the study by Rowland and Murray (2020) findings displayed that lecturers' employed certain strategies to overcome linguistic challenges experienced by their students, some of these strategies were repetition, summarizing, and providing clear slides.

In addition to these, students also reported that some implementations of their lecturers do not yield to successful learning outcomes. For instance, when instructional materials are not supported through additional materials such as visuals (64.28%), then this can be a problem. Another thing is that students expect to have comprehension checks from time to time in the form of lecturers' asking or in the form of quizzes, games, and post-tests. Accordingly, it can be stated that comprehension checks could also facilitate comprehension. In accordance with these, students in the focus group were also asked to reflect on their lecturers' methodology, and they put forward some suggestions so that they thought they could comprehend the courses more, the suggestions were: their lecturers' giving more

examples, solving more sample questions, and supporting the instruction using more visuals. Similarly, in the study by Li (2020) there were suggestions of students in China where EMI was used during the teaching of principles of management, students suggested using videos, and integrating games in line with the course content to stimulate their interest in learning. They also reported that quizzes were beneficial in terms of checking content comprehension.

As for the function of limited L1 use (Turkish) within EMI as an implementation and a strategy, students in both individual and focus group interviews stated that there can be two approaches regarding L1 use by lecturers. Some lecturers, in their courses, prefer to use only English, and some lecturers use English and a limited amount of L1 (Turkish) when they spot that students experience comprehension problems, when they explain a crucial point, when they provide a mini summary at the end of the lesson, or when they explain an L1 equivalent of a culture specific term. As a result, in these situations, when some lecturers prefer to use L1 in a limited way, students find it useful since this increases students' comprehension.

As for the students' limited use of L1 during the courses if lecturers allow, all of the students reported that they use limited amount of L1 if they cannot fully express themselves in English when they ask/answer a question, or make a comment.

Therefore, as reported by students, some lecturers, from time to time, let students express themselves in their mother tongue in order to increase class participation and comprehension. Therefore, L1 use, even in limited way can help students to understand the content, or to express themselves more.

In accordance with L1 use, students also talked about problem solving sessions for some courses such as Mathematics or Physics as extra-curricular activities after lessons. As reported by students, these sessions can be in English or in Turkish. Most

of the participants in the focus group reported that they attended the problem solving sessions in Turkish. Students mostly prefer the problem solving sessions in L1 in order to understand the unclear parts, to understand better and more, to internalize the subject more, and to ask questions about the subject in L1. As a result, it is seen that limited L1 use within EMI instruction is viewed positively and beneficial by students for supporting comprehension. Similarly, in a great number of studies (Chang, 2010; Karakaş, 2016; Rowland & Murray, 2020; Sahan, Galloway & McKinley; 2022) the positive effects of L1 use was reported with reference to its function to facilitate understanding and clarification purposes. In the study by Chang (2010) results indicated that there is L1 use at times of confusion experienced by students regarding the subject, also when students asked for an explanation in L1, and when there is a difficult concept explained. In addition, in the study by Ljosland (2011) a university department in a Norwegian university conducts teaching through the medium of English; however, in addition to English; Norwegian and other languages were also reported to be used in certain circumstances. For instance, it was reported that the lecturers gave the lectures in English, but some code-switching into Norwegian took place during explanations of the terminology. Moreover, in the study by Kim (2011) the findings regarding Korean professors' and students' perceptions for EMI indicated that majority of the professors and students think that some L1 use is a beneficial way of helping students to comprehend the complex content. In addition, Karakaş (2016) investigated the place of mother tongue in EMI programs, the data were based on interviews with EMI lecturers. The findings displayed that more than half of the lecturers are highly supportive of integration of Turkish into EMI course at varying degrees for clarity and comprehensibility of the content, or for explaining something about the Turkish context and culture;

moreover, the lecturers also reported allowing students to use L1 in some situations such as asking questions. In addition, in the study by Kim, Kweon and Kim (2017) students were in favor of L1 use in EMI classes, and they stated that so as to facilitate learning, L1 should be used especially when explaining difficult materials, and when providing a summary at the end of the class. Similarly, in the study by Sahan, Galloway and McKinley (2022) findings indicated that L1 use in EMI courses in Thailand and Vietnam is considered to be a beneficial pedagogical means to support content learning by clarify meaning. Moreover, in the study by Li (2020) although students did not regard English language to be a hindrance to their learning process in their EMI course, all of them suggested that mother tongue use is necessary while explaining some complex issues such as theories or concepts. Lastly, in the study by Rowland and Murray (2020) some students stated that use of L1 at times facilitated their understanding in terms of complicated concepts. In that sense, some lecturers reported using L1 to clarify key concepts, or when they see signs of lack of comprehension by students.

As a result, some code switching and limited L1 use during the courses by both students and some lecturers were reported to be used for increasing comprehension, dealing with complex subjects, or when dealing with some terms in various studies in addition to this study. As a result, in the universities where there is the implementation of 100% EMI policy, there should be some place for L1 use even if it is at a very limited sense. Accordingly, in the study by Baker and Hüttner (2019) multilingual EMI programs in Europe and Asia were compared. The higher education institutes were in the UK, Austria and Thailand. During the lectures in Austria and the UK, there was only English; however, in Thailand in addition to English, use of another language was also seen. For instance, it was reported that

some lecturers use only English, but some lecturers speak Thai when Thai students cannot understand them.

#### 5.2.5 English as a medium of instruction

In this part, English as a medium of instruction is discussed with respect to its use in course materials and during instruction. As for the language of course materials, since the university this study is conducted is an EMI university, the language of course materials as reported by the students is English. Then, students' ideas were further elicited as to what should be the language of course materials if they were to decide for that. Majority of the students (82.85%) agreed that language of the course materials should be English. However, only a few students stated that they should be only Turkish (8.57%), and the other few students stated that some Turkish sources should be used along with the English sources (8.57%).

As mentioned above, majority of the students agreed on the fact that the language of course materials should be as it is, in other words, English, and they put forward several reasons for that. First of all, the biggest reason (30.55%) for their choice was about accessing more and various resources in English since all resources are not translated into Turkish or other languages. Since English is the lingua franca in education, the language of course materials are mostly English and students think that with their knowledge of English, they can search and have access to a great number of resources or research done all around the world. Accordingly, a great number of research are done in the world, but when results are published, the documents are generally published in English since it is the lingua franca in education. As a result, students find themselves advantageous since they can speak English and access to these resources. Moreover, the second reason (27.77%) for

their choice for English is that EMI course materials improve their English. They stated if the instruction was not delivered in English, then they did not need to use English that much. Another important reason (25%) for their preference for English is that students think that English is the lingua franca; therefore, they believe that speaking the lingua franca of today will provide them with various benefits during education and after graduation which will be further discussed in the following section.

As for the reasons of students who think that the language of course materials should be Turkish, it was seen that these students expressed their need to comprehend better and more. This might be due to the fact that students may have different proficiency levels in English, and this may create difficulty for some students in terms of comprehending content courses. Accordingly, some students complete the English preparatory program with different proficiency levels such as A, B, C, and there are also some students who passed the English proficiency test of the university, and started their departments immediately without studying in the English preparatory program. As a result, some students hardly pass the English proficiency test with the minimum accepted passing grades, and these students can be considered to experience comprehension problems in the undergraduate courses. As a result, as reported by some students; in the same classroom, there are students who probably pass the English language proficiency test with A or B level, and they can speak English well, and there are also students who hardly pass the English proficiency test. For instance, when students who are more proficient in English ask a question, or make a comment, they can easily do that as reported by some students. On the other hand, there are some students who hardly express themselves in English may be discouraged to participate since they cannot express themselves as much as the

other students. Therefore, it is clear that more foreign language support should be offered to students who need to improve their English language proficiency in order to comprehend more. As a result, comprehension problems can be the reason for students' preference for Turkish in course materials. In addition, there are also a few students who think that there should be some Turkish sources in addition to the English sources. They put forward two main reasons for that. First of all, in their undergraduate education, they also want to be informed about their country's context. Therefore, they want to have some Turkish sources that give information about the things implemented in their country about their field. Another reason is that students want to learn L1 equivalents of field terms because after graduating from university, some students are thinking about taking the national exams to be appointed to state schools as teachers, and in the national exams, the language of the exams is Turkish, and students need to know the Turkish equivalents of the field terms to answer some of the questions. Actually, this need has also been voiced by some students as the second most needed facility that should be offered by their university which is the need to open a terminology course in the undergraduate program. As a result, it is a need for some students to have some terminological instruction in the form of a separate departmental terminology course, or in the form of some code switching from English to Turkish within the instruction. Therefore, considering these situations, although the language of course elements are English, it might be beneficial to integrate some Turkish sources, and Turkish terminology even if they are used in a limited sense within the EMI instruction.

As for the language of instruction, students' preferences related to the language of the instruction were also questioned. For this question, 65.71% of the students stated that they should be as it is, in other words, in English. In addition, 22.85% of the

students would prefer the language of the instruction to be both English and Turkish as such that language of instruction for some courses could be English, and the language of instruction for some courses could be Turkish, and only 11.42% of the students would prefer it to be Turkish. Accordingly, in the study by Belhiah and Elhami (2015) when students and lecturers were asked in which language they preferred the instruction to be conducted, majority of the students (62%) and the teachers (75%) preferred the bilingual model (English and Arabic), 27% of students and 19% of lecturers preferred English medium instruction; and only a small amount of answers were for Arabic medium instruction (11% of the students, and 6% of the teachers).

As a result, in this study, students put forward several reasons for their preferences for the language of instruction, and some of these reasons were similar to the reasons they put forward for the language of course materials. First of all, the students who think that the language of instruction should be English put forward similar reasons in line with preferring course materials in English because they think that English is the global language to access the world in various fields such as education, and they can also have access to wide range of resources (each; 28.57%). Another reason they put forward was about education and career opportunities in the country or abroad (25%), and the last one was about improving their foreign language.

Moreover, there were also some students who think that there can be some courses instructed in Turkish in addition to the courses instructed in English. The first reason (36.36%) for their preference was about comprehension problems they experience in content courses because some students stated that they have a general understanding of the content, but it can be hard to internalize at times. Another reason (36.36%) was about overcoming difficulties related to delivering the instruction in L1 while

working at schools where the medium of instruction is Turkish. This issue was previously voiced by some other students. Especially in terms of field terminology, students may not know the terminological equivalents or expressions of some terms in Turkish since they received the instruction in English at university, and they may experience difficulty while teaching in L1. In addition, the students also put forward some other reasons as to why some courses should be Turkish along with other courses which are instructed in English, their reason was about being informed about the national context. In addition, some students also talked about the need to use Turkish especially in some application-based courses. For instance, in psychological counseling and guidance, students talked about the importance of words to be used with counselee or students. Therefore, they explained that they need to learn the Turkish equivalents of the words. Therefore, even if there may not be a course completely instructed in L1 within EMI, there is clearly a need for some L1 use in the courses since students may need to use L1 terminology effectively in their professional lives after graduation.

Lastly, there are also some students who think that the language of the instruction should be Turkish. Accordingly, students reported that comprehension problems they experienced in the courses was the reason for their preference.

### 5.3 Students' perceptions of EMI in terms of developmental aspects during education and after graduation

In the third phase of the study, with the third research question, the aim was to understand the effects of EMI on students' development such as foreign language, academic, professional, and personal during education and after graduation. The data were collected based on individual and focus group interviews, and the results were

reported in Chapter 4. Below is the discussion of the results regarding students' perceptions about effects of EMI on students' foreign language, academic, professional, and personal development.

Students generally hold positive perceptions regarding the effects of EMI on their foreign language, academic, professional and personal development.

As for the effects of EMI on foreign language development, all of the students hold positive perceptions regarding the effect of EMI on their English language development. They reported that EMI contributed to their foreign language development in a constructive way. As a result, constant exposure to EMI with materials and instruction facilitates foreign language development. Moreover, it is seen that with EMI, students need to use their foreign language skills in English effectively in order to comprehend the courses and the instructional materials. For instance, they constantly read the course materials, the language of which is English. In addition, during the classes, they try to listen as attentively as possible, and try to ask or answer questions, or take notes during which the medium is English. As a result, it can be stated that on-going exposure to the foreign language, and the need to use it constantly can improve students' proficiency in English. If the medium of instruction was not English, then after the preparatory program, or after passing the English proficiency test of the university, students would still need to use English for purposes such as doing research, accessing resources, but their use would not be that much as it is in an EMI program.

Unlike Cho's (2012) study in which it was reported that EMI courses did not improve English proficiency of the students, and unlike the study by Kim, Kweon and Kim (2017) where more students in the study reported that their English did not improve regarding the effects of EMI, a great number of studies (Chang, 2010; Yeh,

2014; Huang & Curle; 2021) had similar results with this study in the sense that EMI contributed to students' foreign language development in terms of English. For instance, in the study by Yeh (2014) results indicated that students agreed on the positive effects of EMI on increasing English ability. In addition, in the study by Huang and Curle (2021) the findings derived from students' perceptions indicated that due to EMI, students agreed that their English proficiency could improve. Also, the results of the study by Byun, Chu, Kim, Park, Kim and Jung (2011) displayed that EMI is effective in terms of improving students' English language proficiency. Accordingly, in addition to the positive effects on improving foreign language proficiency in English, the effects regarding improvement in certain foreign language skills were also indicated in some studies (Chang, 2010; Tatzl, 2011; Belhiah & Elhami, 2015). For instance, in the study by Chang (2010) students stated that due to EMI, their English language proficiency improved especially in terms of listening skill. Also, in the study by Tatzl (2011) students considered English language improvement to be the actual benefit of EMI programs. Moreover, in the study by Yeh (2014) majority of students reported positive influence of EMI on their listening improvement, and nearly half of the students reported positive effects of EMI on their reading and speaking abilities in English, and one fourth of respondent students reported the positive effects of EMI on their writing abilities. Lastly, in the study by Belhiah and Elhami (2015) students agreed that studying in English improved their speaking, listening, writing, and reading skills.

In this study, similar to the findings of the individual interviews, the participants in the focus group also hold positive perceptions for EMI, and they also talked about the positive effects of EMI on their academic, professional, personal and foreign language development. Regarding foreign language development, students stated that

EMI contributed to their English language development. They also put forward that their foreign language proficiency improved in terms of all language skills, but the most improvement occurred in the areas of listening, pronunciation and reading since they reported using these skills more often during the EMI process. Moreover, they also stated that with EMI, it becomes easier to get high scores from the international English language proficiency tests since their English improves during the process. As for the effects of EMI on academic development, students stated that EMI has positive effects on their academic development, and they put forward several reasons for that. First of all, 39.65% of the responses was about easy access to a great number of educational resources. Since English is the lingua franca of education, the resources are published in English, and owing to their proficiency in English, students can access to these resources, and use them for their academic pursuits. Similarly, in the study by Ölçü and Eröz-Tuğa (2013) the findings indicated that both the instructors from EMI universities, and the ones from Turkish medium universities agreed on the fact that EMI increases access to scientific resources. In addition, regarding language of publications, numerous research is carried out in different countries; however, when it comes to publishing the results, and sharing them with people all around the world, then English is used. In that sense, students can search for resources, access them, and do their research, and share it with scholars all around the world since they can use English effectively for academic purposes. Another opportunity related with academic development (36.20%) is that when students speak English, and are taught with EMI, then they think that they can have more educational opportunities in their country and abroad because even starting from the application process for the graduate programs, English language proficiency is sought in many universities in Turkey and abroad. In the study by

Huang and Curle (2021) the findings displayed that graduated students who had decided to study abroad saw that many courses were similar to the EMI program in their country; therefore, they stated that EMI had provided a good basis for their studies abroad. Similarly, the study by Yeh (2014) displayed that students generally agreed on the effect of EMI on facilitating further studies.

In addition, if students apply for a graduate program in Turkey, and if the medium of instruction is English in the university applied, then being proficient only in English will not be enough, and possessing content knowledge in English will also be required. Therefore, when applying for graduate programs in EMI universities in Turkey or abroad, graduating from an EMI university can be considered to be very advantageous. Similarly, in the study by Huang and Curle (2021) it is seen that students regarded EMI to be beneficial for studying abroad by improving English proficiency.

Students also put forward some more reasons to explain the positive effects of EMI on their academic development which are following the current trends and developments in the field studied, or possessing field knowledge and terminology in two languages. Since students learn the content with EMI, they can also transfer this knowledge of theirs into their mother language as well. Although, they can be terminological differences between the two languages, students can develop a general understanding for the concepts, or topics in two languages, namely English and Turkish.

In terms of academic development, similar to the individual interviews, the students in the focus group interview also hold positive perceptions, and they put forward similar reasons regarding the positive effects of EMI on their academic development which are possessing field terminology and knowledge in two languages, accessing

educational opportunities in graduate level such as M.A. or PhD, accessing various types of resources worldwide, accessing sources that are not translated into Turkish, and gaining knowledge about international education systems. As a result, with EMI, students acquire knowledge about not only their local context but also the international context which can be regarded as beneficial and advantageous.

However, in terms of the practice teaching process, the students in the focus group interview voiced some concerns about differences in the mediums of instruction in the schools they do their practice teaching which was not mentioned in the individual interviews. They stated that in their university, they learn the content through EMI. Therefore, they want to experience the practice teaching experience with EMI, but since the medium of instruction in some practicum schools are Turkish, and in some schools English, some students think that they cannot put theory into practice in terms of using English while teaching in schools where the medium of instruction is Turkish. As result, they talked about several challenges related to differences in terms of mediums of instruction, in other words, EMI at university, Turkish medium instruction in some of the schools where students do their practice teaching. These challenges were preparing multiple lesson plans both in English and in Turkish, finding Turkish terminological equivalents of the terms in English while delivering the instruction in L1, and lack of practice teaching experience with EMI.

As for the effects of EMI on professional development, students think that EMI has positive effects on their professional development. They put forward several reasons for that. First of all, 17.85% of the responses point to job opportunities not only in the country but also abroad. For instance, in Turkey, similar to EMI universities, there are primary or high schools where the medium of instruction is English. As a result, students can have job opportunities in these EMI schools since they can

deliver the instruction in English. In accordance with this, some students also reported that they can also work at schools where the medium of instruction is Turkish; however, even if the medium of instruction is Turkish in these schools, they can make use of not only resources published in Turkish but also the ones published in English while preparing the course content. As a result, accessing to resources in English for professional development (9.80%) is another reason why students think that EMI has positive effects on their professional development. Another reason they put forward is that thanks to EMI, students may have career opportunities at universities especially where the medium of instruction is English. In addition, even students' foreign language proficiency in English by itself can put the students at an advantageous position when applying for a job. Finally, the last advantage mentioned is about rise in salary. For some jobs in some companies, if people can prove foreign language proficiency in English, they can have some extra payment within their salary.

As for the effects of EMI in terms of professional development, similar to the individual interviews, all of the participants in the focus group hold positive perceptions regarding the effects of EMI on their professional development, and they put forward that thanks to EMI, they could have job opportunities abroad and job opportunities in Turkish schools where the medium of instruction is Turkish or English. In line with this, in the study by Tsui and Ngo (2017) students indicated the value of English and its effects on employability at local and global levels.

Moreover, students in the focus group also added that even if they do not use English while teaching in Turkish medium high schools they can still make use of the resources that are written in English. Similarly, in the study by Botha (2013) Macau students regard English as a requirement for their current and future careers in

Macau. Also, in the study by Arkin (2013) undergraduate university students studying at an EMI university perceived EMI as essential for professional and academic career prospects. As a result, in the global world, accessing information is very important, and knowledge of English helps individuals to access resources not only for their academic development but also for their professional and personal development.

Moreover, similar results were identified in various studies in line with this study indicating positive effects of EMI on students' professional development and career prospects (Friedrich, 2003; Tatzl, 2011; Botha, 2013; Huang & Curle, 2021). For instance, in the study by Friedrich (2003) the findings displayed a close connection between English and job market. When asked a group of MBA students in Argentina, over 90% stated that greater employment opportunities occur with knowledge of English. In the study by Tatzl (2011) students put forward that preparing themselves for an international career was among the most significant reasons for studying in an EMI program. In the study by Byun, Chu, Kim, Park, Kim and Jung (2011) results displayed that students from some departments such as Business think that they will benefit from EMI in their future career, and in this study, students from different departments of the faculty of education, all had positive perceptions regarding the effect of EMI on their professional development.

In addition, in the study by Yeh (2014) results displayed that students generally agreed on the benefits of EMI on students' employability. Similarly, in the study by Huang and Curle (2021) findings displayed that not only current but also graduated students from an EMI finance program were positive that EMI will and had enhanced their career opportunities, and students also indicated that EMI increased their career alternatives.

In addition to various career opportunities, this study has unique points regarding departments of the Faculty of Education because although in some departments student will not need to use English in their work place, they still want to be educated with EMI since they perceive it beneficial for their professional development in the sense that they can access to resources and make use of them for their professional development. As explained in the literature review section, EMI education faculties were established in 1982 to educate university students who will work as teachers teaching content courses such as Mathematics and Science with English in Anatolian High Schools. However, with the policy changes from 1997 to 2012, teaching content courses with EMI in these Anatolian high schools is not implemented anymore, but these education faculties still continue their education with EMI. As a result, considering the departments of the Faculty of Education, although some students will not need to use English in their professional lives, they still wanted to be educated with EMI considering the positive developmental effects of it on their foreign language, academic, professional and personal development. For instance, in Mathematics and Science Education Department; when students graduate from this department and start to work as teachers in state schools; Science and Mathematics courses in primary education, secondary and high school education are instructed with Turkish. However, if participants work at private schools or in international schools, then they can use English while teaching Mathematics, Physics and Chemistry. Therefore, they may or may not need to use English in their workplace depending on the type of school they work. As for the department of Primary Education Department in the Program of Early Childhood Education; if participants work at state schools, the medium of instruction is Turkish. However, if participants work at private schools then they can use English or English and Turkish at the same

time while teaching. Therefore, students graduating from these departments may or may not need to use English in their work place either. Moreover, in the Department of Educational Sciences in the Program of Guidance and Psychological Counseling, when students graduate and start to work at state or private schools in Turkey, they will use Turkish during their guidance and counseling sessions with their students. However, if these graduates work at an international company, for instance; as a human resources specialist, they may need to use English during staff recruitment. As a result, different career prospects may entail use of Turkish or English. Moreover, if graduates of these departments may consider working abroad in their field since they are taught with EMI, they are to use English. As a result, participants graduating from these departments will or will not need to use English in their work place. However, they still chose to be educated with EMI. As explained above, there can be various reasons for that. First of all, students stated that although they may not use English while teaching or counseling, they stated that they can still use the resources in English while preparing their lessons, they can also use reading materials for their professional development, and they can also follow the latest developments in their field. Therefore, even if the participants may not need to use English in their work place, they may still need English for professional purposes and other purposes such as academic and personal development. However, the only challenge that students in this study mention about EMI regarding their professional development is that; after graduation, some students are thinking of attending the national exams to be appointed to state schools in Turkey, in those exams, due to terminological differences between English and Turkish, students think that they may experience difficulty in these exams due to not knowing the terminological

equivalents of all the terms in Turkish which was also mentioned in the previous sections.

As for the effects of EMI on personal development, students talked about various positive effects of EMI on their personal development. Students reported that thanks to EMI, they can interact with people from different countries and cultures (17.85%) because English is the global language for communication, and people from different countries use English as a common medium. As a result, no matter what the native language of an individual is, with English, people all around the world can easily interact with one another. Therefore, knowledge of English can be the key to interact with the world which can be considered to be an important advantage for students. Another reason which students mentioned was that when students speak English, they have the self-confidence to live or study in another country (14.28%) because even if a person goes to a country where English is not the native language, people living there generally speak English as a second or a foreign language. Therefore, with the knowledge of English, anyone can most probably live somewhere in the world with their knowledge of English. The students also reported several other reasons to explain the positive effects of EMI on their personal development, one of which is gaining a different perspective. Students think that when they learn another language, each language gives them a different perspective or a way of thinking. In line with this, in the study by Yeh (2014) students reported various benefits of EMI such as employability, and nearly half of the students also reported a more idealistic benefit such as broadening horizons. Another reason is accessing information from primary sources without a need for translation. Since everything is not translated into Turkish, students can have direct access to information in resources that are presented in English, or translated into English. Moreover, another reason put

forward by students is that they think that learning something new is challenging for the brain, and when someone tries to learn it with a foreign language-medium then there is more challenge and cognitive load on the brain. Therefore, some students stated that dealing with EMI has positive effects on their brain, cognition, and thinking skills.

Finally, as for personal development, all of the participants in the focus group also hold positive perceptions regarding the effects of EMI on their personal development. Students reported that thanks to EMI and their proficiency in English, students can do research in various and different fields such as sports, politics and art. Moreover, they stated that they can watch or read materials without subtitles, they can follow the news from primary sources, and they can access materials that are not translated into Turkish. Therefore, they can follow the latest developments and trends in various fields with no need to wait until they are translated into their mother language. Similarly, in the study by Belhiah and Elhami (2015) some students reported that thanks to EMI, they feel more comfortable while watching English language films and news without the need for translation or a dictionary. As a result, it can be concluded that students generally hold positive perceptions regarding EMI since it has positive effects on their foreign language, academic, professional and personal development. Similarly, in the study by Tatzl (2011) it is reported that both students and lecturers favour EMI. Also, the study by Yeh (2014) indicated that students have positive attitudes towards EMI courses. However, in the study by Kim, Kweon and Kim (2017) although most students preferred Korean-medium instruction over EMI related to their English ability and classroom interaction; majority of them stated that their schools should keep on offering EMI classes. Lastly, in the study by Tsui and Ngo (2017) findings related to students'

perceptions of EMI in a Hong Kong university indicated that students recognize the pragmatic value of English, and its effects on employability at local and global levels as well as its effects on increasing cultural awareness.

As for challenges of EMI, it can be stated that, so far students in this study put forward various reasons regarding the positive effects of EMI on their development in various ways. However, there are also some challenges though very few as reported by some of the students. Among the responses related with the challenges; 25.64% of the responses was about superficial learning outcomes. Students who experience comprehension problems think that they have some problems about internalizing the knowledge. As a result, superficial learning instead of an in-depth learning occurs for some students. Another challenge associated with EMI is that there can be difficulty in expressing field knowledge in L1 in professional life due to lack of knowledge in terms of L1 terminology. As outlined before, some L1 integration for terminology is required especially for students who think of working at schools where the medium of instruction is Turkish. This is also linked to another issue voiced by the students which is experiencing difficulty in national exams due to not knowing L1 equivalents of the field terms. Finally, the last challenge is that some students reported spending more time while learning something if it is presented in a foreign language-medium. As a result, there can be few challenges associated with EMI, but students generally overcome these challenges after the first year since they adapt to the program with their experiences and learning strategies.

As for EMI's achievement in terms of its objectives, it can be stated that considering all the responses that students gave about the effects of EMI on their foreign language, academic, professional, and personal development, and seeing that they regard these effects as positive, a further related question was asked to the students as

to whether EMI successfully meets its objectives considering all aspects of EMI. It is seen that 83% of the students think that EMI successfully meets its objectives due to the benefits and improvements they have acquired in terms of foreign language, academic, professional, and personal development. In addition, 17% of the students think that EMI partially meets the objectives due to the challenges mentioned such as problems about internalizing knowledge and terminological difficulties.

Lastly, as for the suggestions of students regarding the implementation of EMI, students put forward various suggestions for EMI so that it can be implemented more efficiently. Most of these suggestions were related to speaking skill due to which students generally experience difficulty. The suggestions related to speaking are integrating a speaking course into the English preparatory program and/or in the undergraduate program, giving more attention to speaking skill within the English preparatory program and/or the undergraduate program, providing students with extra-curricular speaking activities, and testing speaking skill in the English proficiency test of the university. As it is seen, half of the suggestions were made in order to improve speaking skill because students explained that they experience the biggest difficulty with speaking which affect their comprehension. As a result, in order for students to actively participate in class discussions, and to comprehend content courses more, speaking problem should be overcome by taking into consideration the suggestions put forward by students. In accordance with this, in the study by Kırkgöz (2009b) perceptions of students and lecturers on the effectiveness of the foreign language instruction was investigated in an EMI university in Turkey. The results displayed that a skills-based English for academic purposes (EAP) curriculum is considered to be insufficient in preparing students effectively for the academic tasks or needs. Therefore, suggestions were made to improve the EAP

curriculum. Similarly, in this research, a revision of the English preparatory program especially in terms of integrating more speaking into curriculum was highlighted. Moreover, the need for integrating an orientation course especially in the first year of the undergraduate program was also put forward in the sense if there is an orientation course which includes topics and tasks that are in line with the topics and tasks students are to deal with during their undergraduate courses such as reading an article or writing a paper about the field studied, this could be effective in terms of supporting students during their first year in their departments while they are trying to adapt to their content courses. In addition to these, another significant suggestion was about integrating a terminology course into the undergraduate programs. This was also an important issue that have been voiced by the students throughout this study. The students talked about the fact that the language of the instruction is English, and if explanations regarding the Turkish equivalents of the terms are not given, then students may experience difficulty in comprehending the course content, using these terms in their professional lives, and they would also experience difficulty in the national exams due to not knowing the L1 equivalents of the field terms.

## CHAPTER 6

### CONCLUSION

This chapter presents the conclusions regarding this study in line with the findings, and it also displays pedagogical contributions and the limitations of this study along with suggestions and future research directions.

#### 6.1 Summary and concluding remarks

Internationalization in higher education is a growing phenomenon. Accordingly, the adoption of English medium instruction by various universities not only in undergraduate programs but also in graduate programs is widely seen in the form of either full or partial adoption. In Turkey, in addition to Turkish medium instruction in higher education, there are also universities which have adopted English medium instruction fully or partially in their faculties or programs. The adoption of English medium instruction brings about formation and implementation of new foreign language policies along with the revision of existing ones, and the related effects of the process pave the way for numerous studies. As a result, numerous studies are conducted about EMI exploring its various aspects. In line with this, this study was carried out to understand the effects of EMI on content courses by eliciting undergraduate students' perceptions studying in the faculty of education at an EMI university in Turkey. Moreover, this study examines the effects of EMI on content courses with specific reference to certain issues such as students' knowledge and awareness regarding official policies and EMI implementations, the evaluation of EMI courses in terms of language, content, classroom pedagogy, and the effects of EMI on students' development such as foreign language, academic, professional, and

personal development. As a result, research questions were asked to reveal the students' perceptions regarding the EMI process. The data were collected via individual and focus group interviews, a background questionnaire, and the examination of online policy documents as a supplementary tool. As for the data analysis, a grounded theoretical approach was employed. As a result, various findings and related conclusions were achieved based on perceptions' of students. Regarding students' awareness and knowledge in terms of official policies in their university, the results of the study showed that all of the students displayed knowledge and awareness in terms of official policies implemented in their university. Among these policies, 100% EMI policy, compulsory advanced English courses for students graduated with C level from the university's English preparatory program, taking compulsory second foreign language course for some departments were among the most frequently mentioned official policies by the students. In addition, students also showed knowledge and awareness in terms of EMI implementations in their undergraduate programs. For instance, limited L1 (Turkish) use by some of the lecturers and students to ensure clarity and comprehension in complex and crucial parts were mentioned quite often by the students. In addition, students also talked about the facilities offered by their university to support their English language development to better deal with content courses. These facilities were basically grouped under two categories such as the existence of advanced English courses, and a writing center. However, these facilities were found to be limited by the students, and they also put forward their own suggestions for facilities which could support their academic needs. These suggested facilities were essentially grouped under three categories which are more support for speaking skill in English by inserting a speaking course in the English preparatory and/or the undergraduate

program, support for terminology by adding a terminology course in the undergraduate program and support for academic skills required in the undergraduate programs via an orientation course.

As for the use of English, students have positive perceptions regarding their own English, and their lecturers' use of English. Most students regard both of them as sufficient. In addition, when students were asked to evaluate the foreign language skills that they need to improve most, majority of the students regarded speaking as the skill that they need to improve most, and they did not report experiencing any major challenge regarding other foreign language skills.

In addition to these, regarding language use, the significance of L1 use which is Turkish in this study, and its relation to content comprehension also attaches significance. Even though the instruction is delivered via English as a medium, there is also limited use of L1 by some of the lecturers and students from time to time in specific cases. These uses mostly take place when lecturers spot students' lack of comprehension, or when lecturers explain a crucial or a complicated part. As for students' L1 use, students reported using their L1 when they think that they cannot fully express themselves in English. However, students generally regard this L1 use, or codeswitch from English to L1 as beneficial in terms of increasing their comprehension and motivation.

As for the findings regarding content comprehension, results are interpreted also in line with the use of foreign language skills, and use of learning strategies. First of all, most of the students reported that they understand the content generally; however, they tend to experience comprehension problems at times during the courses or after classes during their studies. As a result, they talked about certain strategies they employ to increase their comprehension. As for the strategies student reported

employing during the courses, almost half of the students reported doing nothing about it, however, asking a friend was among the most frequently reported strategy followed by asking the lecturer, and using translation applications. In addition, as for the strategies students reported employing out of the class; studying from the course materials is reported to be the most frequently employed strategy followed by searching the subject from the internet, and peer discussion.

Another finding regarding content comprehension is that majority of the participants in the focus group interview reported that understanding content in non-verbal courses such as Mathematics is more difficult compared to verbal courses. Students reported that this was due to the fact that in non-verbal courses even a single word can change the way a problem is handled or solved. In accordance with this, they reported that verbal courses are more discussion oriented and not understanding a single word does not lead to major comprehension problems.

In addition, the students also talked about the difficulties they experienced in the first year of their undergraduate programs in terms of dealing with academic requirements since it is considered to be a transition year from English preparatory program to their departments. For instance, in English preparatory program, vocabulary taught is about general English with no specific reference to field terminology. Therefore, again terminology can be a major source of difficulty in terms of understanding the content especially in the first year. In addition, students may need an orientation course which entails tasks such as how to write a paper, or make a presentation. Therefore, such a course would provide students with skills they need to deal with the academic tasks in their departments.

In line with these, the relationship between EMI and comprehension was further investigated, and findings indicated that most of the students reported that they did

not experience major comprehension problems; therefore, viewed the effects of EMI on their comprehension positively. However, the students who reported experiencing some comprehension difficulty, and the ones experiencing comprehension difficulty reported some similar experiences in the sense that there could be some decrease in their content comprehension, they need to do some extra work to comprehend better, and they reported experiencing difficulty at times in terms of finding the L1 equivalents of some terms or concepts.

In addition to these, when students' experiences regarding the use of foreign language skills during courses were examined, most of the students reported experiencing difficulty in terms of speaking skill; however, they did not report experiencing major difficulty in other foreign language skills such as reading, listening, or writing. In addition, the students also reported employing certain learning strategies if they have comprehension problems while using these foreign language skills during their EMI process. First of all, students stated that when they experience difficulty about expressing themselves, half of the students avoided speaking; however, there were also other strategies that students reported employing such as using L1 or codeswitching to L1, asking their questions to lecturers after class and discussing content with peers. Secondly, in terms of reading; most of the students reported experiencing no difficulty with reading, but there were also students experiencing difficulty from time to time. At those times, students reported using some strategies. The most frequently employed strategy reported in reading is using online dictionaries. This might be due to the fact that unknown words can be a barrier that hinders reading comprehension. As for the listening skill, majority of the students reported experiencing difficulty due to this skill from time to time, and the strategies they reported using respectively were reviewing the subject after class

either with course materials or from the internet followed by strategies such as peer discussion, or asking lecturers. As for the writing skill, majority of the students reported experiencing no difficulty with writing. However, for the ones who experience difficulty due to this skill, the strategy they reported employing is paraphrasing followed by strategies such as using translation applications and taking notes of keywords.

Regarding methodological implementations of the lecturers; it is seen that students regard some of the implementations of their lecturers successful, and they regard some of them as less successful. For instance, the most useful implementations of the lecturers as reported by students were supporting instruction with visuals followed by integrating hands on learning activities, and codeswitching to L1 to explain a crucial or a complex point. In addition, as for the implementations of lecturers that students found less successful, the most frequently reported one was lecturing via reading from the slides only.

As for students' perceptions regarding language of instruction, course materials, and exams, almost all of the students prefer to have them in English, and very few students stated that they prefer to have them in both languages; English and Turkish, or only in Turkish. The reasons for supporting EMI are mainly related with the availability of more and various resources in English, English's being the lingua franca in education, and EMI's potential to ensure educational and career opportunities during education and after graduation. As previously stated there are also very few students who think that the medium of instruction could be in both English and Turkish; or only in Turkish. The reasons underlying their choices were mostly found to be stemming from comprehension problems, and terminological difficulties.

Regarding the effects of EMI on students' development such as foreign language, academic, professional, and personal, the findings displayed that students generally have positive perceptions regarding the effects of EMI on these developmental aspects. First of all, it was found that all of the students reported positive effects of EMI on their English language development.

In terms of academic development, students also stated that EMI contributes to their academic development, and they put forward a number of reasons for that. These reasons were multifaceted, with EMI, students reported accessing to more educational resources with more research opportunities, they also reported accessing more educational opportunities in and out of the country at undergraduate and graduate level. In addition to this, with the knowledge of English, students reported following current developments and trends about their fields. However, the students in the focus group talked about a challenge they experienced in their practice teaching process. In their university, participants are instructed with EMI; however, during their practice teaching process, they can be appointed to schools where the medium of instruction is Turkish. In that case, students reported experiencing challenges due to different mediums of instruction. Some of these challenges could be mainly listed as the necessity to prepare multiple lesson plans; one in English for the university, the other in Turkish for the school where they do their practicum. In addition, when the medium of instruction is Turkish in some of the schools where students do their practicum, then these students do not have the chance to do practice teaching in English.

Regarding the effects of EMI on students' professional development, students also regard the effects as positive, they put forward several reasons, and among these reasons the most prominent reason points to the effect of EMI on providing job

opportunities in and out of the country, followed by some other important reasons such as the effect of EMI in providing job opportunities out of the field studied which might be due to the fact that to be proficient in English on its own can be an advantage to be admitted for a position in the work place. However, some students also talked about a challenge which is after graduation, some students are planning to attend the national exams to be appointed to state schools in Turkey, and in those exams, due to terminological differences between English and Turkish, students think that they may experience difficulty.

Regarding the effects of EMI on students' personal development, students also regard the effects positively in the sense that with EMI, students reported that they can interact with people from different countries or cultures. Moreover, with EMI, they reported gaining self-confidence to live and/or study in another country. They also mentioned other positive effects of EMI on their personal development such as gaining a different perspective and accessing all kinds of information from primary sources without a need for translation.

In addition to the positive perceptions regarding the effects of EMI, few challenges regarding EMI were also reported by some of the students. These main challenges point to difficulties in terms of internalizing the content at times, terminological transfer problems in professional life, and experiencing difficulty in national exams due to terminological differences as mentioned previously.

In addition, students were also asked about their opinions regarding whether EMI achieves its goals and objectives considering all the aspects questioned. Most of the students stated that EMI successfully achieves its objectives, and few students stated that EMI partially achieves its objectives due to some challenges explained above.

Finally, students were asked about their suggestions for EMI before and during implementation. The most prominent suggestions are about speaking and terminological issues. For instance, students suggested inserting a speaking course in the English preparatory program and/or the undergraduate program. In addition, another speaking related suggestion was made to integrate a speaking exam into the English proficiency test of the university. As it is seen, the need for more focus on speaking displays itself frequently since speaking is a crucial skill to actively participate in courses, discussions, and to ask and answer questions, in other words, to comprehend the course content. Along with this, the suggestion for adding a terminology course into the undergraduate program also attaches significance because as mentioned previously, problems related to terminology can be a problem in terms of comprehension during courses in academic life, or it can be a challenge later in the professional life when using these terms correctly and effectively for professional purposes.

As a result, it is seen that EMI is a complex and multifaceted phenomenon with its various aspects. Therefore, numerous studies are carried out with the aim of understanding EMI itself, and various aspects of it. In that sense, in order to understand and implement EMI efficiently, both theory and practice regarding EMI should be handled with the coordination and collaboration of all stake holders.

## 6.2 Pedagogical contributions, limitations and further research implications

Regarding pedagogical contributions, it can be stated that in language policy and planning, collaboration among all stake holders are very crucial. Accordingly, the policies are formed by the authorities, then they are put into practice at universities by faculty members in various departments and programs. However, at times, it is

seen that some implementations constructed within the framework of these policies may not meet the objectives. Therefore, it is important that all stake holders such as authorities, administrators, lecturers and students be in coordination with each other during which they share their opinions, and get feedback from each other during the policy formation, planning, and implementation stages. By this way, a more fruitful process can take place. Moreover, it is seen with this study that especially for universities where EMI is adopted, it is important to support academic skills, foreign language skills, and terminological knowledge. For instance, improvement of speaking skill, and providing more support for it is highlighted throughout this study because speaking is an important skill, in other words, interaction is very crucial in order to both deliver and comprehend the instructional material. Therefore, students suggested more support for speaking beginning from the English preparatory program to the undergraduate program. As it is seen with this suggestion, it can be concluded that the curriculum of English preparatory programs should be in line with the academic skills and tasks that students are to deal with in their undergraduate programs, and similar suggestions were also put forward in the study by Kırkgöz (2009b). As a result, it is important that English preparatory programs should integrate speaking more into their programs. This may also be in the form of a separate speaking course in which students are involved in discussions or presentation tasks because students are also to deal with similar tasks in their undergraduate courses. Therefore, this skill should be handled with a special focus. Moreover, in terms of preparing students for the relevant academic tasks, it is also important to bring to light the issue of integrating orientation courses into the departmental programs especially in the first year because students start their departments with not much experience about how to read an article, or write a paper.

Moreover, another relevant issue which is outlined in this research several times is the terminology issue. As reported by students, terminology can be a real barrier to understand content, and even a single word can change the meaning of the content; therefore, they cannot decode the meaning. As a result, students demanded that special focus be given to terminology with various ways one of which was integrating a terminology class into the departmental programs especially in the first year. In line with this, the use of L1, although used in a limited way, also attaches importance. Similar to this study, in various studies; L1 use is found to be facilitative to content comprehension (Rowland & Murray, 2020; Li, 2020; Kim, 2011). In that sense, limited L1 use should not be viewed as something against EMI policy but as a facilitative tool to support comprehension process. However, implementations regarding L1 use should be implemented by taking into account the context; in other words, in the absence of international students who do not share a common L1 with the Turkish students. Accordingly, in order to increase comprehension in classes where there are also international students studying with the Turkish students, instead of relying on L1, other supportive implementations could take place. For instance, more English courses can be offered to improve foreign language proficiency of all the students studying in both the English preparatory program and the undergraduate programs. However, these implementations at university level may not be enough. In that sense, it can be stated that foreign language proficiency problems should be handled at earlier stages starting with K-12 education via constructing and implementing effective policies. By this way, problems related to English language proficiency would not be expected to be solved only by the universities in their English preparatory programs and/or the undergraduate programs.

Moreover, considering the international students at EMI universities, it could be necessary to establish EMI offices to support students, to answer their questions or provide solutions for their problems in case they need because international students are new to the country, to the university, it may also be the first time they will be taught with EMI. As a result, such offices could be quite beneficial for them to understand their university, the country, and even the culture because while students study at an EMI program abroad, they not only experience living in a new country but also in a different culture. In addition, considering stakeholders such as lecturers and their experience with international students, it could be necessary to support lecturers in terms of intercultural communication skills through seminars and other activities since interacting with international students from different countries and cultures may require the need to improve intercultural communication skills.

Lastly, regarding the use of instructional strategies by lecturers; students reported that the lecturers tend to employ some instructional strategies, and among them; for instance, when lecturers support their instruction with more visuals, or when they integrate more hands on learning activities, students tend to learn more. In addition, students were also found to have their own learning strategies while they are dealing with the academic tasks such as peer discussion, using the internet to do research, and using translation applications. In that sense, some training in the form of seminars could take place at the university for both the instructors and the students so that they can handle EMI process more efficiently with a more strategic approach.

As for the limitations of this study and future research directions, first of all, it can be stated the participants in this study are students. Therefore, to attain a more complete picture of the EMI process, perceptions of other stake holders such as administrators, lecturers could also be included. Moreover, this study was conducted at the faculty of

education since there are few studies conducted in this faculty, and this faculty as a case was examined with an extensive focus. However, other faculties could also be included to obtain a more comprehensive view about implementation of EMI across different faculties. Another perspective could be examining other education faculties adopting EMI in different parts of the world which may provide a comparative focus. In addition, different foreign language-medium instructions in addition to English can also be examined on their own, or including different foreign language medium instructions with English within the same study can provide another comparative focus.

Moreover, the data for this study were collected mainly via interviews both individual and focus group, a background questionnaire, and document analysis. For future research, data can also be collected based on students' academic productions such as exams and papers that students produced during the EMI process, and also based on classroom observations where students' actual performance during the process can be examined so that a more comprehensive picture regarding the participants themselves, and their actions, throughout the process could be attained. As a result, since an education faculty at an EMI university has been examined, the conclusions derived from the findings, and suggestions proposed should not be generalized for all contexts since they may be applicable in some contexts, but may be less relevant or applicable for others.

In conclusion, in the globalized world, considering the internationalization process, and the status of English as a lingua franca in various domains including education, it is seen that EMI is on the rise in various educational phases including higher education, and it is widely adopted fully or partially by various universities around the world. In that sense, this situation requires a periodic revision and reconstruction

of foreign language policies and implementations with a language policy and planning perspective. Accordingly, Björkman (2014) states that in order to make sound decisions regarding language policy, the actual language implementations should be taken into consideration, by this way, a more bottom-up approach would take place by paying attention to everyday implementations of the academic community, and which language they use for which academic task. Consequently, in order to handle the process in the best way, and to turn this process into a more beneficial one, it is important for all stake holders such as administrators, lecturers, and students to exist in this process with a collaborative manner where they discuss the process, get feedback from each other, and periodically revise and update the policies and the relevant implementations.

## APPENDIX A

### BACKGROUND INFORMATION QUESTIONNAIRE FOR STUDENTS

1. Where were you born? What is your mother tongue?
2. How old are you?
3. What is your gender?
4. What type of a high school did you graduate from?
5. How long have you been learning English?
6. Which department do you study at? How long have you been studying in that department?
7. Did you study at the English preparatory program of the university?
8. Which foreign languages do you speak? What is your proficiency level? How was your proficiency level identified?

APPENDIX B

ÖĞRENCİLER İÇİN ÖZGEÇMİŞ ANKETİ

*(BACKGROUND INFORMATION QUESTIONNAIRE FOR STUDENTS-TURKISH  
VERSION)*

1. Hangi ülkede doğdunuz ve anadiliniz nedir?
2. Kaç yaşındasınız?
3. Cinsiyetiniz nedir?
4. Ne tür bir liseden mezun oldunuz?
5. Kaç yıldır ve ne zamandan beri İngilizce öğreniyorsunuz?
6. Hangi bölümde okuyorsunuz ve bölümde kaçınıcı yılınız?
7. Hazırlık okudunuz mu?
8. Bildiğiniz yabancı diller ve yeterlilik düzeyiniz nedir? Bu düzey hangi ölçütler doğrultusunda belirlendi?

## APPENDIX C

### SEMI STRUCTURED INDIVIDUAL INTERVIEW QUESTIONS FOR STUDENTS

1. Are you knowledgeable about foreign language-medium instruction policies in your university? What do you think about them?
2. Are you knowledgeable about foreign language proficiency criteria of your university to take the departmental courses?
3. Do you think are there enough facilities that students can benefit from regarding foreign language support? If there are not, what kind of facilities would you like to have?
4. Are there any implementations that take place during lessons instructed with foreign language-medium (EMI)? What do you think about them?
5. How would you evaluate instructors' use of the foreign language (English) in terms of delivering the courses?
6. How would you evaluate your own foreign language use as a student? Do you think is your English language proficiency enough to comprehend the courses?
7. Is English used only during the courses by instructors and students? Are there any cases where mother tongue (Turkish) is used? If yes, in which cases?
8. When using English during the courses, about which foreign language skill do you experience the most difficulty? If you order them from the most difficult to the least, how would it be?
9. What do you do when you do not comprehend the course content during and after the lesson?

10. What do you do when you come across a vocabulary item that you do not know?  
How do you learn the course related vocabulary?
11. Do you experience any difficulty when reading course materials? If yes, what do you do to solve it?
12. Do you experience any difficulty when listening to your instructors during courses? If yes, what do you do to solve it?
13. Can you express yourself in terms of writing; when taking notes during courses, answering questions in the exams, and when writing papers? If no, what do you do to solve it?
14. Do you experience any difficulty when talking about the course content, or when asking and answering a question? Does this situation affect your participation?
15. During foreign language-medium instruction (EMI), which methods of instructors would you regard successful and less successful?
16. What are the course materials? In which language are they presented? If you were to decide the language of course materials, what should it be? Why?
17. What is the language that the courses are instructed with? If you were to decide the language of instruction, what should it be? Why?
18. How does foreign language-medium instruction (EMI) affect content comprehension?
19. What are the advantages and disadvantages of foreign language medium instruction (EMI)? What would you like to say if you approach the issue in terms of foreign language, academic, professional, and personal development?

20. Do you think education via foreign language-medium instruction (EMI) at your university meet the objectives?
21. If you designed the education system with a foreign language-medium (EMI), would you like to add anything to it or remove anything from it?

## APPENDIX D

### ÖĞRENCİLERLE YAPILAN YARI YAPILANDIRILMIŞ BİREYSEL GÖRÜŞME

#### SORULARI

*(SEMI STRUCTURED INDIVIDUAL INTERVIEW QUESTIONS FOR STUDENTS-  
TURKISH VERSION)*

1. Üniversitenizde yabancı dilde eğitime ilişkin politikalardan yani resmi kararlardan haberdar mısınız? Bunlar hakkında ne düşünüyorsunuz?
2. Alan derslerini alabilmek için yabancı dil yeterlilik koşullarından haberdar mısınız?
3. Sizce, alan dersleri süresince, öğrencilerin ihtiyaç duyduklarında yararlanabilecekleri yabancı dil desteğine yönelik uygulamalar var mı? Yok ise, ne tür imkanlar olsun isterdiniz?
4. Yabancı dilde eğitim yapılırken, yabancı dil politikaları gibi yazılı olmayan ancak ders esnasında ortaya çıkan uygulamalar var mı? Bu konuda ne düşünüyorsunuz?
5. Sizce öğretim elemanlarının alan derslerini anlatırken kullandığı dil (İngilizce), öğrencilerin dersi anlaması için yeterli mi? Öğretmenin kullandığı dili nasıl değerlendirirsiniz?
6. Öğrenciler olarak kendi dil (İngilizce) kullanımınızı nasıl değerlendirirsiniz? Sizce yabancı dil seviyesiniz dersleri anlamak için yeterli mi?
7. Derslerde öğretim elemanları ve öğrenciler tarafından sadece İngilizce mi kullanılıyor? Yoksa Türkçe kullanılan yerler de var mı? Varsa hangi durumlarda?

8. Derslerde yabancı dili kullanırken en çok hangi dil becerisinde zorlanıyorsunuz? Zordan kolayca doğru bir sıralama yapsanız bu sıralama nasıl olurdu?
9. Yabancı dilde yapılan dersin içeriğini anlamadığınızda ders içinde ve ders dışında ne yapıyorsunuz?
10. Derste ya da ders dışında anlamadığınız bir kelime çıktığında ne yapıyorsunuz? Dersle ilgili kelimeleri nasıl öğreniyorsunuz?
11. Ders materyallerini okurken zorluk yaşıyor musunuz? Yaşıyorsanız çözüm için ne yapıyorsunuz?
12. Öğretim elemanını dinlerken anlamadığınız durumlar oluyor mu? Oluyorsa, çözüm için ne yapıyorsunuz?
13. Derste not alırken, sınavda sınav sorularını cevaplarırken, ya da ders dışında yazdığınız ödev ve makaleleri yazarken yazmak istediğinizi ifade edebiliyor musunuz? Edemediğiniz durumlarda çözüm için ne yapıyorsunuz?
14. Dersle ilgili konuşmak, soru sormak ya da cevaplamak istediğinizde zorluk yaşıyor musunuz? Yaşıyorsanız ne yapıyorsunuz? Bu durum derse katılımınızı etkiliyor mu?
15. Sizce yabancı dilde eğitimde, öğretim elemanlarının yabancı dilde ders anlatırken kullandığı yöntemlerden başarılı veya daha az başarılı bulduklarınız hangileridir?
16. Derste kullanılan materyaller nelerdir? Hangi dilde sunulmaktadır? Bu konudaki dil tercihi size bırakılsa, hangi dilde olmasını isterdiniz? Neden?
17. Bölüm dersleri hangi dilde anlatılmaktadır? Seçme şansınız olsaydı, bölüm derslerinin hangi dilde anlatılmasını isterdiniz? Neden?

18. Dersin yabancı dilde (İngilizce) anlatılması ders içeriğinin anlaşılmasını nasıl etkiliyor?
19. Sizce yabancı dilde (İngilizce) yapılan eğitimin avantajları ve dezavantajları nelerdir? Özellikle yabancı dil gelişimi, eğitimsel gelişim, kariyer gelişimi ve kişisel gelişim açılarından düşünürseniz, neler söylemek istersiniz?
20. Üniversitenizde yabancı dilde yapılan eğitimin hedefine ulaştığını düşünüyor musunuz?
21. Yabancı dilde eğitim sistemini tasarlayan siz olsaydınız, bu sisteme eklemek ya da bu sistemden çıkarmak istedikleriniz olur muydu?

## APPENDIX E

### SEMI STRUCTURED FOCUS GROUP INTERVIEW QUESTIONS FOR STUDENTS

1. What do you think about the official foreign language policies in your university? How do you evaluate these policies?
2. Are there any implementations when courses are instructed with a foreign language medium which are not written but you come across during the lessons? What do you think about these implementations?
3. What do you think about the courses being delivered with a foreign language-medium instruction (EMI)? Is mother tongue used during the lessons? If yes, where, how, and why?
4. What do you think about comprehending verbal and non-verbal courses in English? Are there any similarities or differences?
5. How would you evaluate the process of passing from the English preparatory program to the department?
6. Are there instances when you think that you do not comprehend the courses? If yes, what do you do in these moments? What makes you think that you do not comprehend?
7. The foreign language skill that students would like to improve more is identified as speaking skill. Accordingly, is there any course in the English preparatory program regarding speaking? Do you need such a course? If there would be a speaking course, how would the content be, and in which phase would it take place?
8. What do you think about instructors' foreign language use (English)?

9. What do you think about your own foreign language (English) use?
10. What do you think about courses instructed with a foreign language-medium (EMI) and class participation?
11. What do you think about instructors' English language use in courses and students' content comprehension?
12. What kind of methods should the instructors use so that students can comprehend the courses more? What are your suggestions?
13. What do you do in schools where you do your internship when the medium of instruction is different from the medium of instruction at your university?  
What do you think about this?
14. What do you think about the effect of EMI on your foreign language development?
15. What do you think about the effect of EMI on your academic development?
16. What do you think about the effect of EMI on your professional development?
17. What do you think about the effect of EMI on your personal development?

## APPENDIX F

### ÖĞRENCİLERLE YAPILAN YARI YAPILANDIRILMIŞ ODAK GRUP

### GÖRÜŞMESİ SORULARI

*(SEMI STRUCTURED FOCUS GROUP INTERVIEW QUESTIONS FOR  
STUDENTS-TURKISH VERSION)*

1. Üniversitenizde yabancı dilde eğitim yapılırken uygulanan politikalar yani resmi kararlar hakkında ne düşünüyorsunuz? Bu kararları siz nasıl değerlendiriyorsunuz?
2. Üniversitenizde yabancı dilde eğitim yapılırken yazılı olmayan ancak ders esnasında karşılaştığımız uygulamalar var mı? Bu uygulamalar hakkında ne düşünüyorsunuz?
3. Derslerin İngilizce anlatılması ile ilgili düşünceleriniz nelerdir? Derslerde anadil kullanılıyor mu? Kullanılıyorsa nerede, nasıl, neden?
4. Sayısal ve sözel dersleri İngilizce dinlemek konusunda ne düşünüyorsunuz? Benzerlikler ve farklılıklar var mı?
5. İngilizce hazırlık programından sonra bölüme geçiş sürecini nasıl değerlendirirsiniz?
6. Dersi anlayamadığımızı düşündüğünüz durumlar oluyor mu? Böyle durumlar varsa, ne yapıyorsunuz? Neden anlamadığımızı düşünüyorsunuz?
7. Yabancı dilde (İngilizce) daha fazla geliştirilmek istenen dil becerisinin konuşma olduğu ifade edilmişti, bununla alakalı olarak, hazırlıkta konuşmayla ilgili bir ders aldınız mı? Böyle bir konuşma dersine ihtiyaç duyuyor musunuz? Böyle bir ders olursa içeriği nasıl olmalı ve bu ders hangi aşamada olmalı?

8. Dersi veren öğretim elemanlarının yabancı dil (İngilizce) kullanımı hakkında ne düşünüyorsunuz?
9. Kendi yabancı dil (İngilizce) kullanımınız hakkında ne düşünüyorsunuz?
10. Derslerin yabancı dilde yapılması ve derse katılım konusunda ne düşünüyorsunuz?
11. Öğretim elemanlarının derslerdeki dil kullanımı (İngilizce) ve dersin içeriğini anlamanız konusundaki düşünceniz nedir?
12. Sizce, öğretim elemanları dersi anlatırken nasıl bir yol izleseler, hangi yöntemleri kullansalar, öğrencilerin dersleri daha iyi anlamalarına yardımcı olurlar? Önerileriniz nelerdir?
13. Staj yaptığınız okullarda öğretim dilinin İngilizceden farklı olduğu durumlarda ne yapıyorsunuz? Bu konu hakkında ne düşünüyorsunuz?
14. Üniversitenizde öğretim dilinin İngilizce olmasının yabancı dil (İngilizce) gelişiminize etkisi konusunda ne düşünüyorsunuz?
15. Üniversitenizde öğretim dilinin İngilizce olmasının eğitimsel gelişiminize etkisi konusunda ne düşünüyorsunuz?
16. Üniversitenizde öğretim dilinin İngilizce olmasının kariyer planlamanıza ya da kariyer gelişiminize etkisi konusunda ne düşünüyorsunuz?
17. Üniversitenizin öğretim dilinin İngilizce olmasının kişisel gelişiminize etkisi konusunda ne düşünüyorsunuz?

## APPENDIX G

### ETHICAL APPROVAL FOR THE STUDY

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T.C.  
**BOĞAZİÇİ ÜNİVERSİTESİ**  
Sosyal ve Beşeri Bilimler Yüksek Lisans ve Doktora Tezleri Etik İnceleme Komisyonu

Sayı: 2019-70

20 Kasım 2019

Çiğdem Bak  
Yabancı Diller Eğitimi

Sayın Araştırmacı,

"Effects of foreign language-medium instruction on content courses in higher education" başlıklı projeniz ile ilgili olarak yaptığımız SB3-FAK 2019/65 sayılı başvuru komisyonumuz tarafından 20 Kasım 2019 tarihli toplantıda incelenmiş ve uygun bulunmuştur.

Prof. Dr. Feyza Çorapçı

Doç. Dr. Mehmet Yiğit Gürdal

Doç. Dr. Ebru Kaya

Dr. Öğr. Üyesi İnci Ayhan

## APPENDIX H

### SAMPLE LETTER TO REQUEST PERMISSION FOR THE STUDY

\_\_\_/\_\_\_/\_\_\_

Dear official,

I am Çiğdem Bak, a PhD student at Boğaziçi University, Department of Foreign Language Education. As part of my doctoral research titled “Effects of foreign language-medium instruction (EMI) on content courses in higher education”, which I am conducting under the supervision of Prof. Yasemin Bayyurt, we request your permission to conduct individual and focus group interviews with students at your institution between 16.12.2019 – 30.05. 2020. The interviews will be carried out on a voluntary basis. The data will be kept confidential and the participants’ names will not be revealed in the study. Please contact me at \_\_\_\_\_ if you have any questions.

Thank you in advance,

Kind regards,

Çiğdem Bak

## APPENDIX I

### CONSENT FORM FOR STUDENTS

Name of the research: Effects of foreign language-medium instruction (EMI) on content courses in higher education (Yükseköğretimde yabancı dilde eğitimin - öğretim dili olarak İngilizce'nin kullanımının- alan dersleri üzerindeki etkileri)

Name of the researcher: Çiğdem Bak

E-mail address:

Phone:

Project coordinator (Thesis advisor): Prof. Yasemin Bayyurt

E-mail address:

Phone:

The topic of the research:

This study has been conducted by Çiğdem Bak who is a PhD student at Boğaziçi University at Foreign Language Education Department. She is conducting this research under the supervision of Prof. Yasemin Bayyyurt from the same department. Within the framework of this research; perceptions of undergraduate students studying at the faculty of education at an English medium university in Turkey will be elicited regarding the effects of foreign language-medium instruction (EMI) on content courses in higher education. At the end of the research; the effects of foreign language-medium instruction on students regarding various areas such as language, field knowledge, methodology, professional development will be explained with respect to foreign language policies. This research is carried out with the approval of Boğaziçi University Ethics Committee for Master and PhD Theses in Social Sciences

and Humanities, and this research will be evaluated within the scope of a PhD thesis in line with an academic framework.

Consent:

Dear student,

We are inviting you to participate our research titled “effects of foreign language-medium instruction (EMI) on content courses in higher education” and share your ideas. Within the scope of this research, we hope to attain multifaceted results regarding the effects of foreign language policies within foreign language-medium instruction.

If you agree to participate in the research, we will ask you to participate in two semi structured interviews; one is individual and the other is focus group. These interviews will last between one to two hours. The interview dates will be determined according to your schedule, and will be shared with you. During the interviews, you will be addressed with a pseudonym, and the interviews will be recorded with a voice recorder. Accordingly, all the procedures will be realized on voluntary basis and with your permission.

All the participant information will be kept confidential, and will only be used for academic purposes, and will not be shared with third parties.

Your participation in the study is completely voluntary. We will not ask you to make any payment, and we will not make any payments either. The results attained from this study will not provide you with rewards such as exam grades.

You may withdraw from this research any time you want. In case of a withdrawal from this research you will not encounter any negativity, and the written or electronic copy of the information / data collected from you to that moment will be deleted.

With this research, no risks are expected on your behalf, and with this research, we aim to create an awareness in terms of reviewing the existing language policies, and reconstructing them when needed. In addition, this research is expected to contribute to all stakeholders regarding the improvement of instructional processes with foreign language-medium.

The findings of this research may be published with academic purposes in the future. Before signing this consent form, if you have any questions regarding this research, please ask your questions. If you have questions afterwards or at later stages; you can ask your questions to the researcher and the project coordinator by accessing them from the contact addresses written above. You can also apply to local ethics committees, and also Boğaziçi University Ethics Committee for Master and PhD Theses in Social Sciences and Humanities for information on your rights regarding this research (E-mail: \_\_\_\_\_ )

If your phone number changes, we kindly ask you to notify us of the changes.

I have read the text above and I fully understand the information above. I have /do not want to receive a sample of this form.

I agree to participate in this research project.

Participants' Name-Surname: .....

Signature: .....

Phone Number: .....

Date (day/month/year): ...../ ...../ .....

## APPENDIX J

### ÖĞRENCİLER İÇİN İZİN FORMU

*(CONSENT FORM FOR STUDENTS-TURKISH VERSION)*

Araştırmanın adı: Effects of foreign language-medium instruction (EMI) on content courses in higher education (Yükseköğretimde yabancı dilde eğitimin- öğretim dili olarak İngilizce'nin kullanımının- alan dersleri üzerindeki etkileri)

Araştırmacının adı: Çiğdem Bak

E-mail adresi:

Telefonu:

Proje Yürütücüsü (Tez Danışmanı): Prof. Yasemin Bayyurt

E-mail adresi:

Telefonu:

Proje konusu:

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Eğitimi Bölümü'nde, Prof. Yasemin Bayyurt'un doktora öğrencisi olan Çiğdem Bak tarafından yürütülmektedir. Bu çalışma kapsamında Yükseköğretimde yabancı dilde eğitimin alan dersleri üzerindeki etkileri konusu Türkiye'de yabancı dilde eğitim yapan bir üniversitenin eğitim fakültesinde okumakta olan öğrencilerin görüşleri alınarak gerçekleştirilecektir. Çalışma sonunda yabancı dilde yapılan eğitimin; dil, alan bilgisi, yöntem bilim ve profesyonel gelişim gibi çeşitli alanlarda öğrenciler üzerinde bıraktığı etkiler dil politikaları çerçevesinde açıklanmaya çalışılacaktır. Bu çalışma, Boğaziçi Üniversitesi Sosyal ve Beşeri Bilimler İnsan Araştırmaları Etik Kurulu onayı ile yapılacaktır ve de bu çalışma, doktora tezi kapsamında akademik çerçevede içerisinde değerlendirilecektir.

Onam:

Sayın lisans öğrencisi,

Sizi, yükseköğretimde yabancı dilde eğitimin –öğretim dili olarak İngilizce'nin kullanımının- alan dersleri üzerindeki etkileri konusundaki tez çalışmamıza görüş ve düşüncelerinizi paylaşmanız için davet ediyoruz. Bu çalışma kapsamında, yabancı dilde eğitime ilişkin dil politikalarının etkileri hakkında çok yönlü sonuçlar elde etmeyi umuyoruz.

Araştırmayı kabul ettiğiniz takdirde sizinle en fazla iki saat uzunluğunda birebir ve grup içerisinde yüz yüze görüşmeler yapılacaktır. Bu görüşme tarih ve saati, sizin de uygunluğunuz doğrultusunda belirlenecek ve tarafınıza bildirilecektir. Görüşme sırasında, size kendi belirlediğiniz bir takma isimle hitap edilecek ve ses kayıt cihazı kullanılacaktır. Her türlü prosedür gönüllülük ilkesi ve sizden alınacak izinle gerçekleştirilecektir.

Verdiğiniz bilgiler tamamen gizli tutulacak, yalnızca akademik amaçlar için kullanılacak ve de üçüncü şahıslar ile kesinlikle paylaşılmayacaktır.

Çalışmaya katılmanız tamamen isteğe bağlıdır. Sizden ücret talep etmiyoruz ve size herhangi bir ödeme yapmayacağız. Bu çalışma kapsamında alınan sonuçlar, size ders notu vb. bir katkı sağlamayacaktır.

İstedığınız zaman bu çalışmaya katılmaktan vazgeçebilirsiniz. Çalışmadan çekilmeniz durumunda hiçbir olumsuzlukla karşılaşmayacaksınız ve de sizden o zamana kadar almış olduğumuz tüm bilgilerin / verilerin her türlü yazılı ve/ya elektronik kopyası imha edilecektir.

Yapmak istediğimiz araştırmanın size risk getirmesi beklenmemektedir ve bu çalışmayla mevcut dil politikalarının gözden geçirilmesi ve ihtiyaç durumunda

yeniden yapılandırılması konusunda bir farkındalık yaratılması hedeflenmektedir ve bu çalışmanın yabancı dilde öğretim süreçlerinin geliştirilmesi konusunda alanın tüm paydaşlarına fayda sağlamasını da beklemekteyiz.

Araştırma sonuçları ileride akademik amaçlarla yayınlanabilir.

Bu formu imzalamadan önce, çalışmayla ilgili sorularınız varsa lütfen sorun. Daha sonra sorunuz olursa, araştırmacıya ve de proje yürütücüsüne yukarıda belirtilen iletişim kanallarından ulaşarak sorularınızı sorabilirsiniz. Ayrıca, araştırmayla ilgili haklarınız konusunda yerel etik kurullarına ek olarak, Boğaziçi Üniversitesi Sosyal ve Beşeri Bilimler Yüksek Lisans ve Doktora Tezleri Etik İnceleme Komisyonu'na da (SOBETİK) araştırma ile ilgili haklarınız konusunda danışabilirsiniz.

(E-posta: )

Telefon numaranız değişirse bize haber vermenizi rica ederiz.

Bana anlatılanları ve yukarıda yazılanları anladım. Bu formun bir örneğini aldım / almak istemiyorum.

Çalışmaya katılmayı kabul ediyorum.

Katılımcı Adı-Soyadı: .....

İmzası: .....

Telefon Numarası: .....

Tarih (gün/ay/yıl): ...../ ...../ .....

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