T.C.
BOLU ABANT İZZET BAYSAL UNIVERSITY
INSTITUTE OF EDUCATIONAL SCIENCES
FOREIGN LANGUAGES EDUCATION
DEPARTMENT OF ENGLISH LANGUAGE TEACHING

LANGUAGE NEEDS OF TERTIARY-LEVEL ENGLISH-MEDIUM DEPARTMENTS: A CASE STUDY OF STAKEHOLDERS' PERSPECTIVE

SİNEM DOĞAN

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M.A. THESIS

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YÜKSEK LİSANS TEZ ONAY FORMU

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Sinem DOĞAN

To the memory of my dear brother *Şafak*, who is not with us and is in paradise now

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LIST OF ABBREVIATIONS

BAIBU : Bolu Abant İzzet Baysal University
ZZBEU : Zonguldak Zonguldak Bulent Ecevit University
CALLA : Cognitive Academic Language Learning Approach
CALP : Cognitive Academic Language Proficiency
CBI : Content Based Instruction
CEFR : Common European Framework of Reference for Languages
CLIL : Content and Language Integrated Learning
CNP : Communication Needs Processor
EAP : English for Academic Purposes
EFL : English as a Foreign Language
EGP : English for General Purposes
EMI : English-Medium Instruction
EOP : English for Occupational Purposes
ESL : English as a Second Language
ESP : English for Specific Purposes
EST : English for Science and Technology
ICLHE : Integrating Content and Language in Higher Education
IEP : Intensive English Program
LAC : Language Across the Curriculum
LSA : Learning Situation Analysis
L2 : Second Language
LSP : Language for Special Purposes
PSA : Present Situation Analysis
SCLT : Sustained Content Language Teaching
SLEP : Programs with Limited English Proficiency
TOEFL : Test of English as a Foreign Language
TSA : Target Situation Analysis
WAC : Writing Across the Curriculum
WI : Writing Intensive
YDS : Yabancı Dil Sınavı
YTU : Yıldız Teknik University

ABSTRACT

LANGUAGE NEEDS OF TERTIARY-LEVEL ENGLISH-MEDIUM DEPARTMENTS: A CASE STUDY OF STAKEHOLDERS' PERSPECTIVE

Doğan, Sinem

M.A., Program of English Language Teaching
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MAY 2019, 181 pages

This study investigated the academic English language needs of students in English-medium departments through the perspectives of content area specialists and departmental chairs at Bülent Ecevit University (ZBEU). The primary aim of the study is t o determine which language skill - among reading, writing, listening, and speaking - should be given priority for students' academic studies and to determine the importance of specific language tasks and sub-skills related to four basic skills. The secondary aim of the study is to explore the attitudes of content area specialists towards English-medium instruction in content classes. At Zonguldak Bulent Ecevit University, there are six departments teaching content area courses in partial (30%) English. Students in these departments have to enroll in the compulsory preparatory programme of the university in their first year, and they have to complete the programme successfully. This study is aimed at finding out what the content area specialists and departmental chairs of different disciplines actually require in terms of academic English so that sound curricular recommendations could be made for English language courses in the School of Foreign Languages at ZBEU. Accordingly, the needs analysis in this study sought for answers to the following research questions:

1. Which English language skill(s) has the most importance for content area courses in English Medium Departments at ZBEU?

2. What are the academic English language requirements of content area specialists among the specified language tasks and strategies related to each language skill?
3. What are the attitudes of content area specialists toward English medium instruction in content classes?
    a) In terms of language preferences in their classes and the reasons for their language-teaching/learning preferences?

Data were collected through questionnaires and interviews which were conducted in six departments. The questionnaire including seven sections was completed by 20 content area specialists in six departments and the interview including one question was conducted with the departmental chairs. In the questionnaire, the content area specialists were asked to determine which skill, among reading, writing, listening, and speaking has the highest priority. It was also investigated the frequency of the specified language tasks and the importance degree of sub-skills or strategies related to the skills of reading, writing, listening, and speaking through the sections prepared in Likert scale. Through the interview, departmental chairs stated their attitudes towards English-medium education. The results show that the vast majority of content area specialists in different departments report that reading is the most important skill for the English-medium departments. Apart from the most important skill, the ranking of other sub-skills varies from one department to another. The largest group of faculty members teaches both in English and in Turkish. Participants who prefer Turkish to teach content state two reasons for this. Firstly, they think the students do not have adequate English to understand the content that they are teaching and they also believe that language of instruction should be in native language. The other participants who prefer English to teach content believe that students should read the materials written in English to be able to follow the latest developments in their field, and students are required to know English for graduate studies, and for their professional career.

Based on these results, adjusting the current foreign language curriculum by taking into consideration of the expectations and demands of content area specialists is recommended.

Key words: English Language Teaching, Content Based Instruction, Curriculum Development, Needs Analysis

ÖZ

YÜKSEK ÖĞRETİM SEVİYESİ İNGİLİZCE BÖLÜMLERİN DİL İHTİYAÇLARI: PAYDAŞLARIN BAKIŞ AÇISINDAN BİR VAKA ÇALIŞMASI

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Bu çalışma Zonguldak Bülent Ecevit Üniversitesi'nde (ZBEU) çalışan alan öğretmenleri ve bölüm başkanlarının bakış açısı ile eğitimin İngilizce verildiği bölümlerde okuyan lisans örencilerinin akademik İngilizce ihtiyaçlarını araştırmıştır. Çalışmanın öncelikli amacı bölümlerde okuma, yazma, dinleme ve konuşma becerilerinden hangisine ya da hangilerine öncelik verildiğini ortaya çıkarmaktır. Diğer bir amacı ise dört temel beceriye göre belirlenmiş dil çalışmalarının derslerde kullanım sıklığını ve dil stratejilerinin ya da alt becerilerin önemini belirlemektir. Çalışma ayrıca alan öğretmenlerinin İngilizce içerikli eğitime karşı tutumlarını da araştırmıştır. Bülent Ecevit Üniversitesi'nde kısmi (30%) İngilizce ile eğitim yapan 6 bölüm mevcuttur. Bu bölümlerde okuyacak olan öğrenciler ilk yıllarında üniversitenin hazırlık okuluna kayıt yaptırmak zorunda ve bölümlerine geçiş yapabilmek için hazırlık eğitimini başarıyla tamamlamak zorundadırlar. Bu çalışma ile farklı alanlardaki akademisyenler ve bölüm başkanları akademik İngilizce açısından hangi becerilere ve alt beceri ya da stratejilere ihtiyaç duyulduğunu bildirmişleridir. Böylece Yabancı Diller Yüksekokulunda yapılan müfredat çalışmaları için sağlam kararlar ve tavsiyeler verilmesi beklenmektedir. Bu amaçlar doğrultusunda çalışmadaki ihtiyaç analizi aşağıdaki sorulara cevap aramaya çalışmıştır:

1. Bülent Ecevit Üniversitesi'nde İngilizce bölümlerde alan dersleri için en önemli dil becerisi ya da becerileri nelerdir?

2. Alan öğretmenlerinin her bir dil becerisiyle alakalı belirlenmiş dil çalışmaları ve stratejileri arasından akademik İngilizce beklentileri nelerdir?
3. Alan öğretmenlerinin uygulanan İngilizce eğitime karşı tutumları nelerdir?
   a) Sınıflarında tercih ettikleri dil ve bu tercihlerinin altında yatan sebepler açısından?

Bu çalışmada veri toplamda 6 bölümde uygulanan anketler ve mülakatlar aracılığıyla toplanmıştır. Anket 7 (yedi) bölümden oluşmaktadır ve toplam 20 akademisyen tarafından doldurulmuştur. Tek soru içeren mülakat ise bahsi geçen bölümlerin bölüm başkanları ile yapılmıştır.

Uygulanan anket aracılığı ile alan öğretmenlerinden derslerinde okuma, yazma, dinleme ve konuşma becerilerinden hangisinin en önemli olduğunun belirlenmesi istenmiştir. Bunun yanı sıra kullanılan anket Likert ölçeğiyle hazırlanmış bölümler halinde okuma, yazma, dinleme ve konuşma becerileri ile ilgili belirlenmiş dil çalışmalarının sıklığı ve alt beceri ya da stratejilerin önemini de araştırmıştır. Diğer taraftan, mülakat aracılığıyla bölüm başkanları bölümleri için İngilizce eğitime karşı olan tutumlarını bildirmişlerdir. Sonuçlara göre, farklı bölümlerden olan katılımcıların büyük bir çoğunluğu en önemli dil becerisi olarak okuma becerisini seçmişlerdir. Bunun haricinde, dil çalışmalarının ve alt beceri ya da stratejilerin bölümden bölüme farklılık gösterdiği tespit edilmiştir. Son araştırma sorusu ile alakalı olarak katılımcıların büyük bir çoğunluğu derslerinde hem İngilizce hem de Türkçe eğitim verdiklerini söylemişlerdir. Sadece Türkçeyi tercih ettiklerini söyleyen katılımcılar bu durum için iki sebep göstermişlerdir. Gösterilen sebepler öğrencilerin akademik içeriği İngilizce anlayabilecek seviyede olmadıkları ve eğitim dilinin ana dil olması gerektiği şeklindendir. Derslerinde İngilizceyi kullanan diğer katılımcılar ise öğrencilerin alandaki son gelişmeleri takip edebilmesi için materyalleri İngilizce okumaları gerektiğini ve yüksek lisans/ doktora çalışmaları ve kariyerleri için İngilizceyi bilmeleri gerektiği yolundadır.

Sonuç olarak, bu çalışmanın bulgularının Yabancı Diller Yüksekokulundaki müfredat çalışmaları için dikkate alınması önerilmektedir.

Anahtar Kelimeler: İngiliz Dili Eğitimi, İçeriğe Dayalı Eğitim, Müfredat Gelişimi, İhtiyaç Analizi

CHAPTER I

INTRODUCTION

1. Introduction

This chapter consists of background to the study, the purpose, the research questions, the significance of the problem, the setting and the participants. By looking in each part in detail, it will be clearer what purpose the study will serve for.

1.1. Background to the Study

Using a second or foreign language as a medium of instruction is not a new situation (Swain & Johnson, 1997). As cited in Swain and Johnson (1997), throughout the history of formal education, it has been a general situation (Lewis, 1976). For instance, Latin had been the medium of religious and secular education in Europe for a thousand years. Similarly, Classical Arabic is still widely used as the medium of instruction in Muslim countries. English, French, Spanish, and Portuguese are still widely used in the colonized areas despite the ending of the colonial era (Swain & Johnson, 1997). Additionally, teaching or learning a language within a context or meaningful content is not a new phenomenon. On the contrary, it has been widely accepted in language teaching. However; the question that comes to one's mind is 'What is the role of this meaningful content in foreign language teaching and how important is it?'. As an answer for such questions, theorists and practitioners pointed out that it is not enough to contextualize the lessons around the structures or functions; rather, they suggested using authentic texts based on the second language needs of the learners as a starting point (Brinton, Snow, & Wesche, 1989) because it was realized that teaching an item just because of its existence in the language was not necessary

(Nunan, 2004). With this notion, according to Brinton, et al. (1989, p.2), two views appeared. While one of them suggested teaching lessons focused on specific structures, functions or discourse features by using the authentic texts in isolation, the other focused on the incidental acquisition of these features emphasizing the informational content. In fact, in both of these views, Content-Based Instruction (CBI), in a general sense, refers to "the integration of particular content with language-teaching aims". In a specific sense, "it refers to the concurrent teaching of academic subject matter and second language skills. The language curriculum is based directly on the academic needs of the students". Both in theory and in practice, "CBI aims at eliminating the artificial separation between language instruction and subject matter classes which exists in most educational settings".

In the light of this brief definition, it can be concluded that a CBI curriculum should be based on the goals, needs and interests of learners. Because this instruction is appropriate in an educational setting where learners have specific needs, determining needs of learners, therefore, is an essential component of CBI. The present study aims at identifying needs of students in CBI classes through the stakeholders' perceived needs, namely through the perspectives of content area specialists. The results are expected to strengthen CBI applications and to offer an insight into curriculum renewal studies.

1.2. Statement of the Problem

At Zonguldak Bulent Ecevit University, there are six departments - Department of Electrical and Electronics Engineering, Department of Environmental Engineering, Department of Civil Engineering, Department of Mining Engineering, Department Of Economics and Department of Business Administration - where content is taught through partial English. Currently, students in these departments are registered on an obligatory preparatory programme of the university as required by law. The students have to complete the programme successfully. If they fail, they can not start education in their departments. All the students enrolling in this programme are required to reach B1 level in CEFR, which is the exit level of the programme.

At ZBEU, the School of Foreign Languages has two departments: School of Basic English and Modern Languages. In the department of the School of Basic English, classes are organized based on the language proficiency levels of students which is based on a replacement exam carried out before courses start. Also, each year curriculum studies are done in the department of the School of Basic English. These curriculum renewal studies both focus on goals and content of the coursebooks and take the instructors' feedback, decisions or ideas into consideration. The content of the coursebook taught is adopted as curriculum and syllabus. Shortly, decisions related to the curriculum are made according to the ideas of the instructors, curriculum office and coursebook objectives without conducting any needs analysis. Therefore, the main core is to teach the coursebook content rather than teaching the language itself. As a result of this, the existing curriculum in the department of the School of Basic English has not been meeting the expectations of students studying in these departments and content area specialists. Every year, Preparatory Program faces some informal complaints coming from students and content area specialists in these departments. The content area specialists have always been complaining about the language proficiency levels of the students and students have been complaining about the complexity and difficulty of their content area courses in English. In summary, both the necessity of determining needs for a sound curriculum and informal or social chats done with content area specialists in the departments mentioned above have revealed the importance of a needs analysis study for the current language programme at the university.

1.3. Research Questions

This study investigated the Academic English language needs of students in English-medium departments through the perspectives of content area specialists and departmental chairs at Zonguldak Bülent Ecevit University (ZBEU). The primary aim of the study is to determine which language skill - among reading, writing, listening, and speaking- should be given priority for students' academic studies and to determine the frequency of specific language tasks and the importance of sub-skills related to four basic skills. The secondary aim of the study is to present the attitudes of content area

specialists towards English- medium education in content classes. At Zonguldak Bulent Ecevit University, there are six departments teaching content area courses in partial (30%)English . Students in these departments have to enroll in the compulsory preparatory programme of the university in their first year, and they have to complete the programme successfully. This study aims at finding out what the content area specialists and heads of the departments of different disciplines actually require in terms of academic English so that sound curricular recommendations could be made for English language courses in the School of Foreign Languages at ZBEU. Throughout these aims, the needs analysis in this study sought for answers to these research questions:

1. Which English language skill(s) has the most importance for content area courses in English Medium Departments at ZBEU?

2. What are the academic English language requirements of content area specialists among the specified language tasks and strategies related to each language skill?

3. What are the attitudes of content area specialists toward English medium education in content classes?
   a) In terms of language preferences in their classes and the reasons for their language-teaching/learning preferences?

1.4. The significance of the Study

As stated before, the current study investigated content area specialists' perceived academic English language requirements in a state university in Turkey and in the literature, there have been many studies over needs analysis in CBI contexts. The primary aim of all these studies is to determine students' needs and to develop CBI implementations based on the needs. However, the studies on needs analysis in CBI settings vary across the academic level, academic field, disciplines and academic language skills. While majority of the studies focus on the necessity of one academic

language skill (Behrens, 1978; Bridgeman & Carlson, 1983; Eblen, 1983; Eroğlu, 2005; Şahbaz, 2005; West & Byrd 1982; Yazıcıoğlu, 2004), some others are aimed at investigating the necessity of four basic skills (Arık, 2002; Canbay, 2006; Güler, 2004; Johns, 1981; Gözüyeşil, 2014; Ostler, 1980; Şahan, Çoban & Topkaya, 2016) or two academic language skills (Ferriss & Tagg , 1996). Apart from these, while one study is carried out to design a CBI program based on the needs (Gee, 1997), the other ones are performed to identify the attitudes of academicians' towards English-medium instruction (Güler, 2004; Somer, 2001). However, when considered the uniqueness of each teaching context and each research study is performed in different settings, the current study is significant to build upon the existing literature on needs analysis studies in CBI contexts.

In addition, as stated before, the lack of research on needs analysis has been affecting the curricular decisions negatively at the School of Foreing Languages. For this case, Grier (2005) remarks:

> In order to develop curricula of quality, developers must have valid information on which to base their curricular decisions. The various methods of needs assessment are valuable tools that provide curriculum developers with this information. By incorporating needs assessments in their curricular decisions, curriculum developers can select options that benefit both the learners and society (p.65).

Thereby, the current study is expected to provide scientific data for the curricular studies and insight for curriculum designers, language instructors and administrators in the preparatory school. When such awareness on target language needs has been raised among the language instructors, classroom practices, teaching and learning environment will be directly influenced. In addition, compulsory preparatory instruction for only students of the departments teaching content in English has showed the necessity of determining academic requirements of subject area courses, which will be carried out through a needs analysis study. Another important point concerning the study is that content area specialists will be informed about CBI applications. Therefore, CBI implementations in the content area courses will be strengthened through this study. In short, the significance of the current study lies in the fact that it has been the

first needs analysis study conducted for the departments teaching content through English at ZBEU. Last but not least, the present study may also be a call for further studies and investigations on needs analysis studies for CBI courses at ZBEU. In summary, this research aims to design a curriculum based on needs analysis, to guide instructors and content area specialists in this design process and strengthen CBI applications at ZBEU.

CHAPTER II

LITERATURE REVIEW

2. Introduction

This section consists of two parts. The first part involves the theoretical framework of content-based instruction (CBI) and needs analysis. Accordingly, firstly it will be provided that what content-based instruction is, the historical background of CBI, the principles of CBI, rationales for CBI and the variations of CBI. Additionally, it will also be presented that the emergence of the concept of needs, the historical background of the process of needs analysis, and what constitutes the process of needs analysis. Finally, related studies in international and national contexts will be presented.

2.1. Theoretical Framework

According to Stryker and Leaver (1997,p.3-5), CBI "… is a truly and holistic approach to foreign language education" and " …can be at once a philosophical orientation, a methodological system, a syllabus design for a single course, or a framework for an entire program of instruction". As a form of bilingual education, it embodies a lot of instructional models (Swain & Johnson, 1997). Known as also Content and Language Integrated Learning (CLIL) in Europe, CBI differs from traditional teaching methods in many ways. With the aim of ending the unnatural separation between the language and content in language teaching, it was proposed against bottom-up approaches as an alternative (Brinton, et al., 1989; Stryker & Leaver, 1997; Wesche & Skehan, 2002).

2.1.1. The Definition of Content-Based Instruction

There have been many definitions concerning what a content-based instruction is. For instance, while Krahnke (1987,p.65) remark "It is the teaching of content or information in the language being learned with little or no direct or explicit effort to teach the language itself separately from the content being taught", Brinton, et. al. (1989, p.vii) state that it is "… the concurrent study of subject matter form and sequence of language presentation dictated by content materials". Richards and Rodgers (2011,p.204) state "Content-Based Instruction (CBI) refers to an approach to second language teaching in which teaching is organized around the content or information that students will acquire rather than around a linguistic or other type of syllabus". According to Stoller (2004, p.261), this instruction "… is dual commitment to language and content-learning objectives".

However, as Met (1999,p.4) points out, although different terms are used for the definition of content based instruction, the common phenomenon is that "students engage in some way with content using a non-native language" and they all commonly refer to integrating language and content. In addition, the author puts forward that there is also some variety in the definitions of the term 'content'. Accordingly, while Crandall and Tucker (1990) view content as academic subject matter, Genesee (1994) highlights that content does not have to be academic; it may be any topic relevant to learners' interest or needs. On the other hand, Chaput (1993) defines the term content as intellectual contribution to the understanding of target language and target culture.

2.1.2. The Historical Background of Content-Based Instruction

The importance given on to meaning in language teaching is not a new phenomenon (Brinton, et. al., 1989; Grabe & Stoller, 1997; Richards & Rodgers, 2001; Stryker & Leaver, 1997). The historical antecedent of content-based language instruction can be found as early as 389 A.D. As cited in Kelly (1969, p.36), St. Augustine (60: XI) emphasized the meaningful content in language learning as follows:

> Once things are known knowledge of words follows … we cannot hope to learn words we do not know unless we have grasped their meaning. This is not achieved by listening to the words, but by getting to know the things signified.

In addition, Brinton et. al. (1989, p.4) also highlight that there have been a lot of attempts concerning learning a second or a foreign language through meaningful exposure throughout the history of language teaching. For centuries, upper-class European families have realized the importance of direct interaction in language learning and sent their children abroad to live and study or hired foreign tutors or governesses for their children. Also, as another evidence, the authors state "…soldiers, traders, immigrants, inhabitants of border areas, prisoners of war, footloose students, and even tourists" have been able to develop their second language skills through extensive exposure and contact throughout the history (Brinton, et. al., 1989). In addition to these older implicit examples highlighting the importance of content in language learning, the first published volume on CBI appeared on the language teaching scene in 1986 by Bernard Mohan's volume named *Language and Content*, which proposes that language teaching should not be isolated from content.

According to Brinton et. al. (1989), the roots of content based instruction go back to the simultaneous developments between 1960s and 1980s in Canada, in the United Kingdom and in the United States. Accordingly, the roots of CBI are usually associated with immersion programs developed in Canada (Stoller, 2008). CBI emerged at the elementary and secondary education levels as *immersion programs* in the early 1960s in Canada. The aim of the program was that learners were intensively exposed to the target language through a native speaker by starting at a young age (Brinton, et. al., 1989). Designed to teach French to English-speaking children, these French immersion programs became the best-known form and the precursor of other types of CBI (Lambert & Tucker, 1972). Due to the success of the program in terms of functional French and content knowledge, French immersion programs first spread across the country (Brinton, et. al., 1989). Several years after its emergence in 1965, the immersion model spread to the United States (Lambert & Tucker 1972).

As the most intensive form of content based instruction, immersion education refers to an approach in which curricular activities are designed and conducted based on a foreign language (Snow, 1986). According to Geneese (1987):

> …at least 50 percent of instruction during a given academic year must be provided through the second language for the program to be regarded as immersion. Programs in which one subject and language arts are taught through the second language are generally identified as enriched second language programs (p.1).

In addition, immersion programs vary according to their aims, student profiles and the intensivity of their instruction. Generally, there are three variants of French immersion program. These are early immersion starting in kindergarten or grade 1, middle immersion starting in grade 4 or 5 and late immersion starting in grade 7 (Brinton & Snow, 2017). The goals of an immersion program are listed as follows (Richards & Rodgers, 2001, p.206):

(1) developing a high level of proficiency in the foreing language ;
(2) developing positive attitudes toward those who speak the foreing language and toward their culture (s);
(3) developing English language skills commensurate with expectations for a students's age and abilities;
(4) gaining designated skills and knowledge in the content areas of the curriculum.

As the most researched example of CBI, immersion programs were influential to introduce CBI worldwide and soon paid attention of second and foreign language educators (Stryker & Leaver, 1997). Also, the research studies conducted for over 40 years proved that the immersion programs have contributed a lot on students' content knowledge and language skills (Genesee, 1987; Swain & Lapkin, 1982).

As another development, *Language Across the Curriculum* (LAC) movement emerged over a proposal by a British governmental commission in England in the 1970s as a first language development (Grabe & Stoller, 1997). According to this report, first language instruction should be incorporated into all content-area instruction (Brinton,

et. al., 1989). In other words, reading and writing are incorporated into all subject matter domains throughout the school years. The goal of this notion is not learning to write or learning to read; on the contrary it is ‘writing to learn’ and ‘reading to learn’, which shows that reading and writing are the central components of the curriculum (Grabe & Stoller, 1997; Richards & Rodgers, 2001). Soon a slogan appeared out associated with this notion as “Every teacher, an English teacher” (Richards & Rodgers, 2001, p.205). As a result of this cross-curricular focus offered to native English speakers, students can develop functional skills in their own language and refine the language skills, which is required for advanced schooling. After this movement’s success, which was applied firstly in British schools, related approaches flourished in the United States and Canada: ‘Writing in the Content Areas for secondary grades’, ‘Reading in the Content Areas for secondary grades’ and ‘Writing Across the Curriculum (WAC)’ in North American Universities. This approach, which has led to new developments in teacher training and materials development, has an influence on second language instructional theory and practice at the same time (Brinton, et. al., 1989).

As stated before, another concurrent development in Britain was the movement of Language for Special Purposes (LSP). This movement emerged for university level and occupational settings in Britain in the late 1960s and soon spread to the United States (Brinton, et. al., 1989; Hutchinson & Waters, 1987). As a common method in second and foreing language settings worldwide (Styker & Leaver, 1997), this pragmatic and experience-based instruction is based on systematic analysis of the learners’ functional needs in the second language. Identifiable language objectives, specialized requirements and content are defined according to the learners’ needs. As learners’ needs are at the centre and language objectives and content reflect these needs, this movement is aimed at preparing learners to acquire real-world skills. In practical sense, as LSP courses serve for some specific occupations (e.g. engineer, chemist, nurse), fields and levels of study, this instruction is only possible in homogeneous groups in which characteristics, needs and purpose are relatively similar (Brinton, et. al., 1989). Also, it has a number of subfields such as ESP (English for Specific Purposes), EOP (English for Occupational Purposes) and EAP (English for Academic Purposes) (Hutchinson & Waters, 1987; Richards&Rodgers, 2001). As its major

component is experiential language learning through the frequent use of authentic materials, LSP approach has a similar methodology to CBI (Grabe & Stoller, 1997).

2.1.3. The Principles of CBI

CBI is heavily depended on the principles of Communicative Approach (Brinton & Snow, 2017; Stryker & Leaver, 1997; Richards & Rodgers, 2001) which has also become a foundation of other approaches such as ESP, EAP and task-based teaching (Brinton& Snow, 2017). According to Howatt (1984), emerging in the 1980s, Communicative Approach has two versions as 'strong' and 'weak' version and the author distinguishes those versions as follows:

There is, in a sense, a 'strong' version of the communicative approach and a 'weak' version. The weak version which has become more or less standard practice in the last ten years, stresses the importance of providing learners with opportunities to use their English for communicative purposes and, characteristically, attempts to integrate such activities into a wider program of language teaching. … The 'strong' version of communicative teaching, on the other hand, advances the claim that language is acquired through communication, so that it is not merely a question of activating an existing but inert knowledge of the language, but of stimulating the development of the language system itself. If the former could be described as 'learning to use' English the latter entails 'using English to learn it' (p.279).

Based on the definition above, the weak version of Communicative Approach, as stated by Freeman and Anderson (2011), refers to the Communicative Language Teaching and the strong version refers to the Content-Based Instruction, Task-Based Language Teaching and Participatory Approach. In other words, as stated above, while the weak version refers to 'learning to use' English, the strong version describes 'using English to learn it' (Howatt, 1984, p.279). Similarly, according to Stryker and Leaver (1997, p.12), "…CBI is part of what has been termed a 'new paradigm' in language education" and this paradigm is aimed at developing students' 'communicative

competence' in the foreign language. Concerning the concept of 'communicative competence', the authors put forward that.

This concept is especially relevant to CBI since, in order to prepare our students to live and work in a new culture, we must create a direct link between the classroom and the culture being studied. This cannot be accomplished effectively in a program that focuses primarily on grammatical competence (Stryker & Leaver, 1997,p.12).

Apart from being an extension of Communicative Approach, according to Richards and Rodgers (2001, p.207), CBI is based on two main principles. These are "People learn a second language more successfully when they use the language itself as a means of acquiring information, rather than as an end in itself" and "Content-Based Instruction better reflects learners' needs for learning a second language". In other words, the authors highlight that learning a second or foreing language through the content based on needs is more effective than learning that language for its own sake. On the other hand, Brinton (2003, p.205-208) offers other five principles regarding CBI as follows:

- Base instructional decisions on content rather than language criteria.
- Integrate skills.
- Involve students actively in all phases of the learning process.
- Choose content for its relevance to students' lives, interests, and/or academic goals.
- Select authentic texts and tasks.

In other words, according to Brinton (2003), in content-based instruction, content is the organizing principle in selecting and sequencing the language items contrary to the traditional instructional models. In addition, as in the real world, multiple skills including grammar and vocabulary are simultenously developed. As it is based on Communicative Approach as the main principle, student-centered environment is fostered. Also, peer input and interaction are essential. Therefore, students are directly involved into the process. Content selection is based on students and instructional setting. As the main purpose is not to teach language, texts or tasks in real

world are used. Similarly, Stryker and Leaver (1997, p.5) also state that the success of a CBI program is based on three essential components. Accordingly, a CBI curriculum "(1) is based on a subject-matter core; (2) uses authentic language and texts and (3) is appropriate to the needs of specific groups of students".

2.1.4. Support for CBI

The theoretical foundations and research studies from a variety of sources support and promote content-based learning. Accordingly, the strongest support for CBI comes from the area of second language acquisition (Richards& Rodgers, 2001). The studies of Krashen (1982), Swain (1985) and Cummins (1984, 1989) in the area support and encourage content-based learning (Grabe & Stoller, 1997). Also, another support comes from classroom training studies including the research on cooperative learning, metacognitive/learning strategy instruction and extensive reading (Snow, 2001). On the other hand, research studies on cognitive learning theroy, depth-of-processing research, discourse comprehension processing research, motivation, attribution and interest and expertise from the fields of educational and cognitive psycoholgy and linguistics argue the benefits of CBI (Grabe & Stoller, 1997; Snow, 2001). Last but not least, the outcomes of CBI programs highlight the advantages of CBI (Grabe & Stoller, 1997; Richards& Rodgers, 2001).

2.1.4.1. Support for CBI from Second language Acquisition Research

As stated before, the strongest argument comes from Krashen (1982), Swain (1985) and Cummins's (1984, 1989) studies conducted in the field of second language acquisition. Accordingly, first of all, input hypothesis by Krashen (1982) can be considered as the strongest argument coming from the research in second language acquisition (Brinton, et. al., 1989; Brinton, 2003; Grabe & Stoller, 1997; Richards & Rodgers, 2001; Snow, 2001). Krashen's (1982) *comprehensible input hypothesis* provides an early rationale for CBI. This hypothesis emphasizes that input in the target language must be understood by the learner for successful language acquisition and the language that students are exposed to must be just a step beyond the level of the student.

Krashen explains this process with a formula ‘i+1’. According to this formula, ‘i’ represents the level of language already acquired and ‘+1’ represents the one step beyond that knowledge. According to Swain (1985), this hypothesis argues that acquisition occurs when the input is comprehensible. In this acquisition process, as input must contain new elements, comprehension is accomplished through situational and verbal contexts. Students therefore make a great deal of progress by combining these with their imperfect knowledge of language, with their world knowledge and expectations. In this way, they form a developing stock consisting of formal, functional, and semantic associations. Although some critics argue that this comprehended input does not create a sufficient condition for acquiring productive skills, strong evidence points out that this input enables students a high level of proficiency in listening and reading skills. According to Grabe and Stoller (1997), such instruction in which learning is occurred through significant and relevant content, therefore, can meet the needs of both conditions.

On the other hand, as pointed out by Grabe and Stoller (1997, p.6), Krashen’s argument “has not only supported the use of CBI but has, in turn, been supported by the successful results of a number of L2 CBI programs” such as Canadian immersion programs, U.S. bilingual immersion programs and the University of Ottawa sheltered programs for second and foreign language classes. These programs contributed a lot for the importance of comprehensible input for L2 development and L2 content learning (Snow, 1993; Wesche, 1993) .After the assessment of the success of the immersion programs in Canada, it turned out immersion students showed equivalent subject matter achievement, equivalent L1 learning and near-native L2 learning in terms of comprehension skills when compared to the non-immersion students in Canada (Brinton, et. al., 1989; Grabe & Stoller, 1997). Late-immersion programmes in French even gave positive results (Wesche, 1993).

However, after reassessment of the Canadian immersion programs, Swain (1985) argued that immersion education was successful at teaching subject matter and receptive skills such as listening or reading, but not sufficient for the productive skills such as writing and speaking. As a result, Swain (1985) proposed a hypothesis called

output hypothesis. Accordingly, there must be explicit focus on productive language skills as well as comprehension skills.

Apart from these, the recent discussions of Vygotskian approaches for the field of second language acquisition have indicated that these "…sociocultural approaches are generally consistent with CBI" (Grabe & Stoller, 1997, p.7). Accordingly, as identified by Lantolf (1994), Vygotskian-based concepts of (a) *negotiation in the Zone of Proximal Development,* (b) *private speech* (c) *student appropriation of learning tasks* can be applied in CBI contexts. In CBI classes, students negotiate the knowledge and extend their knowledge as more content is incorporated into lesson. Within this increasing complexity, students engage in private speech. They sort out input and rehearse through interaction with more knowledgeable individuals. As they have chances of learning from teachers and peers, they appropriate the activities, strategies or content.

A final theoretical support from second language learning, according to Grabe and Stoller (1997), comes from Cummins's (1984, 1989) notion of Cognitive Academic Language Proficiency (CALP). Accordingly, Cummins (1984, 1989) claims that second language learners are taught Basic Interpersonal Communication Skills in a very short time and these skills are not sufficient for success in an academic second language learning context. For the development of CALP, which can take from 5 to 7 years or more, and in order to meet students' educational needs which include more demanding language abilities and more complex academic content, content instruction and academic language teaching should be integrated.

2.1.4.2. Support from Educational Studies

Research on instructional approaches such as cooperative learning, metacognitive/learning strategy instruction and extensive reading has given effective results that support CBI (Grabe & Stoller, 1997; Snow, 2001).

Cooperative Learning

In this approach, students work together in small groups in order to learn information and carry out tasks, which encourages peer group support and peer instruction (Grabe & Stoller, 1997). According to Slavin's (1995) controlled experimental research studies, this approach contributes to student cooperation, creates higher motivation for learning, more positive attitudes toward school, success and learning and improves self-esteem of the learners. These results overlap with the goals of CBI quite a lot.

Metacognitive/Learning Strategy Instruction

The research studies on reading strategy training have shown that strategy learning should be integrated within a curriculum of content and language instruction as a consistent component. In this approach, however, the aim is not to language learning strategies separately, rather, is to integrate the concepts of *strategy awareness* and *development* into the curriculum. Thereby, strategy awareness and development form the basis of all learning activities in such a curriculum and learners can transfer these strategy skills to independent learning contexts, which occurs a long-term learning. Likewise, in a content-based classroom, strategy instruction is consistently incorporated into the extended coherent material, which shows that CBI approach attaches importance to train a strategic language and content learner (Grabe & Stoller, 1997). Although designing and carrying out strategy training programs for learners is demanding, integrating this approach in a curriculum seems the best opportunity (Pressley & Woloshyn, 1995).

Extensive Reading

Research on extensive reading has indicated the benefits of reading extended materials in both L1 and L2 contexts (Grabe & Stoller, 1997). While extensive reading in L1 contexts increases reading skills, vocabulary and world knowledge (West, Stanovich & Mitchell, 1993), Elley (1991) strongly argued that reading extensively in L2 contexts increases also learners' language abilities in four basic language skills and vocabulary; their content-area knowledge and their motivation. Therefore, Grabe and

Stoller (1997) concluded that extensive reading offers support for CBI approach in terms of skills transfer and other advantages.

2.1.4.3. Support for CBI from Educational and Cognitive Psychology

Research on educational and cognitive psychology has claimed the effectiveness of CBI (Snow, 2001). According to Grabe and Stoller (1997), the following five areas in these fields provide contributions to CBI.

Cognitive Learning Theory

Anderson's learning theory (1983, 1990a, 1990b, 1993) offers a strong support for the Cognitive Academic Language Learning Approach (CALLA) by O'Malley and Chamot (1990) and provides a strong basis for the effectiveness of CBI (O' Malley, 1990). This learning theory, called ACT theory, consists of three stages of learning which are *cognitive stage, associative stage* and *autonomous stage* respectively. It starts with a stage in which students notice the knowledge, and continues with a second stage in which correct connections are made, and ends with a stage in which behavior becomes automatic and is performed without almost any effort, which thereby independent learning is promoted (Anderson, 1990b). As it explains the complex skill development very well, it provides a solid foundation for academic and complex language learning and integration of content and language (Anderson, 1993; Chamot& O' Malley, 1994).

Depth-of-Processing Research

Depth-of-processing research studies have shown that when coherent and meaningful information is processed deeply, better learning occurs (Anderson, 1990a; Barsalou, 1992; Stillings, Feinstein, Garfield, Rissland, Rosenbaum, Weisler & Baker-Ward). The findings of this research are relevant for CBI. First of all, the results of the research conducted by Anderson (1990a) showed that students' elaborations made on the information lead to better recall. Secondly, when connections including emotional and affective are made between the ideas in a text, this recall improves. Thirdly, recycling the related information and connections between the existing and prior

knowledge create more complex linkages and pathways in memory, which shows that better learning and recall occurs.

Discourse Comprehension Processing Research

Research studies on discourse comprehension processes and text coherence showed that if the information is given coherently, or a material is organized thematically, recalling is easier and thereby more effective learning occurs (Singer, 1990). Similarly, according to Spiro, Vispoel, Schmitz, Samarapungavan and Boerger (1987), presenting information about the discourse of the text and connected information makes learning and recalling easier and help learners to use the information in new contexts. Also, verbal and visual organizers and representations help learners to understand the content and improve learning (Paivio, 1986). Based on the results of the studies mentioned, Grabe and Stoller (1997) conclude that this research area supports the goals of CBI, which are to improve recall of the students through coherently presented content in the learning process. As such, learners make appropriate connections with the other content, which leads to being used more complex language learning activities. As complexity increases, transferring the information to new situations therefore is likely to occur and easier.

Motivation, Attribution, and Interest Research

As critical factors that influence directly student success, motivation, positive attributions and interest help students learn complex skills and deal with challenging informational activities, which are the goals of CBI (Alexander, Kulikowich & Jetton, 1994; Tobias, 1994; Turner, 1993). According to Krapp, Hidi and Renninger (1992), interest in the content and positive attributions to content learning increase the intrinsic motivation, which may improve learning capacity. As such, Grabe and Stoller (1997) note that these research areas provide a strong support for CBI because students in content classes engage in increasingly more complex tasks, activities and skills. According to the ‘flow’, which is a theory of motivation (Csikszentmihalyi, 1990), if students can perform well with the challenging and sophisticated tasks, the increase in the intrinsic motivation is an unavoidable consequence. Also, in turn, one goal of CBI is to create interest in content information through stimulating material resources and

instruction, and to develop students' learning capacity helping them develop intrinsic motivation (Grabe& Stoller, 1997).

Expertise Research

Bereiter and Scardamalia (1993) proposed a theory of expertise which is a process in which learning itself improves. In this process, students reinvest the knowledge, make appropriate connections between the ideas and engage in increasingly more complex problem-solving activities. These students look for increasingly complexity and benefit from these challenges. Thereby they recognize their own growing expertise and develop intrinsic motivation. These expert-like learners' main goal is to become a good learner, not just to accomplish a task. Similarly, as pointed out by Grabe and Stoller (1997), in a content-based instruction, gradually more complex content, tasks and language skills require expert like learners to achieve the goals of CBI.

2.1.4.4. Support from CBI Program Outcomes

According to Grabe and Stoller (1997, p.19), "Content based instruction is a powerful innovation in language teaching across a wide range of instructional contexts. There is strong empirical support for CBI, and the success of many well-documented programs offers additional support for the approach". Among these contexts are 'K-12 ESL contexts' (in North America), 'K-12 foreign language contexts' (primarily in Europe), 'postsecondary ESL contexts', 'postsecondary foreign language contexts' and 'language across the curriculum contexts'. These are actual CBI programs which show the effectiveness of this instruction. Although there are few empirical studies to show this effectiveness, informal assessments and students' success indicate its applicability and benefits. Apart from these contexts, as Richards and Rodgers (2001,p.206) point out, other educational initiatives such as 'Immigrant On-Arrival Programs', which provide survival language for the newly arrived immigrants and 'Programs with Limited English Proficiency' (SLEP), which serve "… for any school-aged children whose language competence is insufficient to participate fully in normal school instruction" have been curriculum approaches since the 1970s to emphasize content learning through a foreign language.

2.1.5. Rationales for CBI

Many researchers, methodologists and authors provide strong rationales for CBI (Brinton, 2003). First and foremost, in CBI classes, students are exposed to a great amount of input while learning content (Grabe & Stoller, 1997; Richards & Rodgers, 2001). As this rich input is presented coherently, students frequently benefit prior knowledge to learn more language and content (Geneese & Lindholm-Leary, 2013; Grabe & Stoller, 1997; Richards & Rodgers, 2001) and such a learning context meets the criteria of successful language learning (Grabe & Stoller, 1997). In other academic learning settings, some type of content is learned through a language as well (Geneese & Lindholm-Leary, 2013; Grabe & Stoller, 1997; Richards & Rodgers, 2001), but in CBI context students are engaged in materials which are coherent and relevant to their needs (Geneese & Lindholm-Leary, 2013). The language activities are therefore not meaningless or artificial in CBI classes (Grabe& Stoller, 1997). On the contrary, students are exposed to an authentic and useful language which includes various structural functional forms in different contexts (Geneese & Lindholm-Leary, 2013). Also, some content areas are more appropriate for language learning (Richards & Rodgers, 2001).

In addition, in CBI, useful language is given in relevant and natural discourse contexts. In spite of explicit language instruction, the learning setting is contextualized and the focus, therefore, is on integrating skills, rather than isolated language fragments (Geneese & Lindholm-Leary, 2013; Grabe & Stoller, 1997; Richards & Rodgers, 2001). In such a purposeful context, students are willing and more motivated to use language in order to negotiate content. Motivation and interest depend on partly on the fact that the learning is occurring and the effort is worth it, partly on students' handling capability of topic and task. CBI creates gradually increasing motivation among students because of complex information and demanding activities, which challenges students and leads to intrinsic motivation (Grabe & Stoller, 1997).

What is more, CBI embraces, in its nature, some learning approaches such as cooperative learning, apprenticeship learning, experiential learning, and project-based

learning. As these approaches provide many opportunities for students to use content, students need to employ strategies due to varying content and learning tasks. Thereby, not only strategy instruction and practice are provided (Grabe & Stoller, 1997), but also students' social and cognitive skills are developed in addition their language skills (Geneese & Lindholm-Leary, 2013).

Last but not least, according to Grabe and Stoller (1997), in a content-based class, students have a voice in choosing specific content and learning activities. As there are many ways to explore themes and topics, student involvement is evident in topic and activity selection, which shows CBI adopts student-centered classroom activities. According to the interests and needs of the students and the teacher, the curriculum may be adjusted incorporating subtopics, issues, and activities into it. CBI curriculum is therefore flexible and adaptable.

2.1.6. Common CBI Variants

Since the early 1980s, the integration of language and content has been a growing phenomenon (Brinton & Snow, 2017; Grabe & Stoller, 1997; Met, 1999). Lots of programs, models and approaches throughout the world have emerged at all education levels and extended into a wide range of contexts (Brinton & Snow, 2017; Genesee and Lindholm-Leary, 2013). According to Mett (1999) and Stoller (2008), CBI is an umbrella term and those various forms fall under content-based instruction. As the most common models, theme-based modules, sheltered content courses and adjunct courses are accepted as three prototype models (Brinton et. al., 1989; Brinton & Snow, 2017). However, as noted by Stryker and Leaver (1997,p.3), " More a philosophy than a methodology, there is no singular formula for CBI". As Brinton and Snow (2017,p.2) remark, "CBI is a continually evolving model, with multiple alternative or "hybrid" models that have branched off from the original three prototype models". According to Genesee and Lindholm-Leary (2013), alternative forms of CBI have emerged based on the education level, the curriculum design and the emphasis given on language and/or content. Regarding the role of language and content in a program, Met (1999,p.4) provides a continuum which "…provides for a range of programs and approaches that

may be primarily content- driven or language driven". The relative role of content and language is determined based on their position on the continuum. This continuum ranges from the most-content driven end, which is followed by partial immersion, sheltered courses, adjunct model, theme-based courses, to the most language-driven end. While the most content-driven end refers to the total immersion (approximately 90% second language instruction), the most language-driven end describes language classes in which content is used for language practices. To put it briefly, according to this continuum, while in content-driven programs, teaching content is attached more importance, language driven programs utilize content to teach a language. Therefore, the continuum may provide useful ideas for program planners and implementers while deciding on the key aspects such as student assessment, roles for teachers and required teaching skills in a program based on CBI. The continuum is presented as follows (Met, 1999, p.7):

CONTENT-BASED LANGUAGE TEACHING:
A CONTINUUM OF CONTENT AND LANGUAGE INTEGRATION

Content-Driven					Language-Driven
Total Immersion	Partial Immersion	Sheltered Courses	Adjunct Model	Theme- Based Courses	Language classes with frequent use of content for language practice

Figure 2.1. A continuum of content and language integration (Met, 1999,p.7).

According to Brinton and Snow (2017,p.9), in addition to the three prototype models – theme-based, sheltered and adjunct instruction- which are still seen widely on the scene, as new settings emerge, CBI continues to evolve with new and hybrid models. This evolution has emerged in order "to accommodate specific student populations, teaching settings, and local resources/logistics". Similarly, Genesee and Lindholm-Leary (2013) stated that alternative forms of CBI ,which vary according to the educational level, curriculum design and the importance attached on content and language, emerged. Accordingly, Brinton and Snow (2017, p.9) present the most-widely known variants and an updated map of CBI as in the following figure:

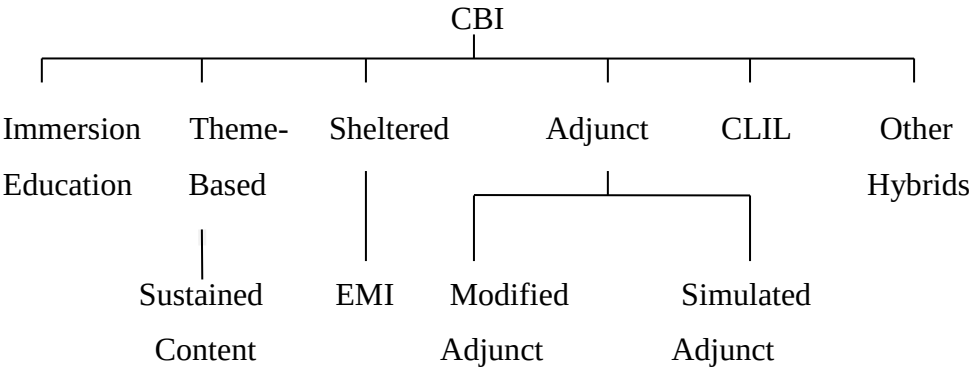

Figure 2.2. An updated map of CBI (Brinton & Snow, 2017, p.9).

2.1.6.1. Theme- Based Language Instruction

In theme-based model, "which have existed for a long time in foreign language education" (Stryker & Leaver, 1997, p.4) and known also as topic-based instruction, the courses are organized around readings and activities based topics or themes (Brinton, et. al., 1989). Themes or topics have the central role in the curriculum (Stryker & Leaver, 1997). Content material is used for both language analysis and practice, which shows that this instruction has a content orientation (Brinton, et. al., 1989; Stryker &Leaver, 1997). As an alternative, instead of using different topics or themes, the curriculum may be structured around one major topic or theme, which is then subdivided into more specific topics. However, this kind of organization in the curriculum requires much more coordination in materials development and adaptation (Brinton, et. al., 1989; Richards & Rodgers, 2001; Stryker &Leaver, 1997). Further, the choice of topic is not determined by the coursebook as in the traditional language classes; on the contrary, content material is presented by the language teacher. The materials are usually teacher-generated or adapted and topic is organized in a way that all the skills are integrated (Brinton, et. al., 1989; Richards & Rodgers, 2001). As such, students are exposed to higher levels of language and language processing through a variety of text types, formats, and activities (Brinton, et. al., 1989). The major aim of this instruction is to develop learners' second language competence through the support of content (Brinton, et. al., 1989; Met, 1999). As it is assumed that content learning occurs inherently, it is the hidden feature. Students are therefore assessed on the development of their second

language skills. Only language instructor is responsible for both language and content instruction (Brinton, et. al., 1989).

2.1.6.2. Sheltered Content Instruction

This instruction is aimed at second language learners separated from native-speaking students (Brinton, et. al., 1989). This model's primary aim is to make the content more accessible and to help learners to master the content by removing the language comprehension problems and thereby incidental language learning is its hidden feature (Brinton, et. al., 1989; Stryker & Leaver, 1997). As the content learning and teaching are attached great importance, it must be any institutional context in which content courses are offered and content area staff must be proficient in the target language. As for the second language population separated from native-speaking students, texts are carefully selected in aspect of their organization and clarity. More specifically, content area specialists may make some linguistic adjustments or they may make adapt their lectures or even they make certain modifications by changing overall course requirements for the sake of the students (Brinton, et. al., 1989; Richards & Rodgers, 2001). As such, only content instructor is responsible for content and language instruction. Students therefore are assessed on the mastery of their content knowledge (Brinton, et. al., 1989).

2.1.6.3. Adjunct Language Instruction

This model, which generally serves for ESL and postsecondary settings, has a linked instructional format in which students attend a language course and a content course (Stryker & Leaver, 1997). These two courses, which share the content base, have a complementary role to each other through mutually coordinated assignments (Richards & Rodgers, 2001). The aim of this model is to help students develop second language skills and master content domains, through which to develop students' academic development skills. Both of these aims have equal importance. In this model, nonnative English-speaking students are separated from native English-speaking students in the language course, which shows that second language learners are

sheltered in a language course and integrated in the content course, where both groups attend. Students are thus evaluated on both of the domains, language and content (Brinton, et. al., 1989). On the other hand, the implementation of this model is a challenging task since a large amount of coordination between two courses is required and modifications or adjustments might be made for the courses to complement each other (Richards & Rodgers, 2001). Further, a greater degree of integration of the two courses places some responsibilities upon the instructors. These responsibilities are shared between two groups. Content instructional team has the primary responsibility for content instruction, and language team is the responsible for the language instruction, which uses different materials from a more traditional language course (Brinton, et. al., 1989).

Apart from these, although these three models are aimed at teaching subject matter through target language, they differ in terms of setting, proficiency level, curriculum, and materials development. When it is looked the implications of these differences regarding each model, as the most common method among other CBI models, theme-based model is the only content-based option in a setting in which content courses are not offered.It can be implemented at almost all levels of language proficiency and at any institutional setting and topics can be selected based on students' interests (Richards & Rodgers, 2001). For the implementation of this model, authentic materials are adapted for language teaching purposes, but commercial ESL texts may be used as a supplement. However, the implementation of sheltered and adjunct models is restricted since these models can be implemented in a setting in which content courses are offered. Because of the inherent linguistic and conceptual complexity of the academic subject matter, either model is not appropriate for lower levels of language proficiency. While sheltered instruction is most appropriate for intermediate to high intermediate levels, adjunct model is most appropriate for high intermediate to advanced levels of proficiency (Brinton, et. al., 1989). In both models, the curriculum is composed of content materials in the form of readings and lectures. In the sheltered instruction, language component is included in the curriculum as a focus on the comprehension and study skills for the mastery of the particular content. As for the adjunct model, the language syllabus is matched with the content curriculum through

which language needs based on the content are taken into consideration and more general academic language skills are included in the curriculum. In terms of materials development, in both of the models, content texts and lectures are adjusted to the proficiency levels of the students (Met, 1999). Content texts are exploited for the majority of language presentation and practice. In the adjunct model, the majority of language practice is based on extensive teacher-generated materials which have content – language link. In addition to these materials, explicit graphic organizers and study guides may be used to support readings and lecture materials in both models (Brinton & Snow, 2017).

All in all, these three models strongly claim that language learning occurs through contextualized and meaningful target language material focusing acquiring information. They therefore see content as the point of departure or an organizing principle. Secondly, they use authentic materials and tasks which reflect the academic demands and therefore meet students' needs. As these authentic materials are not originally produced for language teaching purposes, teachers adapt these materials or supplement and use strategies and guides for the comprehension of the materials. Finally, in addition to the guides and strategies, teachers make some adjustments according to the needs of the second language learners such as increased redundancy and exemplification, use of advance organizers, frequent comprehension checks, and frequent assignments and assessment procedures (Brinton, et. al., 1989; Richards & Rodgers, 2001).

2.1.6.4. Sustained Content Language Teaching

As Brinton and Snow pointed out (2017,p.9), as a form of theme-based instruction, as it is shown in the figure above, sustained content language teaching (SCLT) involves sustained content courses which are "taught by a language instructor". According to Murphy and Stoller (2001), SCLT has a dual role, focusing on both content and language development that has a complementary role. As the difference from theme-based instruction, there is a single content area or topic over a unit, a course, a whole term or a year in SCLT. However, in theme-based instruction, content

is taught or presented through various topics or content areas which have no obvious connections with each other.

2.1.6.5. Content and Language Integrated Learning (CLIL)

Content and Language Integrated Learning (CLIL) emerged in Europe in the 1990s. It has later spread increasingly throughout Europe and worldwide (Brinton & Snow, 2017). According to Coyle, Hood, and Marsh (2010, p.1), it is "… a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language". Although it has the same underlying principles with other forms of CBI, the differences lie in the fact that in the first place it refers to an additional language and this additional language may be a foreign, second or minority language, in other words, not only English. Moreover, as the main goal of this model is to create global citizens, that is, multilingual and multicultural individuals, the language policy largely adopts this understanding. From these reasons, it is viewed as a separate model of CBI (Brinton & Snow, 2017). Similarly, according to Ball, Kelly and Clegg (2015, p.11), it differs from the sheltered instruction, which is considered as a similar form to CLIL, at this point because "sheltered instruction … is typically driven by pressing educational needs" and the ultimate goal of it "is to transition students from the sheltered to the mainstream classroom. Therefore, the main aim of CLIL is to cross over borders and to support multilingualism and multiculturalism. It is widely seen in settings, in which languages as a foreign or a second language are used, not only the native language, such as European Union countries (Coyle et. al., 2010). In addition to these theoretical assumptions, two forms emerged in the practices of CLIL as 'hard' CLIL and 'soft' CLIL. While 'hard' CLIL puts more emphasis on academic achievement and language development is accepted as a bonus, 'soft' CLIL, which is offered for a shorter period of time, attaches importance on both teaching content and language (Ball et. al., 2015).

2.1.6.6. English-Medium Instruction (EMI)

Known as also Integrating Content and Language in Higher Education (ICLHE), English-Medium Instruction (EMI) is often accepted as the tertiary level variant of CLIL. It has the same essential component with other forms of CBI. Although it involves teaching content in the students' L2 as a main principle, its dual aims are to create multilingual citizens and internationalize a tertiary institution, which brings financial gain to the institutions (Doiz, Lasagabaster & Sierra, 2013). In addition to this, the implementations of EMI may vary according to countries, institutions and especially the importance given on language development. Accordingly, in weak version of EMI, teaching content is at the center and language development is paid little or no attention (Brinton & Snow, 2017). On the other hand, in language-enhanced or language-sensitive versions of EMI, integration of content and language is well-organized and there is an explicit focus on academic achievement and language development (Brinton, 2007). However, whatever version is chosen, the important point to be taken into consideration is the required L2 proficiency level of students and teachers and effective assessment of this proficiency, familiarity with EMI and training of the faculty for an effective implementation (Brinton & Snow, 2017).

2.1.6.7. Modified and Simulated Adjunct Models

In the adjunct model, there are two separate courses one of which is taught by a content area teacher and the other is taught by a language teacher through coordination and instructional aims. However, a lot of modifications have been made as a response to need to setting variables (Brinton & Snow, 2017). For instance, as idenfied by Iancu (2002), an Intensive English Program (IEP) adapted the adjunct model and a content course at the introductory level was taught through separate skills-based lessons. As another modification, a language specialist and a leader of a study group (an undergraduate student completing the course in question successfully) co-worked for general content courses at the tertiary level (Snow & Kamhi- Stein, 2002). As a simulated adjunct model, Brinton and Jensen (2002) describe an EAP program at a university in which the video records of lectures and additional readings formed the

syllabus and language forms and skills were taught through a rich array of topics selected from general education courses.

2.1.6.8. Other Hybrid Models

These forms of CBI which go into 'other' category emerged as a response to local contexts and student needs as different from the other models. The most notable example is writing intensive (WI) courses in which cross-curricular areas or topics are offered. As the typical features of such courses, Townsend (2001) states that student writing is placed more emphasis; courses are taught by senior academicians having taken training on writing across the curriculum; there is a required number of writing assignments which consist of multiple drafts through various genres and have a percentage in the assessment procedure of content classes.

2.1.7. Issues in Implementation

There are some key issues for a successful CBI implementation. According to Brinton, Snow, and Wesche (2003) (as cited in Brinton&Snow, 2017):

> " These include but are not limited to: administrative issues (e.g., where the impetus for implementing CBI comes from and who carries responsibility for the program's implementation); program design issues (e.g., whether the primary objective is to teach language or to teach content and how far-reaching the planned changes are); student issues (e.g., students' L2 proficiency level, their prior educational background, and their needs and interests); staffing issues (e.g., whether instructors have the necessary linguistic proficiency and background in CBI and whether they are willing to take on new roles in their teaching); and, finally, program evaluation issues (e.g., student achievement and the quality of the curriculum and materials)"(p.13-14).

Concerning staffing issues, Stryker and Leaver (1993) also point out language teachers must be knowledgeable in both content and language teaching areas. What is more, when it is looked at the literature, research studies have showed there are other three important issues mentioned very frequently related to the implementation of CBI. These are "(1) the lack of attention to form in CBI; (2) the balance of attention to language and attention to content; and (3) the power imbalance between language and content instructors" (Brinton, Snow, & Wesche, 2003. As cited in Brinton & Snow,

2017, p.14). Concerning the balance of language and content in CBI, Genesee and Lindholm-Leary (2013) point out that the rate of the immersion may range from total immersion (approximately 90%) to partial immersion which is more language driven. Met (1998) even provides 'a continuum' for the content and language integration. However, Davison (2005) states that what is understood by the terms 'content' and 'language' depends upon the disciplinary community, in other words, these terms are open to interpretation. On the other hand, according to Met (1998), no matter how much rate of the immersion is, the main aim is to combine content and language learning. Additionally, Grabe and Stoller (1997) point out that according to the program successes and empirical research findings, the rationales given for CBI are persuasive. However, the authors also highlight that it is not sufficient to label a program itself as a content-based program. Programs should adopt these rationales in terms of both foundation and in practice. They claim that for an effective content-based curriculum, there are three essential components: careful structuring of content, language and strategy instruction or learning.

To sum up, it is a difficult task to classify CBI as models are always evolving. The purpose should not be to draw distinct lines between the models; on the contrary, it should be to present rich opportunities that CBI provides for the language education (Brinton & Snow, 2017). CBI can be a very effective way to teach both first and second language skills in school. It can serve well for all age groups (Brinton, et. al., 1989) and at all education levels (Genesee & Lindholm-Leary, 2013). Rich second language input in relevant contexts is the key, where the attention of the learner is focused mostly on the meaning rather than on the language. Last but not least, this "instruction is particularly appropriate where learners have specific functional needs in the second language" (Brinton, et. al., 1989, p.9), which shows the importance of determining needs in content-based instruction. Therefore, the next section will include information about needs analysis and curriculum development process in which needs analysis plays a significant role.

2.1.8. Curriculum Development

As stated by Ornstein and Hunkins (2018, p.19), “Curriculum as a field of study has been characterized as elusive, fragmentary, and confusing”. As the field includes all the experiences concerned to learning, it is large and complex (Nunan, 2003). Therefore, a comprehensive definiton of curriculum is a challenging task. At the same time, the way it is defined reftlects the approach to curriculum. Ornstein and Hunkins (2018) define the curriculum approach as follows:

Our approach to curriculum reflects our perceptions, values, and knowledge. A curriculum approach reflects a holistic position, or a metaorientation, encompassing curriculum’s foundations (a person’s philosophy, view of history, view of psychology and learning theory, and view of social issues), curriculum domains (common, important knowledge within the field), and curricular theory and practice. An approach expresses a viewpoint about curriculum’s development and design; the role of the learner, teacher, and curriculum specialist in planning curriculum; the curriculum’s goals; and the important issues that must be examined(p.19).

Accordingly, curriculum may be defined as a list of plans based on goals; as a program describing learners’ experiences; as a field of study or as an organizing structure for content or subject matter (Ornstein & Hunkins, 2018). For instance, Pratt (1980,p.4) adopts a behavioral approach in his definiton and remarks “ Curriculum is an organized set of formal education and/ or training intentions”. On the other hand, some authors emphasize learning experiences in their definitions. For instance, Eisner (2002,p.26) defines the curriculum as a “preplanned series of educational hurdles and an entire range of experiences a child has within the school”. Similarly, Saylor, Alexander and Lewis (1981,p.10) describe the curriculum as “ a plan for providing sets of learning opportunities for persons to be educated”. According to Richards (2001), curriculum development, which goes into the field of applied linguistics, is an essentially practical process which is comprised of review and reflection practices. He articulates the issues that language curriculum development is concerned with as such:

- What procedures can be used to determine the content of a language program?
- What are learners' needs?
- How can learners' needs be determined?
- What contextual factors need to be considered in planning a language program?
- What is the nature of aims and objectives in teaching and how can these be developed?
- What factors are involved in planning the syllabus and the units of organization in a course?
- How can good teaching be provided in a program?
- What issues are involved in selecting, adapting, and designing instructional materials?
- How can one measure the effectiveness of a language program?

(Richards, 2001, p.1)

2.1.8.1. Historical Background

The origin of curriculum development begins with the notion of syllabus design which refers to the content of a program. In other words, issues of syllabus design came out in language teaching much earlier as having a role of initiator. Richards (2001, p.15) summarizes the principles to syllabus design in the first part of the twentieth century as follows:

- The basic units of language are vocabulary and grammar.
- Learners everywhere have the same needs
- Learners' needs are identified exclusively in terms of language needs
- The process of learning a language is largely determined by the textbook
- The context of teaching is English as a foreign language

The emergence of curriculum principles and processes was seen after 1900 in language teaching and the curriculum as a field of study has advanced a lot since the 1920s (Ornstein & Hunkins, 2018). Since 1965, curriculum development has gone through a lot of evolutions. In this evolution process, lots of models and flow charts

were proposed by different authors (Brown, 1995). One of the most important steps towards the development of a curriculum approach was taken by Tyler in 1949, which changed the nature and process of curriculum studies throughout the 1950s (Ornstein & Hunkins, 2018; Richards, 2001).Tyler (1949, p.1) notes that there are four fundamental questions to be answered while developing a curriculum. These are:

1) What educational purposes should the school seek to train?
2) What educational experiences can be provided that are likely to attain these purposes?
3) How can these educational experiences be effectively organized?
4) How can we determine whether these purposes are being attained?

Richards (2001, p.39) states that these questions are turned into a model and shows it in his book as follows:

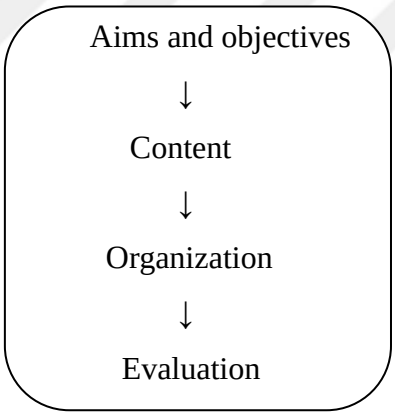

Figure 2.3. A curriculum model (Richards, 2001, p.39).

Although Tyler's intention was not to design such a model and he did not present a model graphically (Lawton, 1973; Ornstein & Hunkins, 2018), this simple model and its variations became acceptable in the educational areas and lots of models were generated (Inglis, 1975). For instance, Taba (1962), Goodlad (1966), Popham and Baker (1970) and Gagné and Briggs (1974) developed models viewed as refinements of the Tyler model. Tyler's model set the foundations of curriculum development for the first half of the 20th century and it was accepted as a rational, scientific and sequential

approach to curriculum development (Ornstein & Hunkins, 2018). However, Tyler's model was widely criticized in many ways. According to the critics, the model heavily depended upon objectives (Zahorik, 1976); it was designed by a linear approach and viewed the evaluation as a final stage rather than being involved in every stage (Ornstein & Hunkins, 2018; Richards, 2001). Although the Tyler's model views teaching and learning process as measurable behaviours, this approach to curriculum development has taken place in language teaching as a frame of reference since 1920s (Ornstein & Hunkins, 2018).

As a result, the critics of the model argued that a cyclical model would be better and a more cyclical model was proposed. This model, described as an *ends-means model,* "has been widely adopted in language teaching from the 1980s" (Richards, 2001, p.40). Contrary to the Tyler model, this model " … builds on the viewpoint that ends do not precede and direct means or activities but rather emerge from activity to redirect the activity and add meaning to it" (Zahorik, 1976,p.489). As it starts from identifying learner needs, the ends or goals are not separate from the process and learning activities or means are at the heart of the process (Richards, 2001). Taba (1962, p.12) lists the steps of ends-means model as follows:

Step 1: diagnosis of needs
Step 2: formulation of objectives
Step 3: selection of content
Step 4: organization of content
Step 5: selection of learning experiences
Step 6: organization of learning experiences
Step 7: determination of what to evaluate and of the ways of doing it

According to Richards (2001, p.41), however, this model also evolved and "in the field of curriculum studies the approach was sometimes reduced to a mechanistic set of procedures and rules known as a systems-design model". System approach, as Clegg (1973) points out, emerged due to the advances in technology and management, especially in computer systems, in the 1950s and 1960s. According to this approach,

curriculum design is comprised of three components as *input, process* and *output.* In simple terms, input enters into the system and is transformed into output throughout the process. Output is then evaluated based on the objectives and may enter into the system again. However, according to Richards (2001,p.40), although the systems model views the curriculum development as a rational and technical process, this model was accepted as the key aspect of the success of the curriculum studies and "In the 1980s, funding for large-scale curriculum projects in many parts of the world was often dependent on their being couched in this framework". Similarly, Rodgers also (1989) states his argument concerning system model as follows:

> The curricular systems-design model has been prescriptive and rule-driven. It describes a linear sequence of events comprising formulation of objectives, selection of content, task analysis, design of learning activities, definition of behavioral outcomes and evaluative measures for determining the achievement or non-achievement of these outcomes (p.27).

According to Richards's (2001, p.41) curriculum approach, developing or renewing a curriculum consists of planning and implementation processes. "These processes focus on needs analysis, situational analysis, planning learning outcomes, course organization, selecting and preparing teaching materials, providing for effective teaching, and evaluation". However, these elements should be viewed as an interacting system in which one change in one element affects the others. For instance, the textbook used may affect teaching practice or the attitudes of learners towards learning activities may depend on the issue of needs analysis. This interacting system approach to curriculum is portrayed by Brown (1995, p.20) as in the following table:

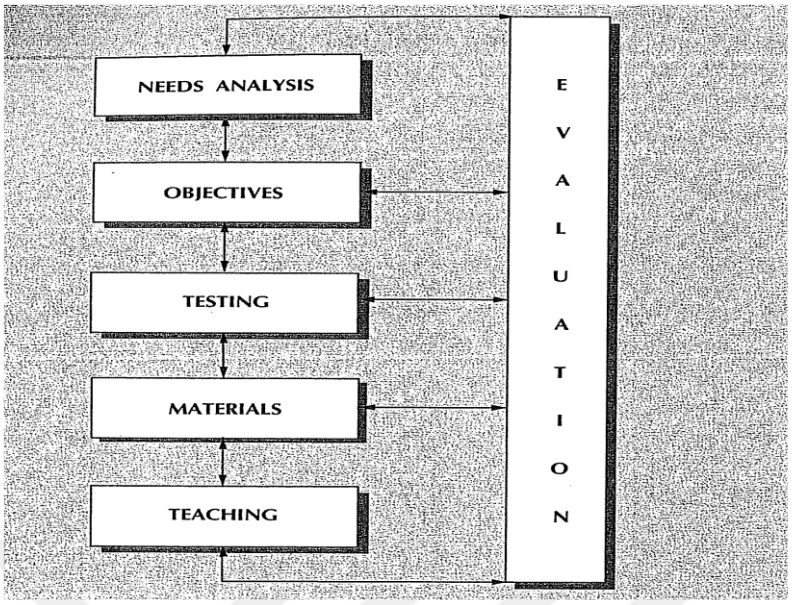

Figure 2.4. Systematic approach (Brown, 1995, p.20).

According to Brown (1995), the model presents a general outline of system approach to curriculum design. In other words, it is both complete and consistent with large education settings and applicaple in specific contexts. The model not only provides a logical approach to curriculum development or maintenance but also views the curriculum development or maintenance as an ongoing process through the various intereactions between the elements. The author describes his curriculum approach as follows:

> Curriculum that is viewed as a product is inflexible once finished. Curriculum that is viewed as a process can change and adapt to new conditions, whether those conditions be new types of students, changes in language theory, new political exigencies within the institution, or something else. This process is known as *systematic curriculum development* (p.24).

One of the recent models which portrays a systems approach to curriculum development is Graves's model (2000). According to Graves (2000), classic models of curriculum design and recent ones are almost similar in aspect of the components although there are some subdivisions or naming is different. For instance, in the classic models, firstly, a needs assessment is conducted, and then objectives are developed based on the needs assessment. Based on the objectives, content is selected and so on. However, the author presents her own model with a few differences as follows:

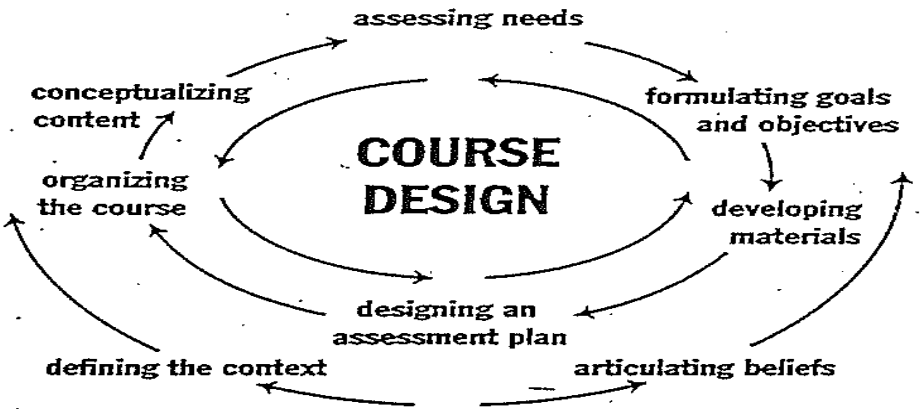

Figure 2.5. A framework of course development process (Graves, 2000, p.3).

According to Graves (2000), as similar to Brown's (1995) and Richards's (2001) approach, the list in the model is not linear and it is a flow chart. As the name suggests, components are interrelated and each influences and is influenced by the other. For instance, while formulating goals and objectives, content will also be the focus. One component will contribute to others and changes to one will influence all the others. There is no hierarchy in the processes and no sequence in their accomplishment. You can begin anywhere because it depends on your beliefs and understandings, the context and what you know about your students. Therefore, articulating beliefs and defining context are the foundations of the other processes. Also, in this model, going back and forth is possible. It is not a matter of getting one "right" before moving on to the next.

In addition, another point that critics point out that system approach to curriculum development is not involvement of teachers into the process. For instance, Richards (2001, p.42) remarks "such an approach typically depicts teachers as on the receiving end of a process controlled and directed by others" and states that teachers do not take part in planning and decision-making phases. However, teachers and language teaching professionals are at the center of the process. For instance, Johnson's (1989) curriculum development model represents this approach. According to Johnson (1989, p.3), planning and decision-making phases in curriculum development are more difficult than implementing. While the products of these thinking processes are more visible and identifiable, the processes that reveal these products emerge through the contribution of

various people including teachers and even learners. The author summarizes stages, decision-making roles and products in curriculum development as in the following table:

Table 2.1. Stages, decision-making roles and products in curriculum development

Developmental stages	Decision-making roles	Products
1. curriculum planning	policy makers	policy document
2. specification:	needs analyst	syllabus
ends means	methodologists	
3. programme implementation	materials writers	teaching materials
	teacher trainers	teacher-training programme
4. classroom implementation	teacher	teaching acts
	learner	learning acts

Similarly, Graves (2000, p.5) also argues that teachers should be involved in curriculum development process and remarks,

I believe that teachers are the best people to design the courses they teach, and having the processes expresses as verbs such as “assessing needs” rather than nouns such as “needs assessment” means that each verb needs a subject. I see the teacher as the subject of these verbs, taking charge of the processes, rather than playing the role of recipient of the products.

All in all, according to Richards (2001,p.41), curriculum development process has always been viewed as a principal element in a language program design from the 1980s and the debates over the ‘right method’ which was the focus of interest in the 1970s gave its place to curriculum development process. “In many countries, language curriculum development units have been established in ministries of education since the 1980s with a mandate to review and develop national language teaching curriculum based on a curriculum development perspective”. In this process, lots of curriculum models have been proposed by different authors and researchers. Among these numerous models, similarities and differences are also evident, though different authors

and researchers use different terminology or conceptual categories (Graves, 2000; Nation & Macalister, 2010). For instance, what Johnson (1989) names as 'ends /means specifications' means the same with what Graves (2000) names as 'formulating goals and objectives'. While Brown (1995) includes six components under the categories needs analysis, objectives, testing, materials ,teaching and evaluation in his curriculum development, Johnson (1989) divides it into three main categories as policy with four sub-categories, pragmatic considerations and participants. While Brown (1995) does not include any component regarding to 'beliefs' into his curriculum design, Graves (2000) views the 'beliefs' as the most essential component. As a conclusion, as Nation and Macalister (2010,p.146) state, deciding on which approach or model to use " … [depends] on the starting point, the time available for course preparation, the availability of needs analysis information, the availability of a usable course book, and the skill of the curriculum designer" . However, whichever approach is chosen, all the parts of the model chosen should be involved into the process in a principled way.

2.1.9. Needs Analysis

Needs analysis is an essential component of curriculum design or development. Its importance in the fields of both EGP and ESP has been emphasized by many authors and scholars (Basturkmen, 2010; Berwick, 1989; Brindley, 1989; Dudley-Evans & St. John 1998; Hutchinson & Waters, 1987; Johns, 1991; Jordan, 1997; Munby, 1978; Richterich & Chancerel, 1987; West, 1994). For instance, while Richards (2001, p.51) remarks "needs analysis is, in the most general sense, procedures used to collect information about learners' needs", according to Basturkmen (2010, p.17), it is "the identification of language and skills is used in determining and refining the content for the ESP course". According to Nation (2010, p.24), "needs analysis is directed mainly at the goals and content of a course. It examines what the learners know already and what they need to know". Richterich (1983) gives a more comprehensive definition as follows:

There has been a broadening of the scope of needs analysis to encompass the full educational process - the determination of objectives, contents and curricula, for the

production and testing of new materials, for the development of autonomous learning, assessment by the learner, feedback for the conduct and reorientation of the project, teacher education and re-education, and 'for running an entire system' (p.12).

On the other hand, as what people understand from the term ‘needs’ has a direct influence on the process of needs analysis, many definitions exist in the literature concerning what needs are. For instance, according to Brindley (1984, p.28), “the term needs is sometimes used refer to wants, desires, demands, expectation, motivations, lacks, constraints, and requirements”. Hutchinson and Waters (1987) use two terms while describing the types of the needs as *target needs* and *learning needs*. While target needs are used as an umbrella term and consist of *necessities*, *lacks* and *wants*, learning needs are concerned with how students expect or wish to learn and what motivates them. Berwick (1989) divides the concept of ‘needs’ into two terms: *felt needs* which the learners have and *perceived needs* which are viewed by the teacher, institution and stakeholders. According to Auerbach’s (1995) definition, people may have other kinds of needs, apart from the linguistic needs, such as in the case of immigrant minorities in English-dominant societies. These people need to keep up with the existing order and become active in a community for their rights and interests. On the other hand, according to Nation ‘s (2010) classification, identifying needs provide four types of information as *present knowledge, required knowledge, objective needs* and *subjective needs* . Accordingly, referring to Hutchinson’s definition, Nation and Macalister (2010) state that *present knowledge* goes into *lacks*, *required knowledge* goes into *necessities*, and *subjective needs* go into *wants*. According to Richards (2001), the term *needs* is often used to describe the difference between what a learner is able to do at present and what he should be able to do in a language by referring to a linguistic deficiency. In short, needs are often considered as language needs. However,as it is different of what the people understand from the concept of needs, this term is varied according to the judgement, interests, and values of the stakeholders such as teachers, learners, employers, and parents. Therefore, needs should be categorized into *immediate needs*, *long-term needs*, *feasible needs*, *critical needs* and *impractical needs*. Accordingly, the critical, immediate and feasible needs should be prioritized.

2.1.9.1. Historical background

Until 1950s, English had been taught through its structure and vocabulary. In this period of time, while designing a syllabus, the approach was that all learners' needs are same and learner' needs were defined as language needs. Therefore, syllabuses of textbooks reflected only the linguistic features of the language, rather than learners' needs. In the first part of the twentieth century, although other approaches started to emerge for teaching specific English, the main focus was on teaching of general English (Richards, 2001).

However, after World War II, the status of teaching of English started to change and became an important phenomenon with the industrial, scientific and technological advances worldwide (Hutchinson & Waters, 1987; Richards, 2001; White, 1988). With these developments, the demand of an international language in the areas of technology and commerce occurred between the countries and due to United States' economic power after World War II; this language became English (Hutchinson & Waters, 1987; Richards, 2001). As the understanding of nature of language and of language learning changed, the period of seeking for a new method started. The 1950s and 1960s went through with this methodological excitement (Richards, 2001). In the next 20 years, seeking for the best method with an understanding that a method could be a remedy continued (Lange, 1990). Within this pursuit, however, why people learn a language or what they need has not been taken into account, rather the concepts of how people learn and what language is are emphasized (Jupp & Hodlin, 1975). As Richards (2001) stated, there was no teaching method which addressing learners' needs and the situation or motivation of the learners was a missing point. The language teaching policy was therefore reviewed in many European Countries in the 1970s and this reevaluation was concerned about the issues of teaching foreign languages in a school system and the status of teaching classical languages, as well. In 1969, the Council of Europe, which is a regional organization of European countries and supports cultural and educational cooperation in community, in order to promote a more effective learning of foreign languages, decided that (Council of Europe 1969,p.8; cited in Richards, 2001,p.26):

- If full understanding is to be achieved among the countries of Europe, the language barriers between them must be removed;
- Linguistic diversity is part of the European cultural heritage and that is should, through the study of modern languages, provide a source of intellectual enrichment rather than an obstacle to unity ;
- Only if the study of modern European languages becomes general will full mutual understanding and cooperation be possible in Europe.

According to Richards (2001), upon these decisions, being informed about societies' needs gained importance and CLT emerged at this time as a replacement for the structural-situational and audio-lingual methods. However, this was not a response to any teaching method; rather it moved this period from an obsession with a teaching method to a reevaluation of the basic assumptions of language teaching. The important point for the communicative approach was the whole context of teaching and learning and the needs of societies and learners were viewed as the starting point of a language program. Therefore, as stated by Hutchinson and Waters (1987), the language teaching history witnessed a new generation that had the awareness of why they need a language rather than learning a language for its own sake as in the past. Wishes, needs and demands gained importance in teaching English and the era of learning a language without any purpose came to an end. This new approach of English courses tailored for needs or demands led to the development of the understanding of the specialism which means identifying linguistic features of the specialist area. Thus the foundations of ESP (English for Specific Purposes), known as EST (English for Science and Technology) at that time, were built and adjusting courses to learners' needs became the guiding principle of it.

The origins of ESP movement, according to Dudley-Evans and St John (1998), go back to the improvements in the world economy, science, technology, and increasing use of English in these areas, economic power of oil riched countries and increasing number of international students in UK, USA and Australia through 1950s and 1960s. As Hutchinson and Waters (1987) state, ESP approach has evolved and gone through several stages in order to address the specific language needs of learners from the early 1960s. The important point is that ESP movement should be considered as an approach, not a product and this approach starts to design a course by identifying the needs. However, this is not a unique situation to ESP. As Richards (2001), states, identifying needs should be the starting point for each course design. All courses are based on a need in some way even if it is only

passing a class at the end of the term. The difference, therefore, between ESP approach and EGP (English for General Purposes) approach is not concerned to the existence of needs, but rather it is a matter of an awareness of the need (Basturkmen, 2010; Hutchinson &Waters, 1987; Nation & Macalister, 2010).

To sum up, according to Richards (2001), language teaching history was influenced by the emergence of ESP and the communicative approach in the 1960s and 1970s. The ESP movement not only brought about the development of language courses and materials of different disciplines through register and discourse analysis but also made a great contribution to the scholar literature by introducing the concept of 'needs analysis'.

2.1.9.2. Types of needs analysis

As stated before, the wave starting in the 1960s, as stated by Richards (2001), was turned into a "needs-based philosophy" in the 1980s worldwide, especially for the design of ESP programs. As Pratt (1980) stated, the needs analysis was so important at those times that any kind of financial support in order to develop a training program was dependent on being a response to a genuine need. However, as West (1998) notes, the concept of needs analysis has changed a lot and expanded over the years since Munby's Communicative Syllabus Design (1978). Similarly, according to Basturkmen (2010), needs analysis was initially a simple pre-course procedure focusing on only target situation – *target situation analysis.* However, from that time, several different types of needs analysis have appeared out. For instance; Dudley-Evans and St John (1998, p.125) present a comprehensive list which includes the current process of needs analysis as in the following:

A. Professional information about the learners: The tasks and activities learners are/will be using English for – *target situation analysis* and *objective needs.*
B. Personal information about the learners: Factors which may affect the way they learn such as previous learning experiences, cultural information, reasons for attending the course and expectations of it, attitude to English – *wants, means* and *subjective needs.*

C. English language information about the learners: What their current skills and language use are – *present situation analysis* – which allows us to assess (D). PSA determines strengths and weakness in language skills.

D. The learners' lacks: The gap between (C) and (A) – *lacks*.

E. Language learning information: Effective ways of learning the skills and language in (D) – *learning needs - Learning Situation Analysis (LSA)*

F. Professional communication information about (A): Knowledge of how language and skills are used in the target situation – *linguistic analysis, discourse analysis, genre analysis*.

G. What is wanted from the course: students' needs from the course

H. environmental situation: information about the environment in which the course will be run– *means analysis*.

Register Analysis

Taking place in the 1960s and early 1970s, register analysis is accepted as the first stage in the needs analysis evolution process (Dudley-Evans & St John, 1998; Hutchinson & Waters, 1987). As Dudley-Evans and St. John (1998) state, this analysis emerged due to the fact that some grammatical and lexical items are used more than of General English and therefore it was only concerned with identifying discrete grammar and vocabulary items. According to Hutchinson and Waters (1987), this analysis refers to identifying grammatical and lexical features of the special fields in the target areas and designing a syllabus based on these. Also, as West (1994) notes, this analysis does not go beyond the word and sentence levels.

Discourse Analysis

Known also as rhetorical or textual analysis, discourse analysis emerged as a reaction against register analysis in the 1970s (West, 1998). Therefore, in addition to the analysis done in the register analysis, organizational patterns, in other words, textual patterns and discourse markers in written and spoken texts are identified and the syllabus is designed based on these (Hutchinson & Waters, 1987). The aim of this analysis is to investigate how sentences are used and combined into discourse (West, 1998).

Genre Analysis

According to Robinson (1991),Swales (1981) introduced the term *genre* to the language teaching area and according to Swales (1981,p. 10 -11), *genre* is "a more or less standardized communicative event with a goal or set of goals mutually understood by the participants in that event and occurring within a functional rather than a personal or social setting". As Robinson (1991) states, the standardization refers to the regularities by the professional community. Also, Dudley-Evans and St. John (1998) give a comprehensive definition to make a distinction between discourse analysis and genre analysis as follows:

Any study of language or, more specifically, text at a level above that of sentence is a discourse study. This may involve the study of cohesive links between sentences, of paragraphs, or the structure of the whole text. The results of this type of analysis make statements about how texts -any text-work. This is applied discourse analysis. Where, however, the focus of text analysis is on the regularities of structures that distinguish one type of text from another, this is genre analysis and the results focus on the differences between text types, or genres (p.87).

Target Situation Analysis

According to Basturkmen (2010), *target situation analysis* is one of the big steps in the evolution process of needs analysis. In this analysis, the linguistic features of the target situation are identified and then a syllabus is designed based on this. This process is known as 'needs analysis' nowadays, but Chambers (1980) named it as 'target situation analysis'. According to Richards (2001), the most comprehensive and well-known work on target situation analysis is John Munby's Communicative Syllabus Design (1978), which is comprised of highly detailed procedures in order to identify target language needs of any group of learners. According to Hutchinson and Waters (1987), this set of procedures is called the Communication Needs Processor (CNP) and it includes questions about key communication variables. In this systematic design, there are two points that Munby (1978) focuses on: *the procedures used for determining the communicative needs of the learners* and *procedures for turning the information to form a syllabus*. The first part includes nine elements relating to the communicative needs of the learners : *participant*, *purposive domain*, *setting*, *interaction*, *instrumentality*, *dialect*, *target level*, *communicative event*, and

communicative key. According to the information filled, as identified by Richards(2001), the needs profile is then translated into a list of specific skills in the form of statements depending on the skills taxonomy of Munby which is consisted of 54 categories and 300 subskills under these categories. Schutz and Derwing (1981, p.32) present a simplified version of a profile of the learner's communicative needs:

Profile of Communicative Needs

1.**Personal**	Culturally significant information about the individual, such as language background
2.**Purpose**	Occupational or educational objective for which the target language is required
3.**Setting**	Physical and psychological setting in which the target language is required
4.**Interactional variables**	Such as the role relationships to be involved in the target language use
5.**Medium, mode, and channel**	Communicative means
6. **Dialects**	Information on dialects to be utilized
7. **Target level**	Level of competence required in the target language
8. **Anticipated communicative events**	Micro- and – macro- activities
9.**Key**	The specific manner in which communication is actually carried out

According to Hutchinson and Waters (1987), with this design, the needs were identified in a systematic way depending upon a scientific basis for the first time. However, as Richards (2001) stated, although the Munby model gained acceptance at first, it was criticized a lot later. It was charged with depending on subjective and arbitrary judgments and decisions by those who used this model. More specifically, Dudley-Evans and St. John (1998) stated that Munby's model did not give information about how to prioritize the subskills and it did not take into consideration of the affective factors. Also, West (1994) reported that Munby's model is inflexible, complex, time-consuming and based on a narrow point of view in that it includes only learners. On the other hand, Hutchinson and Waters (1987) stated that the model has a language-centred approach to needs analysis. According to Munby model, comprehending and producing linguistic features of the target situation is sufficient, but needs mean more than this. Therefore, the authors made a distinction between the types

of the needs. They use two terms while describing the types of the needs as *target needs* and *learning needs*. While target needs are used as an umbrella term and consist of *necessities*, *lacks* and *wants*, learning needs are concerned with how students expect or wish to learn and what motivates them. Accordingly, while *necessities* are concerned about what the learner needs to know in order to meet the needs of the target situation, *lacks* refer to the gap between the target proficiency and existing proficiency. On the other hand, the assumption behind *wants* is that identifying learners' needs should not exclude learners as learners have opinions about their needs, as well. For this aim, Hutchinson and Waters (1987, p. 59-60) proposed a target situation analysis framework in the following:

A target situation analysis framework

Why is the language needed?

- for study;
- for work;
- for training;
- for a combination of these;
- for some other purpose, e.g. status, examination, promotion.

How will the language be used?

- medium : speaking, writing, reading etc.;
- channel : e.g. telephone, face to face ;
- types of text or discourse: e.g. academic texts, lectures, informal conversations, technical manuals, catalogues.

What will the content areas be?

- subjects : e.g. medicine, biology, architecture, shipping, commerce, engineering;
- level : e.g. technician, craftsman, postgraduate, secondary school.

Who will the learner use the language with?

- native speakers or non-native;
- level of knowledge of receiver : e.g. expert, layman, student;
- relationship : e.g. colleague, teacher, customer, superior, subordinate.

Where will the language be used?

- physical setting: e.g. office, lecture theatre, hotel, workshop, library;
- human context: e.g. alone, meetings, demonstrations, on telephone ;
- linguistic context : e.g. in own country, abroad.

When will the language be used ?

- concurrently with the ESP course or subsequently;
- frequently, seldom, in small amounts, in large chunks.

Present Situation Analysis

PSA (*Present Situation Analysis*) was introduced by Richterich and Chancerel (1980) and may be used as a complement to the TSA (Target Situation Analysis) (Robinson, 1991). According to West (1998), while TSA tries to determine the destination point, PSA attempts to identify the starting point. Therefore, a combination of TSA and PSA increases the reliability of needs analysis. In PSA, as Dudley-Evans and St. John (1998) state, strentghts and weaknesses of students are used to define the starting point. Also, according to Jordan (1997), sources of data are the students themselves, the teaching context or setting and the institution itself.

Deficiency Analysis

The gap between the present situation and target situation is defined as deficiency analysis by Jordan (2011). On the other hand, according to Allwright (1982), identifying learners' present needs and wants with target requirements may mean a deficiency analysis. Similarly, Robinson (1981) calls this process as combination of target situation analysis and present situation analysis. Also, according to Hutchinson and Waters's (1987) definition of need types, the term 'lacks' refers to this analysis. Last but not least, Jordan (1997) states that this analysis is effective while designing a curriculum and determining syllabus priorities.

Strategy Analysis or Learning Needs Analysis

According to West (1994), this analysis is concerned with strategies that students will use to learn a language. In other words, the aim is to identify how students wish to learn, rather than what they will learn. The assumption behind this analysis is

that students have also ideas or opinions about how to learn and these should be involved in course design. According to West (1994) and Jordan (1997) , Allwright (1982) is the pioneer of *strategy analysis* and is the first person to make a distinction between the terms *need*s, *wants* and *lacks.* Later, the idea was adopted by Hutchinson and Waters (1987,p.62-63) and the authors developed a similar framework to the one used in the target situation analysis as follows:

A framework for analyzing learning needs

Why are the learners taking the course?

- compulsory or optional;
- apparent need or not;
- Are status, money, promotion involved?
- What do learners think they will achieve?
- What is their attitude towards the ESP course? Do they want to improve their English or do they resent the time they have to spend on it?

How do the learners learn?

- What is their learning background?
- What is their concept of teaching and learning?
- What methodology will appeal to them?
- What sort of techniques are likely to bore/alienate them?

What resources are available?

- number and professional competence of teachers;
- attitude of teachers to ESP;
- teachers' knowledge of and attitude to the subject content;
- materials;
- aids;
- opportunities for out-of-class activities.

Who are the learners?

-age / sex/ nationality;

- What do they know already about English?
- What subject knowledge do they have?
- What are their interests?

- What is their socio-cultural background?
- What teaching styles are they used to?
- What is their attitude to English or to the cultures of the English-speaking world?

Where will the ESP course take place?

-Are the surroundings pleasant, dull, noisy, cold etc?

When will the ESP course take place?

- time of day;
- every day/ once a week;
- full-time / part-time;
- concurrent with need or pre-need.

According to Hutchinson and Waters (1987), needs analysis is a complex process. Target situation analysis shows the starting point (lacks), destination (necessities) and maybe ideas of learners (wants). However, this analysis can not demonstrate how the learner will learn these language items, skills, strategies or subject knowledge. Therefore, if one wants to have useful and sound analysis of learner needs, both target situation needs and learning needs must be taken into consideration in a needs analysis process. These two types of needs must be in harmony, especially in ESL and EFL settings. If the learning needs of students can be figured out, target needs can be met more easily. With a similar view, Graves (2000) also points out that the concept of 'needs' yields two kinds of information about learners as *subjective information* and *objective information*. While subjective information includes attitudes or expectations, objective information includes facts. The important point is here that subjective information must be taken into consideration, or objective information may be pointless.

Means Analysis

Called as environment analysis by Dudley-Evans and St. John (1998), this analysis, according to West (1997), takes into consideration of constraints and opportunities of teaching context. In other words, course is adapted to the environment by gathering data related to logistic and pedagogy matters. The factors related to learners, teachers, language teaching and classroom culture are investigated. According

to Dudley-Evans and St. John (1998, p.124), the assumption behind this analysis is that "acknowledgement that what works well in one situation may not work in another".

To sum up, as Basturkmen (2010) points out, there are a lot of definitions concerning the concept of needs in the literature. Looking through its history, the notion of needs has undergone great changes in meaning over time and its meaning has widened.Especially considering the definitions of recent years, it has been understood that the concept of need is not just about linguistic structures, but on the contrary, it is a concept covering the entire learning process and that these factors should be addressed. For the evolution process of needs analysis, West (1997) uses a metaphor of a 'journey' to describe it. Accordingly, the focus of needs analysis was initially on the question of 'what', that is, on identifying ' necessities' or 'objective needs', which metaphorically refers to 'destination'. Then the concept of 'lacks' were introduced, which shows 'the point of departure'. However, this is similar to a journey in which a starting point and destination are known, but a route is not known. In other words, how one can get to the destination was not taken into consideration. Identifying necessities and lacks were like a compass on this journey giving general direction. Therefore, in time, strategy analysis was added to the process and the route was identified, which refers to 'means of travel' on a journey. However, this time, it was decided that the route must be chosen according to the vehicles and guides available on a journey, which describes 'means analysis' emphasizing the conditions of the learning situation.

2.1.9.3. The purpose of needs analysis

In its simplest form, according to Graves (2000), when designing or teaching a course, it is assumed that there is a gap between a current state and a desired goal in order to meet learners' needs. Therefore, the purpose of a course is to bridge this gap. This occurs when information is gathered about both the current state and the desired goals. The author presents the process which describes the purpose of needs assessment as follows:

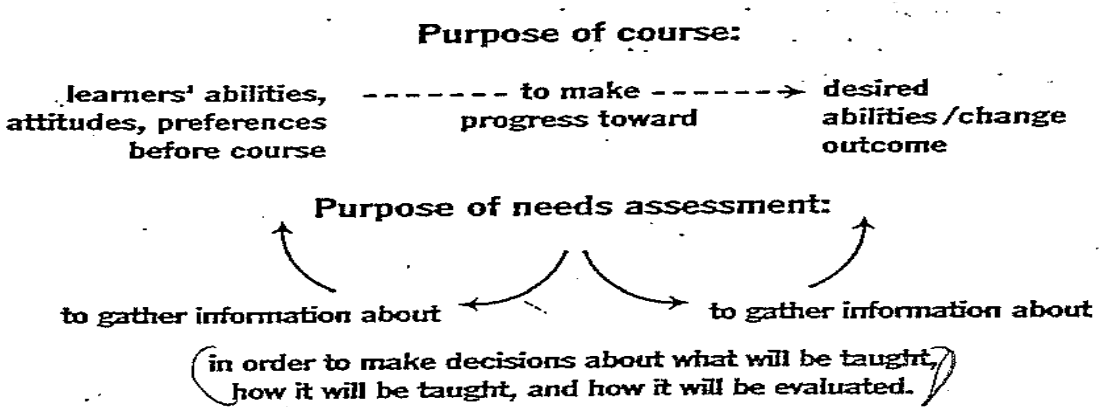

Figure 2.6. Basic purpose of needs assessment (Graves, 2000, p.101).

In addition, according to Richards (2001, p.52), needs analysis can be used for many different purposes. He presents a list of likely purposes as in the following:

- to find out what language skills a learner needs in order to perform a particular role, such as sales manager, tour guide, or university student
- to help determine if an existing course adequately addresses the needs of potential students
- to determine which students from a group are most in need of training in particular language skills
- to identify a change of direction that people in a reference group feel is important
- to identify a gap between what students are able to do and what they need to be able to do
- to collect information about a particular problem learners are experiencing

On the other hand, Richards (2001) emphasizes that purposes change based on the educational setting or context as there are differences between needs analysis conducted for restaurant employees and for EFL students. Therefore, as Graves (2000) states, the first step is to determine what the purpose or purposes are before conducting a needs analysis. According to Basturkmen (2010), the needs may sometimes be identified easily in the employment where English is used for a specific purpose such as the industry of tourism or hotel. However, according to Richards (2001), sometimes learners' needs may not be identified as in the case of students in an EFL context where

English may be a compulsory subject. In this case, curriculum planners and other people such as employers, parents, teachers cooperate to identify the needs of the learners with the understanding of the students may not have any immediate perceptions of needs. In many parts of the world, the process moves in this way without consulting learners. Richards (2001, p.53) summarizes this case as such "… Needs analysis thus includes the study of perceived and present needs as well as potential and unrecognized needs".

2.1.9.4. The users of needs analysis

A needs analysis may be used for different people and the end users of needs analysis may change from one study to another (Allen & Spada, 1983; Richterich, 1979). For instance, according to Richards (2001,p.55-56), in order to carry out a needs analysis for a secondary school English curriculum in a country, the following users may be included in the study:

- Curriculum officers in the ministry of education, who may wish to use the information to evaluate the adequacy of existing syllabus, curriculum, and materials
- Teachers who will teach from the new curriculum
- Learners who will be taught from the curriculum
- Writers, who are preparing new textbooks
- Testing personnel, who are involved in developing end-of-school assessments
- Staff of tertiary institutions, who are interested in knowing what the expected level will be of students exiting the schools and what problems they face

In addition, Richards (2001) states that each needs analysis has different stakeholders who are interested or involved in the needs analysis process. As those people will expect different things from a curriculum, a needs analysis may therefore have a political aspect. Due to politic, economic and other various issues, there may be cases of giving priority, supporting one group of people or justifying a decision within the process. In this sense, it is very important to take into consideration of these different stakeholders and to seek for negotiation. Similarly, Benesch (1996) states that

needs analysis process is affected by the ideology of the stakeholders . According to Auerbach (1995, p.9), “Pedagogical choices … are in fact inherently ideological in nature.” In summary, as Richards (2001) argues, based on the educational setting, institution, other stakeholders such as parents and funders may affect the things in a classroom. Therefore, needs assessment may be conducted by reconciling different views to find out the needs. Even when needs assessment, according to Berwick (1989), is conducted between only the teacher and learners, it is still a complex process because every student is unique and different learners in the same class have different needs.

2.1.9.5. Target population

According to Richards (2001), as the users of a needs analysis may change, target population may also change. Target population refers to the people whom the information will be collected about. As West (1994) notes, even though the needs analysis studies usually seem to focus on only (potential) language learners, other people that give useful information for the study may be involved in the process as the target population. For instance; as Hoadley-Maidment (1983, p.40) provides three main parties as *teacher-percevied needs*, *student-perceived needs* and *company-perceived needs*, Richards (2001, p.57) lists the likely target population for a public secondary school in an EFL context as follows:

- Policy makers
- Ministry of education officials
- Teachers
- Students
- Academics
- Employers
- Vocational training specialists
- Parents
- Influential individuals and pressure groups
- Academic specialists
- Community agencies

In addition, Richards (2001) points out that the key point in determining the target population is sampling, in other words, the representative of the total population. In some cases, the target population may be small and total population may be included in the needs analysis. However, when including each participant in the process is not feasible, a sample of total population should be made. On the other hand, Elley (1984) argues that sampling is such an important issue that there are several factors influencing sampling process and decisions therefore should be made by regarding these factors, the purpose of the study and sources of information available. Also, if the target population is large, expert advice on approach to sampling is often required.

2.1.9.6. When do we conduct needs assessment?

According to Richards (2001, p.54), needs analysis may be conducted *prior* before, *during* or *after* a language program. 'A priori approach' to needs analysis "as part of the development of a course" requires long-term planning, plenty of time and resources. According to Basturkmen (2010,p.26), in pre-course design process "… information is gathered to help the teacher or course developer decide what the course should focus on, what content in terms of language or skills to include and what teaching/learning methods to employ". Needs assessment activities carried out in this period, as Graves (2000) states, are generally procedures such as placement exams in order to place students in the right course at the right level. Also, they may be diagnostic to pinpoint specific areas of strengths and weaknesses of students, so that they may be addressed throughout the course. If a pre-course needs assessment is carried out, an important point is that planning the course should be based on the results of the assessment as it is important to be responsive to students' needs right from the first day of class.

On the other hand, in the cases pre-course needs analysis is not possible because of time constraints and there is little information available about learners, needs analysis may take place during the course to form the goals, content, and the teaching approach "as part of the delivery of the course" (Richards, 2001,p.54). According to Basturkmen (2010, p.26), as "over time needs can change and teachers also gain increased understanding of the

situation and the learners' needs in relation to it", an ongoing needs analysis is required to revise the course design "once it is set up and running". In other cases, plenty of information may be gathered after a course is finished and the information collected is used to evaluate and revise a language program (Richards, 2001).

2.1.9.7. Designing needs analysis

Designing a needs analysis involves a series of steps (West, 1994). According to Nation and Macalister (2010, p.32), a good needs analysis ensures that "a course will be relevant and satisfying to the learners" and requires asking the right questions at the right time and seeking for the effective answers. However, as Richards (2001) points out, each needs analysis varies in terms of their scopes and purposes. Therefore, when a needs analysis is planned, procedures such as collecting, organizing, analyzing and reporting data gathered are important issues. The planning process should start with clear reasons and the key point is to gather useful and relevant information with the appropriate gathering instrument (Graves, 2000; Richards, 2001; Schutz & Derwing, 1981). For instance, the following procedures were followed to investigate the language needs of non-English background students at New Zealand University (Richards, 2001, p.63-64):

1. Literature survey
2. Analysis of a wide range of survey questionnaires
3. Contact with others who had conducted similar surveys
4. Interviews with teachers to determine goals
5. Identification of participating departments
6. Presentation of project proposal to participating departments and identification of liaison person in each department
7. Development of a pilot student and staff questionnaire
8. Review of the questionnaires by colleagues
9. Piloting of the questionnaires
10. Selection of staff and student subjects
11. Developing a schedule for collecting data

12. Administration of questionnaires
13. Follow-up interviews with selected participants
14. Tabulation of responses
15. Analysis of responses
16. Writing up report and recommendations

In small-scale needs analysis studies, the following procedures may be followed (Richards, 2001, p.64):

- Initial questionnaire
- Follow-up individual and group interviews
- Meetings with students
- Meetings with other teachers
- Ongoing classroom observation
- Tests

Apart from these, Nation (2010, p.30) views needs analysis as a kind of assessment and states that its evaluation is based on "its reliability, validity and practicality". Accordingly, reliable needs analysis requires "using well-thought-out, standardised tools". Valid needs analysis is concerned to gathering "what is relevant and important". Therefore, the type of need and type of information should be identified in advance. As for practical needs analysis, it refers to one which "… is not expensive, does not occupy too much of the learners' and teacher's time, provides clear, easy-to-understand results and can easily be incorporated into the curriculum design process". As a conclusion, the author states that although there should be a compromise among the three elements, ensuring validity is always to be the first step.

2.1.9.8. Administering needs analysis

According to Richards (2001), the process of planning needs analysis involves who will administer, who will collect the data and analyze the results. Each needs analysis varies in aspect of their demands and scopes. For instance, needs analysis may

be a small- scale study with a teacher and his/her own class or a large-scale study with a big population of people.

On the other hand, Shaw and Dowsett (1986) point out that some language programs require teachers to conduct an ongoing informal needs analysis. In this case, the teachers carry out an informal needs analysis in the form of chats with their students within a course. This informal way of collecting information may take on the role of complementary for the formal studies. Similarly, emphasizing that needs analysis should be teachers' responsibility in a classroom, Graves (2000) states that ongoing needs assessment may be conducted as directly, indirectly or informally. For a direct needs assessment, the focus of any activity is to gather specific information. For an indirect needs assessment, a regular teaching activity is given a needs analysis focus. As for an informal needs assessment, it is simply observing students carefully and conscientiously. The author provides the steps to be followed of the needs assesment conducted in a class as follows:

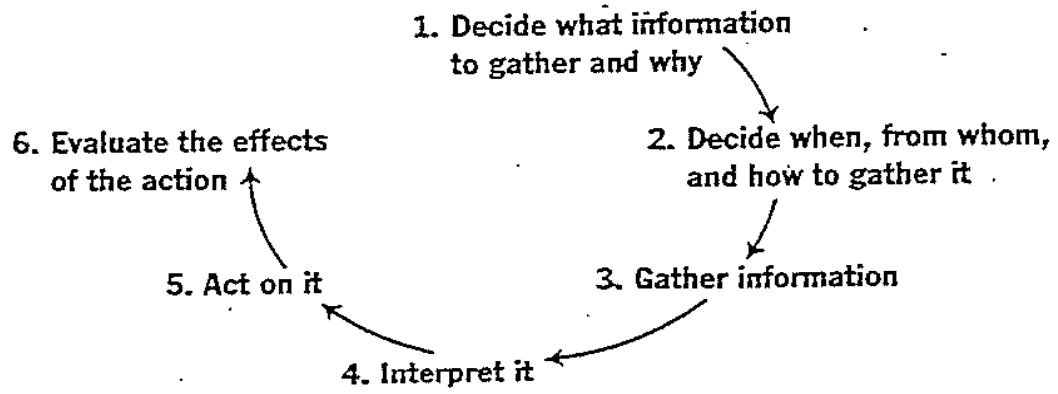

Figure 2.7. The needs assesment cycle (Graves, 2000, p.100).

According to Graves (2000), as this figure is cyclical, depending on the context, these steps can be repeated throughout the course at various times. The important point in this process is to decide the kind of information to be gathered. Too much information in too a short time just causes confliction and is overwhelming. Also, gathering information which is relevant and you can use is another key point. In short, as it is possible to make different choices about what to assess, what is rational in this

process is at first to choose only a few types of information and then to learn how to benefit it, therefore students can see the value of it.

2.1.9.9. Procedures for conducting needs analysis

The ultimate aim of a needs analysis is to tailor the course to the needs of learners. Therefore, the procedures for conducting needs analysis should be considered carefully or there is a risk of designing a course which does not address the needs of the end users. Among these procedures, one of the most important is to select the appropriate data collection tool, which influences the quality of the data collected (Basturkmen, 2010; Nation & Macalister, 2010). In the process of carrying out a needs analysis, many procedures may be used from scientific surveys to informal tools (Richterich, 1983). As a single procedure is impossible to provide all the useful and reliable information for the study, a triangle approach, the process of "collecting information from two or more sources", is advised (Richards, 2001, p.59). Also, the scope and the objectives of the study also determine the data collection instrument in needs analysis (Schutz & Derwing, 1981).

Apart from these, Richards (2001) highlights that the procedure(s) selected for collecting information should show the learners' needs comprehensively and represent the interests of the different people involved. Therefore, the important point while designing a needs analysis is to collect information that will be useful for the study, not to produce too much information. According to Nation and Macalister (2010), another important point is that if there is not plenty of time available, one should be selective about what kind of data is selected and investigated. Finally, as Basturkmen (2010) puts forward, most needs analysis studies are conducted with questionnaires or interviews or either of them. However, there are other ways to conduct a needs analysis. The tools that can be used in a needs analysis are listed as follows.

Questionnaires

Using questionnaires in a needs analysis study is the most common method (Graves, 2000; Jordan, 1997; Richards, 2001). According to Richards (2001, p.60),

questionnaires can be prepared easily, can be implemented for a large population and provide information in a practical way to tabulate and analyze. They can also be used to involve many types of topics. Also, they can be prepared either through structured items "in which the respondent chooses from a limited number of responses" or unstructured items "in which open-ended questions are given that the respondent can answer as he or she chooses". According to Graves (2000), the advantageous point of questionnaires is that it is possible to adjust the questions for your particular group. Another advantage is, as stated by Richards (2001), that other data collection methods may be used as follow-up with questionnaires in order to reduce obtaining superficial or imprecise data. Moreover, piloting of questionnaires allows ambiguities or problems to be reduced. On the other hand, according to Gardner and Winslow (1983), while objectivity is the main advantage of using questionnaires, low rate of return may create a disadvantage.

Interviews

Using interviews in a needs analysis study is a common practice (Basturkmen, 2010). Interviews provide a more detailed analysis of issues when compared to questionnaires (Richards, 2001). As Jones (1991) names this advantage as 'intrinsic superiority', Mackay (1978) calls it 'completeness of coverage'. While Mackay (1978) points out that interviews provide an opportunity of clarification due to the interviewer's physical presence, West (1994) notes that this case may create a disadvantage at the same time. They can also be used at the initial stage of research in order to design a questionnaire (Richards, 2001) or may be used as a follow-up stage to clarify or build up the data obtained through questionnaires (Kumar, 2011). Thereby, as West (1994) points out, the advantages of each method may be exploited. Also, according to Richards (2001, p.61) structured interviews "with a definite number of specific questions" provide consistency across responses. Moreover, interviews may be conducted face-to-face or through telephone. However, on the other hand, it lasts longer to conduct interviews and they can only be used for smaller populations.

Meetings

Through meetings, a great deal of information may be collected in a quite short time. However, information collected may be impressionistic, subjective and involve

specific people's ideas in a group (Richards, 2001). This procedure called as *group discussions* by Graves (2000) is a useful way to address needs-related areas and to involve different points of view into the process.

Observation

Observations are an alternative way of assessing needs to observe learners' behavior in a target situation (Richards, 2001). According to Jordan (1997), it is a valuable approach for *deficiency analysis*. However, as Richards (2001) points out, observations often influence people's performance negatively. Furtherly, observation is a skill that requires training. Although using a checklist or an evaluation sheet makes the process structured and clear (Yalden, 1987a), an observer needs to know what and how to observe and where to use the information obtained (Richards, 2001).

Collecting learner language samples

It is a useful and direct way of assessing the needs of learners. It is used to gather data about learners' performance on different language tasks and to specify problems students have (Richards, 2001). Language samples may be collected through *written or oral tasks* (Graves, 2000; Richards, 2001), *simulations or role-plays, achievement tests, performance tests, self-ratings* (Richards, 2001); *pre-course placement/ diagnostic tests, entry tests on arrival, self-placement/diagnostic tests, progress tests, informal class tests* (Jordan, 1977) and *learner or learning diaries* (Graves, 2000; Jordan, 1977). Other learner language samples that Graves (2000) identifies as *ongoing needs assessment activities* are *ranking activities* in which students rank or list an issue or topic; *regular feedback sessions* in which students reflect on the course ; *dialogue journals* which students keep and the teachers respond to and *portfolios* which is a collection of students' work to show progress and achievement. Apart from these, teacher diaries may be an effective tool for a needs analysis study (McDonough, 1994). Also, a final evaluation or feedback session on the effectiveness of learning may provide information for future curricular activities, as Hoadley-Maidment (1983) stated.

Task analysis

Task analysis involves analysis of the task types that students will carry out in occupational or educational settings and investigation of the linguistic features of the tasks (Basturkmen, 2010). Determining linguistic features of the tasks provides basis for the course design and materials development (Richards, 2001).

Case studies

Case studies involve following a single student or a group of students through an educational experience to explore the characteristics of a specific situation (Richards, 2001). In a needs anlalysis context, case studies are used in order to investigate learning needs of individual students or groups (West, 1994). According to Richards (2001), although they do not provide generalization, they may be used as a complementary to other sources of information obtained. Also, as Schmidt (1981) points out, case studies provide a process-oriented definition for needs analysis.

Analysis of available information

There has been considerable research on needs analysis and the previous research should be benefited (West, 1994). According to Richards (2001), through this procedure which is generally used as the first step in a needs analysis, a large amount of data may be gathered through a variety of sources such as *books, journal articles, reports, surveys, records* and *files*.

2.1.9.10. How to use obtained information

According to Richards (2001, p.67), the results of needs analysis studies are usually reported by summarizing the findings in the lists. These lists may include a little information or detailed information about the findings. The information gathered through a needs analysis may be reported in a format as follows:

- a full written document
- a short summary document
- a meeting
- a group discussion
- a newsletter

According to Basturkmen (2010) and Hyland (2008), needs analysis is not a totally objective procedure.Concerning this issue, Hyland (2008,p.113) remarks “Needs analysis is like any other classroom practice in that it involves decisions based on teachers’ interests, values, and beliefs about teaching, learning and language”. In other words, as Richards (2001) puts forward, the important point is that whatever the amount of the information is, the data gathered is subjective and is exposed to interpretations. For this reason, both more analysis and detailed information are required in order to be able to understand the situation more precisely and the information gathered has to be analyzed and interpreted before its application.

Moreover, Richards (2001) argues that there is no direct application of needs analysis findings to the curriculum design. Even if the problems, difficulties, opinions, situations, comments, preferences and suggestions obtained from a needs analysis through a variety of different sources provide useful information, this does not mean that immediate changes will be made on the curriculum. In other cases, application of the results may not be possible because of time constraints. Similarly, Scrivener (2005) states that addressing needs is not an easy task as it may require finding new materials, varying activities or breaking the routine in order to satisfy the different views.

Apart from these, in some needs analysis studies, there may be some contradictory data and in these cases, a great deal of negotiation among the stakeholders should be made for a relevant and appropriate application (Richards, 2001). Similarly, for the cases in which different perspectives from different stakeholders emerge, Brindley (1989) points out that negotiation process among the stakeholders is a must and the assumptions of the stakeholders should be satisfied and clarified.

On the other hand, according to Scrivener (2005), while data obtained from a needs analysis may provide useful information, it may also involve unrealistic requirements or inappropriate wishes. Any needs analysis conducted has a risk of making people believe that everything they want or expect will come true. For this reason, in order to make use of the data obtained, findings of needs analysis should be balanced (Nation & Macalister, 2010; Richards, 2001; Scrivener, 2005). According to

Graves (2000, p. 3), in this balancing process, “What makes sense to you will depend on your beliefs and understandings, articulated or not, and the reality of the context and what you know about your students”. Therefore, beliefs and institutional and cultural context serve as the foundations for each component of course design process.

Last but not least, as for the issue of what the data gathered will be used for, Richards (2001, p. 67) presents the following cases:

- It may provide the basis for the evaluation of an existing program or a component program.
- It may provide the basis for planning goals and objectives for a future program.
- It may assist with developing tests and other assessment procedures.
- It can help with the selection of appropriate teaching methods in a program.
- It may provide the basis for developing a syllabus and teaching materials for a course.
- It may provide information that can be used as part of a course or program report to an external body or organization.

To conclude, as Richards (2001) states, in all those cases, decisions should be made on which needs are critical or desirable, which needs are immediate and long-term and which ones are feasible and impractical. The critical, immediate and feasible needs should be prioritized. As Scrivener (2005) points out, instead of ignoring conflicting views of different people and acting as if differences do not exist, finding a balance between the course requirements and people’s perception of needs is much better.

2.2. Related Studies

In the literature, a great deal of research exists over academic language needs of university students in CBI contexts both in international and national educational settings. Although these studies vary across academic fields, participants or stakeholders, and required academic skill, the main aim is to provide a sound basis for curriculum studies in CBI contexts. In this section, firstly international studies over

needs analysis in CBI contexts will be presented. Secondly, national studies on language needs of university students in CBI settings will be focused.

2.2.1. International studies on needs analysis in CBI settings

Although there are many international studies conducted on needs analysis, the ones done in CBI setting are limited in number. To start with, Behrens (1978) performed a study which included 128 faculty members in 18 academic disciplines and 6 professional fields at American University. The aim of the study was to identify the perceptions of the faculty members on student literacy, types, and frequency of writing tasks. For this purpose, Behrens (1978) had the faculty members classify the writing tasks under three types: reports, themes or essays, research papers. According to the results of the study, while essays written over experiences or readings were the most frequent type of papers assigned in undergraduate humanities and social science courses, the essays were infrequent in undergraduate professional school courses and were the ones never assigned in science courses. Experimental reports were the ones assigned most in undergraduate science courses. The results also showed that reports which included factual discussion and research papers were the most frequent types in the professional school courses. A great majority of the undergraduate courses (85%) surveyed required some type of paper, which showed the significance of writing.

At the University of Southern California, a questionnaire of students' academic skills needs required for their degrees was done with 131 ESL students by Ostler (1980). Students were asked to to identify the importance of specific academic tasks in the skill areas of speaking, listening, writing and reading through a questionnaire. Overall results showed that six oral / aural tasks - class notes, asking questions, discussing issues, giving talks, panel discussions and interviews - were prioritized by the students, though there were significant variations across major fields and class types. Ostler (1980) concluded that the students need support and training for academic speaking skills instead of general conversation skills.

In an ESL setting, Johns (1981) carried a study through a questionnaire with 200 randomly selected classroom instructors at San Diego University. The aim of the study was to determine which skills (reading, writing, speaking, and listening) had the most significance for non-native students. The results showed that receptive skills – reading and listening – were the most required skills, and writing and speaking were ranked as less important by the faculty members. Based on these results, Johns (1981) suggests that teaching of the productive skills – speaking and writing- have secondary importance in the curriculum where reading and listening were central. Speaking and writing skills could be used as post activities for the receptive skills.

West and Byrd (1982) carried out a study in 25 engineering faculty at the University of Florida to identify the types of writing required in graduate engineering courses. The faculty was asked to rank specific writing tasks according to the frequency of the assignment. According to the results of the study, types of writing assigned most often were an examination, quantitative problem and report writing. While homework and paper writing were assigned less often, progress report and proposal writing were the ones assigned least often.

Bridgeman and Carlson (1983) conducted a questionnaire at 34 U.S. and Canadian universities. The purpose of the study was to determine what academic writing tasks and writing skills were required in six academic disciplines for beginning graduate students. The survey also questioned writing requirements of beginning undergraduate students. For this purpose, faculty members were asked to determine the frequency of various writing tasks assigned and to rate the importance of given specific writing skills. According to the results, while lab reports and brief article summaries were frequent in engineering and the sciences for undergraduates and graduates, longer research papers were required more for both groups in MBA, civil engineering and psychology programs. As for the importance of specific writing skills, descriptive skills such as describing a procedure were considered important in engineering, computer science and psychology programs. While the writing skill of arguing for a particular position was considered very important for undergraduate students, MBA students and

psychology majors, it was ranked as little important in engineering, computer science and chemistry programs.

Eblen (1983) carried out a study through questionnaires in 266 faculties in five academic divisions at the University of Northern Iowa. The purpose of the study was to find out types and frequency of writing tasks required in the fields. According to the results, essay test had the highest frequency across the fields which showed that writing as a mode of testing had significance as much as writing as a mode of learning new information. The other writing tasks assigned most were informative ones which are analytical papers, abstracts of readings, documented papers, essays or themes, lab reports, case reports, technical reports, and book reports, in the order of decreasing frequency across the fields. Personal writing such as personal essays or journals were assigned a lot more in education and humanities courses than in science, social science and business courses.

Ferriss and Tagg (1996) conducted a survey with 900 instructors at four different types of institutions. The aim of the study was to identify academic listening and speaking tasks required by subject matter instructors. The study was done through a questionnaire including both quantitative and qualitative sections. While the quantitative sections asked instructors to specify the required aural and oral tasks, difficulties students had, and the areas of improvement in these skills, the qualitative sections wanted instructors to write their extra comments and present examples of assignments. The results showed that expectations and requirements of the instructors vary across the academic field, type of institution and class size.

Gee (1997) did a study implementing a sheltered adjunct class over a proposal of creation of paired classes or connected courses that Glendale Community College put forward in 1990. The purpose of this proposal was to increase students' performance in content classes. In this sheltered adjunct course in which ESL students – non-native ones - were separated from the other students in the class, advanced reading and composition class paired with a course in social science. For this purpose, a questionnaire was given to the social science instructor to identify the required skills

and areas for the syllabus and the materials. This questionnaire tried to question the weaknesses through some specified sub-skills in speaking, writing, reading, listening and general academic skills and the importance of the major specific sub-skills in the areas mentioned. Furthermore, Gee (1997) did a classroom observation in the social science class as an ESL instructor and questionnaires were distributed to all students in the social science class to involve the expectations of students into the process. According to the results of the questionnaire completed by the content area teacher, in the first place, students were required to ask and answer questions about the readings studied in the classes. Another point that the content teacher reported was that listening skills were needed for a better performance in the lectures. As for reading skills, they were necessary for vocabulary studies and obtaining ideas. Last, writing skills had significance for the courses.

2.2.2. National studies on needs analysis in CBI settings

When we consider the studies on the needs analysis in Turkey, it is seen that there are many needs analysis studies in CBI context. To start with, at a state university, Somer (2001) primarily aimed at investigating the beliefs of content area specialists in the departments of architecture and engineering about the importance of English for their students' departmental studies and the attitudes towards English-medium education in their departments. The secondary aim of the study was to identify which language content area specialists use in their courses; the underlying reasons of their language preferences and the problems content area specialists have when they prefer to use English in their lessons. With these aims, the study was carried out with totally 33 faculty members in the departments of engineering and architecture. Data was gathered through a questionnaire. According to the results, all the participants reported that their students need to learn English to read sources or materials in English and English language education should start as early as possible and continue for students to be able to master academic content in English. Also, skills-based lessons should be emphasized more in the curriculum studies at the preparatory program. Apart from these, in aspect of language preferences of content area specialists, the results showed that a large majority of teachers use both Turkish and English in their lessons due to inadequate

proficiency level of their students and comprehension problems. The teachers who prefer to use English in their classes stated that most of the main sources or materials are in English. Finally, the teachers who use Turkish in their courses claimed educational and political reasons such as comprehension problems and protecting Turkish language.

Arık (2002) did a study to investigate students' English language needs from the content area specialists' point of view at a Turkish-medium state university. The purpose of the study was to determine the importance of specific academic English language skills related to writing, reading, speaking and listening through the perspectives of content area specialists in different disciplines. For this purpose, questionnaires were conducted with 177 content area specialists. According to the main results of the study, teachers agree on the importance of English for their students' academic success. Although a few teachers reported that academic English language skills were not required, other teachers in the study ranked reading skill as the most important skill. Furtherly, ranking of the skills varies across school types (faculties or vocational schools), teachers' educational background (teachers with or without Ph.D. s or M.A.s) and academic discipline. Teachers working at the faculties, teachers who have Ph. D. s and teachers in the hard-pure sciences reported that academic English language skills have more importance for students compared to other participants in the study. Arık (2002, p.4) suggests that the current curriculum where English is taught "… as an integrated skills service course for matriculated students" should be adjusted to the requirements of the content area specialists.

Güler (2004) carried out a study to investigate academic English language requirements of disciplinary teachers for students at a state university where language of instruction was changed from partial English to Turkish medium instruction. The study primarily aimed at determining which skill among reading, listening, writing, speaking and translation has the highest priority and determining the importance of specific language tasks related to four basic skills for the academic success of the students. The secondary aim of the study was to reveal the attitude of lecturers towards English-medium instruction at the tertiary level because of the recent switch from English-

medium instruction to Turkish-medium instruction. For this purpose, questionnaires were distributed to the disciplinary teachers at eight different faculties and 254 questionnaires were completed and returned. Overall results of the study showed that most of the teachers showed agreement on the importance of English and ranked reading as the most important skill for students' academic studies. However, a few teachers reported that writing, speaking and listening had significance for students, as well. As for the results concerning attitudes of the teachers towards English-medium instruction, the majority of teachers support Turkish-medium instruction and they reported that content courses should be delivered in the mother tongue. At the end of the study, Güler (2004) stated that these findings may be utilized in the curricular studies and the existing curriculum may be adjusted to the needs. In addition, the researcher believes that the results of this study may provide a new perspective towards English-medium instruction in educational settings.

At a state-run university in Turkey, Yazıcıoğlu (2004) did a study to describe academic writing requirements of students from the perspectives of content area specialists in the two English-medium departments. In the study, a questionnaire was given to 54 content area specialists in two departments, medicine faculty and economics department. According to the main results, all the academicians reported that general academic writing skills are essential for their students' overall academic success, but they also reported that students' current writing skills need to be improved. In addition to this, the findings showed that being a proficient writer has less importance in the medicine faculty than in the economics department approaching more critically to students' writing skills. The researcher concludes that current curriculum should be kept and creating an adjunct course for economics students may be possible.

Eroğlu (2005) did a study to investigate content course teachers' academic reading requirements for first-year students in English-medium departments at a state university in Turkey. In the study, a questionnaire was distributed to 35 content area specialists in English-medium departments. The follow-up interviews were conducted with 18 content area specialists. A vocabulary test was given to 99 first-year students to identify the vocabulary levels of the students. Furtherly, reading samples from the

textbook and the final exam in the Preparatory School were analyzed. The results showed that all content area specialists reported that being a proficient reader for academic success is essential. Based on this result, Eroğlu (2005) suggests that the current curriculum in the Preparatory School be adjusted and revised to include more academic vocabulary studies and the texts required by the content area specialists.

Şahbaz (2005) carried out a study to investigate content area specialists' academic reading and text type requirements of first-year students in English-medium departments at a state university. The study was done through interviews and questionnaires. Thirteen out of twenty instructors completed the questionnaire and follow-up interviews were conducted with 20 content area specialists. In addition, samples of required textbooks were collected from first –year, first-term content area specialists and reading samples from the textbook taught in the Preparatory School were included in the study. According to the results of the study, all content area specialists reported that being a proficient and efficient reader is essential for students' academic success. Teachers also suggested that students' academic reading skills and vocabulary knowledge should be improved in the Preparatory School. Şahbaz (2005) recommends that necessary adjustments to the current curriculum should be made based on the findings of the study.

Another study in Turkish context was done by Canbay (2006) at a state university. The study investigated the academic English needs of students in English-medium departments at a state university through the perspectives of content area specialists and departmental chairs. The primary aim of the study was to determine which skill among reading, writing, listening, speaking and translation was the most important for the English-medium departments. The secondary aim of the study was to specify the importance degrees of specific sub-skills and language tasks or activities related to reading, writing, speaking and listening for the English-medium departments. For these purposes, questionnaires and interviews were conducted in thirteen departments teaching content in English. The questionnaires were completed by 128 content area specialists and interviews were done with 13 departmental chairs. Main results of the study showed that reading is considered the most important skill by the

lecturers. The importance of specific language tasks and activities varies across the departments. Based on these results, the researcher suggests the existing curriculum including content-based instructional practices should be adjusted to the expectations of the lecturers.

As one of the recent researches, Gözüyeşil (2014) investigated academic English requirements of engineering departments teaching content area courses through partial English at a state university from the perspectives of content area specialists and engineering students. The study aimed at determining which skill among reading, listening, writing and speaking is the most important for the English-medium departments and the importance of specified sub-skills related to four skills. The study was carried out through two questionnaires and semi-structured interviews. One of the questionnaires was given to 133 engineering students, and the other questionnaire was given to 246 preparatory class students. The interviews were conducted with 11 content area specialists. The results showed that requirements and expectations vary across the participants in the study. While academicians ranked reading and listening as the most important skills, engineering students reported that speaking and listening had the most significance for them. The preparatory students reported that they had difficulties in reading skills and strategies. However, overall results showed that engineering students need to improve reading skills for their academic success. At the end of the study, Gözüyeşil recommends that the existing curriculum should be adjusted based on the results.

Last but not least, Şahan and et. al. (2016) performed a study to investigate the academic English language needs of undergraduate engineering students in the English-medium departments at a state-run university in Turkey. For this purpose, 104 engineering students, 18 EFL instructors, 9 faculty members, 12 engineers and 4 employers were included in the study. These participants were chosen from English Preparatory Program, Faculty of Natural Sciences, Architecture and Engineering and two automotive companies. In the study, questionnaires were given to all the participants, and follow-up interviews were done with 12 participants selected randomly. Overall results showed that all basic language skills, except translation, have

equal importance although content area specialists ranked receptive skills as the most important. In the study, the translation was considered important by only students. The findings revealed the need for teaching specific English at Preparatory Program where such kind of instructional practices are not delivered. At the end of the study, researchers, therefore, recommended curricular studies in accordance with the results of the study should be done at the Preparatory Program.

All in all, CBI is an evolving field and the rich opportunities that this field has provided should be benefited in language education (Brinton & Snow, 2017). Also, determining learner needs is an essential component of a CBI context (Brinton, et. al., 1989). Accordingly, the current study investigated learners' needs in a CBI setting. As it is not possible to investigate each need area in one study (Richards, 2001) and the current study has been the first needs analysis research conducted for content courses at ZBEU, the present study, according to Dudley-Evans and St John's (1998) list, included *target situation analysis* and *genre analysis*.

CHAPTER III

METHODOLOGY

3. Introduction

This chapter is concerned with the methodology of the present study. In the first section, the research design of the study will be discussed. The next section will provide information about participants and data collection instrument. Lastly, data collection procedures and data analysis procedures will be presented.

3.1. Research Design

The purpose of the present study is to investigate Academic English language needs of students in English-medium departments and to reveal content area specialists' opinions towards English-medium instruction at ZBEU. Throughout these aims, two types of data were used as quantitative data and qualitative data in the current study. Quantitative data collected from questionnaires and qualitative data obtained through interviews were analyzed separately, and the results concerning each data form were analyzed. Therefore, the present study adopted *the mixed methods design* as research design. A mixed methods research design is an approach which involves collecting, analyzing and interpreting both quantitative and qualitative data in a single study to understand a research problem (Creswell & Plano Clark, 2011, Tashakkori& Teddlie, 1998).

Mixed Methods Design

Mixed methods research is a new paradigm in the social and human sciences (Creswell, 2009); however its popularity is increasing in educational research and other disciplines (Creswell, 2003; Creswell & Plano Clark, 2007). When it is looked at its historical background, from the late 19th century to the mid-20th century, quantitative approach was widely adopted in the social sciences. In the second half of the 20th century, qualitative approach gained importance and mixed-methods approach developed through this interest in the qualitative approach (Creswell, 2009). The term *triangulation* introduced by Jick (1979) was used in the scholarly literature and became a framework for mixed methods research. Therefore, this term is considered an antecedent to mixed methods research (Creswell, 2011).

With the increasing interest and popularity, the field has also evolved and developed (Creswell, 2012). This evolution can be seen in identified procedures such as visual models, a notation system developed by Morse (1991), specific designs, classifications and types in different disciplines. Especially, the notation system (Morse, 1991) became popular and it has been developed and added by methodologists. Therefore, it is still being used widely in the mixed methods field (Plano Clark &Creswell, 2008). An example of a notations system is as follows:

Approach			**Type**
QUAL	+	quan	Simultaneous
QUAL	→	quan	Sequential
QUAN	+	qual	Simultaneous
QUAN	→	qual	Sequential

Figure 3.1. Examples of Types of Designs Using Morse's (1991) Notation System (Cited in Plano Clark &Creswell, 2008, p.168)

In the notation system above (Figure 3.1.), shorthand labels and symbols are used to convey the procedures of mixed methods research. The short forms of quan and qual stand for the quantitative data and qualitative data respectively. The symbols of '+'

refer to the simultaneous of data collection. Arrows indicate that data collection will be conducted sequentially. Capitalization and lowercase letters indicate the priority or weighting given on the quantitative or qualitative data form (Plano Clark & Creswell, 2008).

Mixed methods research simply refers to the combination of quantitative and qualitative approaches. For instance, Creswell, Plano Clark, Gutmann, and Hanson (2003) remark:

> A *mixed methods study* involves the collection or analysis of both quantitative and/or qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process of research (p.212).

In addition, increasing number of methodologists and authors argue that mixed methods research is the third methodological movement and thereby it should be considered a separate and distinct research design (Creswell, 2014). For instance, Creswell and Plano Clark (2007) propose a definition for mixed methods research which emphasizes mixed methods research as both a method and methodology. The definition is as follows:

> Mixed method is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis and the mixing of qualitative and quantitative approaches in many phases of the research project. As a method, it focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches, in combination, provides a better understanding of research problems than either approach alone (p.5).

As it is seen in the definitions given above, the basic assumption of mixed methods research is to provide a more comprehensive understanding for the research problem than either research by itself by combining quantitative and qualitative research as all the research methods have limitations and using multiple methods neutralizes these limitations. That is, the strengths of each data form are benefited. Accordingly,

quantitative data are used for its power of statistical analysis and describing trends or a large population. Qualitative data are used for its feature of exploratory and providing in-depth information (Creswell, 2012; Creswell et. al., 2003). Thereby, a powerful mix is obtained, and a study can be strengthened (Greene & Caracelli, 1997).

There are other reasons for using this design in a study. When using one type of research is inadequate to address the research questions or problems (Creswell, 2009) or when the researcher wants to add alternative perspectives to the study, using mixed methods research is a good choice. Also, it provides a sophisticated and complex approach, especially appealing to those new in research procedures (Creswell, 2012).

On the other hand, as pointed by Creswell (2012, p.553), this research design poses some challenges for the researchers. First of all, as it combines quantitative and qualitative research, the typical ethical issues of either research method also relate to the mixed methods research. Accordingly, the issues that need to be considered in quantitative research are "obtaining permissions, protecting the anonymity of respondents, not disrupting sites, and communicating the purposes for the study". As for the qualitative research, these issues are concerned to "conveying the purpose of the study, avoiding deceptive practices, respecting vulnerable populations, being aware of potential power issues in data collection, respecting indigenous cultures, not disclosing sensitive information, and masking the identities of participants". Therefore, the interdisciplinary nature of this design requires being familiar with either data form. Even in some cases, it may require working with a research team. Apart from these, due to the intensive nature of this type of design, data collection and analysis take a lot of time, which requires labor and effort. As this research design has a complex nature, researchers need to use clear and visual models in order to clarify the flow of research procedures in a study. Also, researchers need to keep in mind that different types of mixed methods design raise different and specific ethical issues (Creswell, 2014).

Types of Mixed Methods Research

The growth of interest in mixed methods research has led to emerge numerous procedures and variations for mixed methods design from different disciplines

worldwide (Creswell, 2014). For instance, Greene, Caracelli & Graham (1989) proposed four different types of mixed methods design to be used in the field of assessment, and Morgan (1998) developed five different types for the health research. Although there are a great number of overlaps or similarities in the typologies, it also poses some challenges. Creswell (2009) states this case as follows:

> … as these classifications are drawn from different disciplines, have emphasized different facets of mixed methods designs, and lack consistency in the names of the designs. It may even appear that little agreement exists among these authors and that there are an infinite number of design options (p.59).

For this reason, authors made a great effort to classify these procedures and variations. One strategy that authors use is to review the published studies and to classify it. These classifications belong to different disciplines with different terminology (Creswell et. al., 2003). In these classifications, a great number of diverse terms such as *multimethod, convergence, integrated, combined* (Creswell, 1994); *multitrait research, integrating qualitative and quantitative approaches, interrelating qualitative and quantitative data , methodological triangulation, multimethodological research, multimethod designs, linking qualitative and quantitative data, combining qualitative and quantitative research* and *mixed model studies* (Creswell, et. al., 2003); *integrating, synthesis, quantitative and qualitative methods,* and *mixed methodology* may be found in the literature but the term *mixed methods* is more prevalent in recent writings (Creswell, 2014; Tashakkori & Teddlie,1998). Also, different types of mixing methods are still being identified (Creswell, 2012).

Another important point is to determine the type of mixed methods design in a study. Four criteria are proposed in the literature to help researchers. These are concerned to timing, weighting, mixing, and theorizing of two types of data. In other words, researchers should consider the timing of either data collection, whether it will be collected sequentially or at the same time (concurrently). Also, the weight or the priority given to either data form needs to be considered, whether equal importance will be given or one form of data will complement or inform the other (Creswell, 2012; Tashakkori & Teddlie, 1998). The third factor is related to at which stage the mixing of quantitative and qualitative data will occur and how the two sets of data will be mixed,

whether they will be merged, embedded or connected (Creswell, 2009). The last factor influencing the choice of type is that whether a theoretical perspective guides the study. All researchers bring a theoretical perspective to their studies, and theoretical framework may occur implicitly or explicitly in a research study (Creswell, et. al., 2003). However, this issue has been discussed recently in the mixed methods field, and it has been a controversial topic (Greene, 2007). It was pointed out that transformative types of designs have an explicit theoretical framework. On the other hand, it was also noted that an explicit theory may or may not occur in mixed methods research (Tashakkori & Teddlie, 1998). All in all, these four factors help researchers to determine the appropriate mixed methods design for their study (Creswell, 2003, 2009, 2012 & Creswell, et. al., 2003; Tashakkori & Teddlie, 1998).

Apart from these, as stated before, Creswell (2009) states that there are infinite numbers of designs of mixed methods research and it may be challenging for a researcher to choose the appropriate design. For this case, Plano Clark & Creswell (2008, p.178) remark "… it can be suggested that the mixed methods researcher has the flexibility to choose and innovate within the types to fit a particular research situation". Thereby, the present study adopted Creswell and Plano Clark's (2011) classification of mixed methods research designs. Accordingly, there are six types of mixed methods design. These designs are *the convergent parallel design, the explanatory sequential design, the exploratory sequential design, the embedded design transformative design, and the multiphase design.* The authors state that the first four designs are basic designs and last two designs are complex designs. According to this classification, the current study was conducted through *explanatory sequential design*. In other words, data were collected in two phases sequentially. Firstly, quantitative data were obtained through questionnaires and then interviews were conducted to build up and validate the quantitative findings. A further explanation about the research type of the current study is as follows:

The explanatory sequential design: As the most popular type, data are collected in two phases sequentially. That is, one set of data collection follows and informs the other. Firstly, quantitative data are collected and then qualitative data are gathered to

explain, elaborate, validate or expand on the quantitative findings. The rationale for this type is that a general picture concerning the research problem is portrayed and qualitative data are used to refine, extend or explain a few typical cases, a key result or outlier and extreme cases (Creswell, 2014; Creswell & Plano Clark, 2011, Creswell, et. al., 2003;). As Creswell and Plano Clark (2011) state, the explanatory sequential design attaches more importance to the quantitative information. Therefore, quantitative information is the major aspect of the data collection process. Also, when reporting data, first quantitative data are introduced, and then a small amount of qualitative data follows it with secondary importance. Mixing of two data sets occurs at the interpretation stage. The advantages of using this type of design are that the parts of quantitative and qualitative in the study are identified clearly, which creates an advantage for both readers and researchers. Like the convergent design, it takes the advantages of using quantitative and qualitative data in a study. Accordingly, as quantitative data are used for the general picture, qualitative data are exploited for obtaining in-depth information concerning the general case (Creswell & Plano Clark, 2011). On the other hand, unlike the convergent design, two sets of data do not have to be converged or integrated when reporting data (Creswell, 2012). The drawback of using this type is to determine which aspect of the quantitative data will be followed up for the researchers. For the follow-up phase, researchers should take into consideration the sampling and which questions to ask. Also, this design requires expertise, time and a large amount of labor to gather both forms of data (Creswell, 2012; Creswell & Plano Clark, 2011). The diagram (Figure 3.2.) which portrays the procedures of this design is as follows:

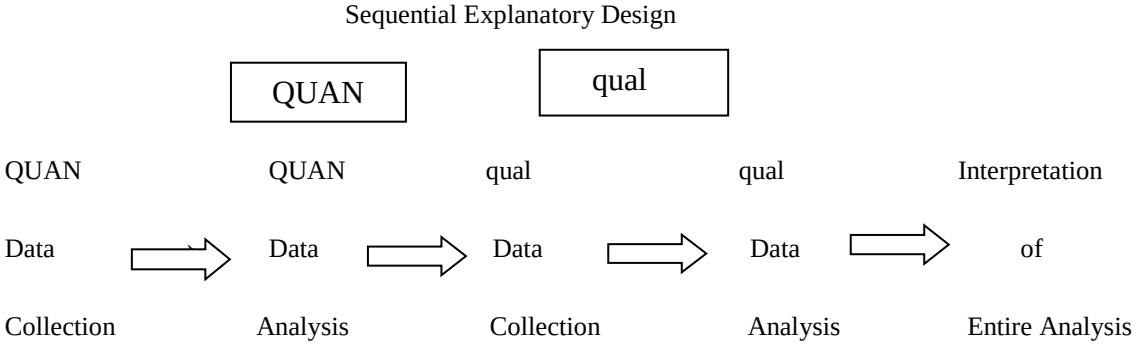

Figure 3.2. Sequential Explanatory Design (Creswell & Plano Clark, 2008, p.180).

Concerning the current study, according to the Figure 3.2., firstly quantitative data were gathered through questionnaires conducted with twenty content area specialists. Next, the quantitative data were analyzed through statistical procedures. The quantitative findings indicated that the third research question of the present study yielded an extreme case. In order to explain or extend this extreme case, a semi-structured interview as qualitative data was used. Within interviewing, only one question which is the third research question of the current study was asked to the respondents. Additionally, to probe up the respondents, the questions 'Why?' or 'Why not?' were also asked to the respondents. Apart from these, sampling procedures in the second phase need to be taken into consideration in this type of design (Creswell, 2014). As Patton (1990) points out, if the goal is to obtain insights into specific cases, events or individuals, the researcher creates the sampling purposefully. Therefore, *the purposeful sampling* was used for the selection of the respondents in the qualitative phase of the present study. Accordingly, as the present study includes six departments, six departmental chairs were selected as respondents. To conclude, quantitative data were used in order to portray a general picture, and qualitative data were collected in order to elaborate and validate quantitative findings.

3.2. Setting

This study was carried out in six departments teaching content area courses in partial English at Zonguldak Bulent Ecevit University. These are Department of Electrical and Electronics Engineering, Department of Environmental Engineering, Department of Civil Engineering, Department of Mining Engineering, Department Of Economics and Department of Business Administration. In these departments, the language of instruction is partial English (30%) which means that not all the courses are taught in English, only 30 percent of the courses are taught in English. This percentage is calculated based on the number of the courses that a faculty can offer in a four-year education. In each department, the lecturers who teach content area courses in English are few in number as they are required to get high scores from the language exams such as YDS or TOEFL to teach in these courses.

Students of English-medium departments are subjected to an obligatory preparatory programme of the university as specified in the Regulations of the School of Foreign Languages at ZBEU [*Article 8/1: The students who are registered on one of the university's compulsory preparatory programs for the first time or through a vertical / horizontal transition and do not meet the conditions of exemption specified in paragraph (2) or (3) of Article 6, do not take the foreign language proficiency test or fail in this exam are supposed to complete the 60 credits of preparatory education*].The students have to complete the programme successfully. If they fail, they can not start education in their departments. All the students enrolling in this programme are required to reach B1 level in CEFR, which is the exit level of the preparatory programme.

3.3. Participants

In this study, as participants two groups were used as content area specialists and departmental chairs.

3.3.1. Content area specialists

Data were collected through questionnaires given to twenty content course teachers in six departments There are 24 content course teachers who teach content in English in six departments at ZBEU, all of whom were given a questionnaire. Twenty of them completed and returned the questionnaire. The number and the percentage of the teachers who completed the questionnaire teach in different departments as presented in Table 3.1. below.

Table 3.1. Participants of the study according to the department

Departments	**N**	**%**
Electrical and Electronics Engineering	4	20.0
Environmental Engineering	2	10.0
Civil Engineering	3	15.0
Mining Engineering	7	35.0
Economics	2	10.0
Business Administration	2	10.0
Total	20	100

In addition, the academic titles of the participants in the current study are as in Table 3.2.

Table 3.2. Participants of the study according to the academic titles

Academic Titles	**N**	**%**
Professor	6	30.0
Doctor	13	65.0
Lecturer	1	5.0
Total	20	100

Apart from these, Table 3.3. presents the years of experience of the participants at the institution in the current study.

Table 3.3. Participants of the study according to the years of experience at the institution

Experience	**N**	**%**
5-10 years	4	20.0
11- 20 years	9	45.0
More than 21 years	7	35.0
Total	20	100

3.3.2. Departmental chairs

The semi-structured interview consisting of one open-ended question was planned to be conducted with 6 departmental chairs. However, as the departmental chair of business administration did not come to the appointment although it was scheduled and he did not get in contact with the researcher afterwards, the interview was conducted with five departmental chairs. Also, as all of the departmental chairs showed reluctance on giving demographic information about themselves due to time constraints and some privacy issues, no further information about these participants could be included in the current study.

3.4. Data Collection Instrument

In the current study, two types of data collection instruments were used. To collect quantitative data, a questionnaire was conducted. Questionnaires are widely used and useful instruments to collect survey information (Cohen, Manion & Morrison, 2007; Dörnyei, 2003; Richards, 2001; Wilson & McLean 1994). They provide structured, often numerical data and thereby are frequently preferred in quantitative research (Richards, 2001; Wilson & McLean 1994). As advantages, using questionnaires in a study is economical in terms of time, effort and financial resources (Cohen, et. al., 2007; Gilham, 2000; Kumar, 2011). Especially when it is administered to a captive audience, it is significantly cheap (Kumar, 2011). They can be administered without the researcher (Wilson & McLean 1994); they can be prepared easily; can be implemented for a large population (Richards, 2001), and can be used “with a variety of people in a variety of situations targeting a variety of topics” (Dörnyei, 2003, p.10). They can be administered to obtain a great deal of information in a fairly short time. In addition, when they are structured well, it can be fast and straightforward to be tabulated and analyzed (Gilham, 2000; Richards, 2001; Wilson& McLean, 1994). It can also be mailed (Cohen, et. al., 2007). Furthermore, when a questionnaire provides anonymity, honesty is increased, which leads to correct responses and reliable information (Cohen, et.al., 2007; Kumar, 2011).

The disadvantages of questionnaires, on the other hand, are that they do not always occur as they are based on the research study and several factors (Kumar, 2011). First of all, the administration of a questionnaire is limited in terms of the target population as it cannot be conducted with illiterate, very young or old and handicapped people. In addition, the response rate may be low (Cohen, et. al., 2007; Kumar, 2011), which negatively influences the quality of information as the rate does not represent the total population. This case may cause from several factors such as the interest of the study population in the topic, layout and length of the questionnaire, the quality of the covering letter and how the questionnaire is delivered. For this reason, the response rate which is 50% is accepted as an ideal rate (Kumar, 2011). Also, some issues cannot be clarified if there is no direct contact with the researcher (Dörnyei, 2003), which is not possible most of the time. The participants cannot give immediate or spontaneous responses, especially through mailed questionnaires. In this case, respondents either make comments on their own or consult others, which may have a negative influence on the quality of information gathered as it prevents obtaining real opinions or ideas of respondents (Kumar, 2011).

In the present study, the construction of the questionnaire started forming an outline based on the researcher's teaching experience and recommendations coming from the informal interviews that the researcher had conducted with the content area specialists. In the light of this data, the researcher analyzed the questionnaires of the similar studies (Arık, 2002; Canbay, 2006; Güler, 2004; Somer, 2001) and selected the appropriate items for this study. Also, the researcher got into contact with the author of the questionnaire, Instructor Soner ARIK, and obtained permission both verbally and through e-mail to use the questionnaire in the current study. After that, the questionnaire (See Appendix B) prepared in English was translated into Turkish by the researcher. According to Dörnyei (2003, p.66), some external feedback is required for "an initial item pool" and researchers tend to choose familiar sources such as colleagues, friends, and the family (Converse & Presser, 1986). Therefore, the questionnaire in Turkish was given to the instructors in the School of Foreign Languages at ZBEU. In this process, the instructors analyzed items by comparing the English and Turkish versions of the

questionnaire, and they reported the ambiguous or overlapping items. Based on this feedback, the researcher revised and removed some items in the questionnaire.

The questionnaire given to the participants consists of seven sections. As stated before, two types of rating scales were used as 5-point scale(1=never; 2=rarely;3= sometimes;4=usually; 5=always) and 4-point scale (1=not important; 2= not very important; 3= fairly important; 4= very important). The first section includes three questions about demographic information of the participants. In the second section, there is one question prepared in a 4-point rating scale and through this question, the participants were asked to determine which skill, among reading, writing, listening, and speaking, has the highest priority for their students' academic success. The third section includes one Yes/No question regarding the use of writing skill in content classes, a 5-point rating scale with 20 items which is concerned about the frequency of writing types , and a 4 –point rating scale with 10 items which questions importance of specific writing sub-skills. The fourth section includes one Yes/No question regarding the use of reading skill in content classes, a 5-point rating scale with 11 items which is concerned about the frequency of reading types , and a 4 –point rating scale with 9 items which questions importance of specific writing sub-skills. The fifth section consists of one Yes / No question regarding the use of speaking skill in content classes, a 5-point rating scale with 8 items which is concerned about the frequency of speaking tasks, and a 4 – point rating scale with 7 items which questions importance of specific speaking sub-skills. The sixth section involves one Yes/ No question regarding the use of listening skill in content classes and a 5-point rating scale with 12 items which is concerned about the frequency of listening types. The last section investigates the attitudes of content area specialists towards English-medium instruction at ZBEU, their language preferences among Turkish and English for content-based instruction and their reasons for their preferences. This section includes one question regarding whether or not participants approve English medium instruction in their departments, and three multiple – choice items which investigate the language preferences content area specialists in classes. At the end of relevant parts of each section, the item of *specify others* is added as an open-ended question to gather other possible answers (See Appendix B).

As for the qualitative phase of the present study, a semi-structured interview was conducted. Semi-structured interviews are frequently preferred and used in the qualitative analysis (David & Sutton, 2004). Predetermined themes, issues and questions are prepared by the researcher in advance (Corbetta, 2003). The interview is documented through note taking or tape recording (Gray, 2004). The researcher may also design an interview schedule however he does not have to adhere to the schedule. Also, the researcher may change the order of the questions and ask additional questions in the interviewing process. In other words, the researcher is free within the process; he /she may ask questions that he finds appropriate, make explanations for clarification and prompt the respondent (Corbetta, 2003; Gillham, 2000; Kajornboon, 2004; Patton, 2002). The strengths of semi-structured interviews are that they allow for prompting and probing the respondents; explaining and rephrasing the unclear points, which provides obtaining deep knowledge and high quality of data. On the other hand, the drawbacks of using semi-structured interviews are that this type of interview requires some interviewing skills as inexperienced interviewers may have difficulty in asking prompt questions and probing into deeper situations, which may prevent obtaining relevant data (Corbetta, 2003; Gillham, 2000; Patton, 2002).

In the current study, through the interview, one open-ended question was asked to the departmental chairs. The departmental chairs stated their attitudes towards English-medium education at ZBEU. The question asked in the interview is such as the following:

- What is your attitude towards English-medium education in your department? Do you approve or not? Why or why not?

3.5. Data Collection Procedures

The process of data collection in the study started with the preparation of the questionnaire in English in May, 2017. At the end of May, 2017, the researcher applied with required documents for the Human Research Ethics Committee at Bülent Ecevit University for official permission to conduct the questionnaire and the interview at six

departments. On 22nd June, 2017, the committee approved the present study and the researcher got an appointment from the secretaries of each department to set up a meeting with the research assistants for the piloting session of the questionnaire. The piloting session was carried out with 10 research assistants selected randomly from six departments in late June. In these one-on-one interviews, the researcher asked the research assistants to pay attention on the content of the questionnaire according to their departments and to focus on the comprehension problems or overlapping items in the questionnaire. Some of the research assistants reported that some items in the questionnaire were irrelevant for their departments. However, as those items stated were relevant to different departments, they were not removed from the questionnaire. Some changes were made according to the revisions and feedback coming from the research assistants, and the latest version of the questionnaire was formed for the present study. The reason that the piloting sessions were done with the research assistants is that the research assistants have a core understanding of the curriculum of the program in their department and they have some experience in the classes.

Throughout the first week of July, the researcher handed out the questionnaires to the content area specialists herself and on 09-13 July, 2017, the researcher visited the content area specialists to gather the questionnaires and asked whether they had any questions in order to clarify the ambiguous points. After data analysis of the questionnaires, meetings were arranged with the six departmental chairs in order to elaborate a few significant issues obtained from the quantitative findings. The interviews lasted for five days.

3.6. Data Analysis Procedures

Data analysis in a mixed methods research is depended on the type of design chosen. Accordingly, as the current study adopted *the explanatory sequential design* (Creswell &Plano Clark, 2011), data analysis of each data form, as stated by Creswell (2003), was made independently and quantitative data analysis was followed by the qualitative data collection. While reporting the two sets of data, qualitative data analysis

was given in a separate section following the quantitative findings. Due to the nature of explanatory sequential design, as the main focus in the present study was on the quantitative findings, a small qualitative data were used, as Creswell (2012) points out. The detailed procedures of analysis of each data from are given as follows.

In this study, the data gathered from questionnaires were analyzed by using SPSS 19.0. As the current study was completed with a small number of participants, that is, twenty participants, the quantitative findings include percentages, frequencies, means, and standard deviations. In order to interpret the means, two kinds of scales, which include the ranges proposed by Arık (2002, p.33-34), were used. The scales used are given as follows:

- 1st Type Choice Scale

1) Not important: values between 1.00 and 1.75
2) Not very important: values between 1.76 and 2.50
3) Fairly important: values between 2.51 and 3.25
4) Very important: values between 3.26 and 4.00

- 2nd Type Choice Scale

1) Never: values between 1.00 and 1.80
2) Rarely: values between 1.81 and 2.60
3) Sometimes: values between 2.61 and 3.40
4) Usually : values between 3.41 and 4.20
5) Always : values between 4.21 and 5.00

The reliability of the instrument used in this data was calculated through Cronbach's alpha. This calculation yielded an alpha coefficient of *0.81,* which is highly reliable (Cohen, et. al., 2007).

As for the data collected through qualitative phase, interviews were transcribed and translated into English. In the process of analyzing the data gathered from the interviews, thematic analysis was made. In other words, it was focused on the parts

related to the answers of the questions in the interview. For this process of disregarding some parts of data and focusing on some, Guest, MacQueen and Namey (2012: Cited in Creswell, 2014, p. 213) point out that "Because text and image data are so dense and rich, not all of the information can be used in a qualitative study. Thus, in the analysis of the data, researchers need to "winnow" the data…". As for the report of the qualitative findings, the structure of the report varies according to the type of design used (Creswell, 2009). According to explanatory sequential design, qualitative findings follow quantitative findings (Creswell & Plano Clark, 2007). Also, after thematic analysis, quotations of the respondents were used as qualitative findings. For this case, Creswell and Plano Clark (2007) remark:

> Because the qualitative items are an add-on to a quantitative survey, the items generally do not result in a rigorous qualitative data set. However, they provide the researcher with interesting quotes that can be used to validate and embellish the quantitative survey findings (p.65).

To sum up, mixed methods research designs differ from other research designs in several ways. These key characteristics are that a rationale is to be provided for the design; both quantitative and qualitative data need to be used; the priority and sequence of data forms should be considered; the appropriate data analysis form should be used and a diagram or a visualization which shows the procedures should be provided (Creswell, 2012).

CHAPTER IV

FINDINGS AND DISCUSSION

4. Introduction

The aim of this chapter is to present the findings based on the data analysis results related to each research question. The results will be presented in detail in the order of research questions. Also, this chapter aims to discuss the findings by comparing the results of the similar national and international studies.

4.1. The Findings of Data Analysis Relating to the Research Question 1

"Which English language skill(s) has the most importance for content area courses in English Medium Departments at ZBEU?"

The research question stated above is aimed at identifying the most required skill among the language skills of *reading*, *writing*, *listening*, *speaking* and *translation* for all departments. The data were obtained by Question 4 in the questionnaire which asks the importance degree of five language skills through Likert-scale ranging from not important (1) to very important (4). The data related to the research question 1 is analyzed in a quantitative manner. Table 4.1. shows the results ranging from the most required skill to the least required skill. The results are presented as means, percentages and standard deviations for each item.

Table 4.1. The most required skill for all departments

Skills	**VI**		**I**		**NVI**		**NI**		$\bar{x}$	**SD**
	F	P	F	P	F	P	F	P		
Reading	17	89.5	2	10.5	-	-	-	-	3.89	0.31
Listening	12	63.2	6	31.6	1	5.2	−	-	3.66	0.48
Speaking	6	31.6	10	52.6	3	15.8	-	-	3.37	0.50
Writing	5	26.3	13	68.4	1	5.3	−	-	3.27	0.46

Note: VI: Very Important, I: Important, NVI: Not Very Important, NI: Not Important, $\bar{x}$: Mean, SD: Standard Deviation.

When we look at the table 4.1.which includes the means of each item ranging from 3.89 to 3.27, it is seen that all the skills are ‘very important’ according to the content area specialists. The high mean values and the low standard deviations show that there is agreement on the distribution of the responses of each item. But the skill that has the highest priority according to the results from the perspectives of content area specialists is reading. When the percentages and frequencies are examined, it is clearly seen 17 out of 19 teachers, which comprises 89,5 percent of all, reported that reading skill is ‘very important’. Overall, no teacher stated that reading is ‘not very important’ or ‘not important’.

The second skill, that has the highest priority after reading based on the responses of the content area specialists is listening. According to Table 4.1., 12 teachers out of 19 teachers stated that listening is ‘very important’ and six teachers stated that this skill is ‘important’. While the majority of the teachers (94,8%) think that listening skill is ‘important’, only one teacher stated that it is ‘not very important’.

Speaking is the third skill that has the highest priority after reading and listening according to the responses of the content area specialists. The percentages show that while 6 of 19 content area specialists considered it ‘very important’, 10 of them considered it ‘fairly important’. However, according to 3 content area specialists, speaking is ‘not very important’ for students’ academic success.

As a last skill in the ranking, writing comes according to the responses of the teachers. While 5 out of 19 teachers considered it ‘very important’, 13 of them stated that it is ‘fairly important’. Only one content area teacher reported that it is ‘not very important’.

4.1.1. Discussion Relating to the Findings of the Research Question 1

“Which English language skill(s) has the most importance for content area courses in English Medium Departments at ZBEU?”

As stated above, the present study primarily aimed at revealing the necessary academic language skills of students in English-medium departments from the views of the content area specialists. In regard to this aim, the first research question tried to seek for the answer of the most required language skill among the departments teaching content through partial English by the perspectives of content area specialists. When the results are examined, it is very clear that all language skills among reading, writing, listening, and speaking have great importance for the teachers. Although all the skills are considered ‘very important’ by the respondents, the most required skill is reading by the views of the teachers.

This indicates that content area specialists at ZBEU prioritize reading skill over other three skills. In addition to this, when the findings concerning the standard deviations of each skill are examined, it is clearly seen that the standard deviations are lower than 1.00 for each item, which indicates that the teachers show agreement that each language skill is ‘very important’.

In addition, when we look at the findings from the perspective of evaluation of the existing curriculum in the preparatory programme at ZBEU, the results concerning each skill bear importance in the aspect of two points for the curriculum studies in the preparatory programme at ZBEU. First of all, they may be useful and helpful to make a general comment on whether the current curriculum meets the demands of the content area specialists in terms of requirements of language skills. According to the overall

results, the respondents consider that each language skill is important for the academic success of their students; however, the skill of reading is more important than the other four skills. According to this finding, when we evaluate the current curriculum at the preparatory programme, it seems that the existing curriculum fulfills the demands of the content area specialists in the aspect of the requirements of language skills. As the current curriculum adopts the integration of four skills approach in which no skill is important than the other one, each skill is taught and tested in an integrated approach. Moreover, there are separate 2 hours of speaking courses done for each level every week except for the main course.

Another important point is that these results may provide insights and recommendations for the existing curriculum in the programme. Accordingly, when the results concerning the skill of reading are taken into consideration, it is very clear that the content area specialists prioritize the reading skill. In order to meet the demand of developing the reading skill of the prep students more effectively, some curricular studies may be done in the preparatory programme because the current curriculum does not give much emphasis on reading skill, so the language teachers do not do extra supportive work on reading skill in their classes. For this case, there seem to be two ways for the curriculum renewal studies. It could be either to design separate supplementary reading courses in which reading strategies such as scanning and skimming and some vocabulary studies based on the readings are done or to revise the current curriculum by incorporating some reading strategies and intensive or extensive reading materials into it.

Apart from these, when we look at the related literature, there are a lot of international and national needs analysis studies in CBI context in which the common aim is to strengthen CBI applications in the educational settings. Therefore, as some studies are aimed at revealing the most required language skill or investigating only one language skill, the other studies vary across the types of the participants or stakeholders or the contexts in which the studies are done. Among these, there are some studies which have consistent results with the present study. These studies are Arık's (2002), Güler's (2004), Canbay's (2006) and Gözüyeşil's (2014) studies. In these studies, reading was also considered the most important skill by the respondents in CBI

contexts. Apart from these studies, several needs analysis studies are available in the literature which investigated only academic reading requirements in English- medium departments such as Eroğlu's (2005) and Şahbaz's (2005) studies. The results of both studies showed that being a proficient and efficient reader is essential for students' academic success, which indicates consistency with the results of the current study.

By taking the research settings of these studies and the present study into consideration, it can be easily concluded that the skill of reading is attached great importance in content-based instruction in tertiary education in Turkey.

4.2. The Findings of Data Analysis for the Research Question 2

"What are the academic English language requirements of content area specialists among the specified language tasks and strategies related to each language skill?"

As mentioned before, this research question is aimed at exploring particular genres for four basic skills and the importance of sub-skills related to the four skills from the perspectives of content-area teachers. Through Question 5, 8, 11 and 14 in the questionnaire which is respectively '*Do your students have to do any kind of writing/ reading / speaking / listening in English for your course*?', participants reported whether or not they use these skills in their classes or they expect their students to have these skills. Table 4.2. shows the results concerning the necessary English language skills for undergraduate students at ZBEU.

Table 4.2. Required skills for undergraduates at ZBEU

Skills	**Yes**		**No**		**N**
	F	%	F	%	
Reading	18	94.7	1	5.3	19
Writing	17	85.0	3	15.0	20
Listening	13	68.4	6	31.6	19
Speaking	9	47.4	10	52.6	19

Note: F: Frequency, %: Percentage, N: Number

As it is clearly seen in the table above, reading is the most necessary skill considered among content area specialists. 18 teachers out of 19 reported that their students have to do reading for their courses. Only one teacher reported that reading is not necessary for his course. After reading, writing was thought to be the second necessary skill. 17 teachers out of 19 stated that their students need to write for their courses. Three teachers stated that they do not need any writing work for their courses. As the third necessary skill, listening comes after writing. 13 teachers out of 19 reported that their students have to listen in their courses. 6 teachers stated that they do not need any listening work in their courses. As for the last skill, speaking comes in the table above. While 9 teachers out of 19 stated that their students need to speak in their courses, 10 teachers reported that their students do not have to speak in their courses.

In addition to the table 4.2. which includes general responses of the necessity of each skill for the departments, for a detailed investigation, the questionnaire used in this study tried to investigate the use of the frequency of each skill for particular genres in the departments and the importance of sub-skills related to each skill. Accordingly, first of all, the results of the writing section will be presented and the results of reading, speaking and listening sections will follow respectively.

The following table shows the results concerning the requirements of writing tasks. The results in the table are given with the number of the teachers, with the items' means and standard deviations, from the highest priority to the lowest priority.

Table 4.3. Particular tasks for writing skill

Items	N	$\bar{x}$	SD
To answer short-answer question types in exams	16	4.43	0.72
To write paragraphs/ essays in exams	15	3.66	1.29
To take notes in the class	16	3.50	1.03
To write lab reports	16	2.81	1.75
To prepare presentations	15	2.80	1.69
To write summaries	15	2.46	1.24
To write descriptions of experiments	15	2.33	1.54
To write research papers	15	2.13	1.24
To write projects	15	2.13	1.30
To write CVs	16	2.12	1.36
To write business letters	16	1.87	1.20
To write compositions	15	1.86	0.74
To write personal letters	16	1.75	1.12
To write e-mails	15	1.60	0.63
To write reviews on articles	14	1.42	0.64

Note: N: Number, $\bar{x}$: Mean, SD: Standard Deviation.

As can be seen from Table 4.3., the mean values of responses given by content area specialists concerning writing requirements for genres vary between 4.43 and 1.42, which also shows the use of the frequency of these writing tasks range from ‘always’ to ‘never’. According to the table, the item which has the highest value with a mean value of 4.43 is ‘to answer short-answer question types in exams’. This mean value shows that according to the content area specialists this task is ‘always’ used in the courses. The following writing tasks in the ranking is ‘to write paragraphs / essays in exams’ with a mean value of 3.66 and ‘to take notes in class’ with a mean value of 3.50, which shows that these tasks are ‘usually’ used in the courses according to the responses of content area specialists. The items ‘to write lab reports’ with a mean value of 2.81 and ‘to prepare presentations’ with a mean value of 2.80 are the writing tasks which are ‘sometimes’ required in the courses as reported by the content area specialists. As for the next tasks in the ranking in the table above, the items ‘to write summaries’ with a mean value of 2.46, ‘to write descriptions of experiments’ with a mean value of 2.33,

‘to write research papers’ and ‘to write projects’ with the same value of 2.13, ‘to write CVs’ with a mean value of 2.12, ‘to write business letters’ with a mean value of 1.87 and ‘to write compositions’ with a mean value of 1.86 are the writing tasks that are ‘rarely’ used in the classes through the responses of content area specialists. As for the genres that are ‘never’ used in the courses, content area specialists reported that ‘to write personal letters’ with a mean value of 1.75, ‘to write e-mails’ with a mean value of 1.60 and ‘to write reviews on articles’ with a mean value of 1.40 are the tasks that they never need for their courses.

In addition to the required writing genres, the present study also investigated the importance of some specified writing sub-skills / strategies. Table 4.4. presents the importance of writing sub-skills through the mean values and standard deviations of each item and with the number of teachers who responded.

Table 4.4. The importance of writing strategies

Items	**N**	$\bar{x}$	**SD**
Good expression of the main idea	17	3.76	0.43
Relevance of ideas to the context	16	3.25	0.57
Appropriate use of vocabulary	16	3.25	0.57
Appropriate use of academic vocabulary	17	3.05	0.74
Sequence of ideas	16	3.00	0.51
Adequate development of ideas	16	2.93	0.57
Grammatical accuracy	16	2.87	0.61
Appropriate connections between ideas	16	2.87	0.61
Originality of ideas	16	2.75	0.77
Mechanics (spelling, punctuation, format etc.)	16	2.68	0.79

Note: N: Number,$\bar{x}$: Mean, SD: Standard Deviation.

As it is seen in Table 4.4., the mean values of writing sub-skills vary from 3.76 and 2.68, which indicates that each item is considered ‘important’ by the content area specialists. According to the table above, the most important item in the list is ‘good expression of the main idea’ with a mean value of 3.76, which indicates that this sub-skill is considered ‘very important’ among the writing tasks by the content are teachers.

The following items in the list, with the same mean value of 3.25, are ‘relevance of ideas to the context’ and ‘appropriate use of vocabulary’, which shows that these strategies in writing are considered ‘fairly important’ by the content area specialists. The following items in the list, which are also considered ‘fairly important’ by the content are teachers, are ‘appropriate use of academic vocabulary’ with a mean value of 3,05 , ‘ sequence of items’ with a mean value of 3,00, ‘ adequate development of ideas’ with a mean value of 2,93, ‘ grammatical accuracy’ and ‘ appropriate connections between ideas’ with the same mean value of 2,87, ‘originality of ideas’ with a mean value of 2,75 and ‘mechanics (spelling, punctuation, format, etc.) with a mean value of 2.68.

As the second skill, the present study investigated the reading skill requirements for particular genres and the importance of some specified sub-skills. The following table shows the results concerning how often the specific reading tasks are used in the classes from the perspectives of content area specialists. The table presents the numbers of the participants, mean scores and standard deviations of each item regarding reading tasks.

Table 4.5. Particular tasks for reading skill

Items	**N**	$\bar{x}$	**SD**
To read lecture handouts	18	4.66	0.59
To read textbooks	18	4.16	1.09
To read graphs, charts, tables etc.	17	4.00	1.06
To read reference books (e.g.dictionaries)	18	3.66	0.97
To read on the Internet (e.g. e-mail messages,websites)	18	3.33	1.37
To read reports	17	3.11	0.92
To read articles in academic journals	17	2.82	1.07
To read instruction booklets/ user manuals	17	2.76	1.14
To read articles from weekly magazines	17	2.11	0.92
To read newspapers in English	17	1.64	0.78

Note: N: Number, $\bar{x}$: Mean, SD: Standard Deviation.

According to Table 4.5., above which shows the results of reading skill for particular genres from the perspectives of content area specialists, the means of the items show that the results vary from 4.66 to 1.64, which indicates that responses range from ‘ never’ to ‘ always’. As the table above shows, the most required task according to the content area specialists is ‘to read lecture handouts’ with a mean value of 4,66, which shows that this task is ‘Always’ used in the content courses. The following tasks required most by the content area specialists are ‘to read textbooks’ with a mean value of 4.16, ‘to read graphs, charts, tables etc’ with a mean value of 4,00 and ‘to read reference books’ with a mean value of 3,66 , which shows that these genres are ‘usually’ used in the content area courses. According to the responses of content area specialists, the tasks ‘to read on the Internet’ with a mean value of 3,33, ‘to read reports’ with a mean value of 3,11, ‘to read articles in academic journals’ with a mean value of 2,82 and ‘to read instruction booklets/ user manuals’ with a mean value of 2.76 are ‘sometimes’ required for the content courses. Last but not least, according to Table 4.5., while the genre required ‘ rarely’ for the courses is ‘ to read articles from weekly magazines’, the task ‘ to read newspapers in English’ is ‘never’ required in the courses.
In addition to the required reading genres, the present study also investigated the importance of some specified reading sub-skills / strategies. Table 4.6. shows the importance of reading sub-skills through the mean values and standard deviations of each item and with the number of teachers who responded.

Table 4.6. The importance of reading strategies

Items	N	$\bar{x}$	SD
To read for specific information	18	3.72	0.46
To read for main idea	18	3.55	0.61
To draw conclusions	18	3.55	0.51
To understand logical relations within the text	18	3.33	0.68
To recognize terminology	18	3.33	0.68
To read for general information	18	3.00	0.84
To understand the writer’s attitude /point of view	17	2.58	0.87
To scan for unknown words in general	18	2.55	0.78

Note: N: Number, $\bar{x}$: Mean, SD: Standard Deviation.

As it is seen in Table 4.6. above, the means of each item vary between 3.72 and 2.55, which shows that all the sub-skills presented in the table are ‘very important’ or ‘fairly important’ according to the responses of the content area specialists. According to the table, the sub-skills or strategies reported as ‘very important’ by the participants are ‘to read for specific information’ with the highest mean value of 3.72, ‘to read for main idea’ and ‘to draw conclusions with the same mean value of 3.55, ‘to understand logical relations within the text’ and ‘to recognize vocabulary’ with the same mean value of 3.33. The following strategies reported as ‘fairly important’ by the teachers are ‘to read for general information’ with a mean value of 3.00, ‘to understand the writer’s attitude / point of view ‘with a mean value of 2.58, and ‘ to scan for unknown words in general’ with a mean value of 2.55.

After reading, the present study attempted to reveal the particular genres required for speaking skill from the points of view of the content area specialists. The following table presents how often particular genres of speaking skill are used in the content classes through the means, standard deviations of each item and the number of teachers responding.

Table 4.7. Particular tasks for speaking skill

Items	**N**	$\bar{x}$	**SD**
To ask and answer questions in class	9	4.44	0.72
To participate in classroom discussions	9	4.11	1.05
To make presentations	9	3.44	1.50
To present oral reports	9	3.11	0.92
To speak at seminars	9	3.11	1.26
To speak in informal daily life situations	9	3.00	1.50
To speak to foreigners about their subject	9	2.44	1.50
To speak on the telephone	9	1.66	1.11

Note: N: Number, $\bar{x}$: Mean, SD: Standard Deviation.

As it is seen in Table 4.7. above, means of the items vary between 4.44 and 1.66, which indicates that the frequent use of the tasks in the table above range from ‘never’ to ‘always’. According to the table, the most required task in the aspect of

speaking skill by the teachers is ‘to ask and answer questions in class’ with a mean value of 4.44, which shows that it is ‘always’ required for the content courses. The following tasks whose mean values show that they are ‘usually’ used in the courses are ‘to participate in classroom discussions’ with a mean value of 4.11 and ‘to make presentations’ with a mean value of 3.44. As for the tasks which are ‘sometimes’ exploited in the courses according to the teachers, they are ‘to present oral reports’ and ‘to speak at seminars’ with the same mean value of 3.11. The following task which is ‘sometimes’ required for the courses is ‘to speak in informal daily life situations’. Moreover, according to the teachers’ responses, while ‘to speak to foreigners about their subject’ with a mean value of 2. 44 is a type of task that is ‘rarely’ used in the classes, ‘to speak on the telephone’ is reported to be ‘never’ required for the courses.

In addition to Table 4.7. which shows the frequency level of the particular genres for speaking skill, the present study tried to explore the importance of some speaking sub-skills / strategies. The following table presents the importance of the sub-skills of speaking respectively according to the perceptions of content area specialists through mean values, standard deviations of each item and the number of the teachers who responded.

Table 4.8. The importance of speaking strategies

Items	**N**	$\bar{x}$	**SD**
Academic vocabulary specific to the discipline	9	3.77	0.44
Non-academic vocabulary	9	3.33	0.50
Conveying the message	9	3.33	0.50
Grammar	9	2.77	0.83
Intelligibility / comprehensibility	9	2.77	0.83
Pronunciation / Accent	8	2.75	0.70
Fluency / Accuracy / Being hesitant	9	2.33	0.86

Note: N: Number, $\bar{x}$: Mean, SD: Standard Deviation.

As it is clear from Table 4.8. above, means of the items change from 3.77 to 2.33, which shows that the importance degrees of the strategies vary from ‘very important’ to ‘ not very important’. According to the Table 4.8., the most important

subskill for the content area specialists is ‘academic vocabulary specific to the discipline’ for the skill of speaking with a mean value of 3.77 which shows that this item is considered ‘very important’ for the content courses by the teachers. Similarly, the following tasks considered ‘very important’ by the teachers are ‘non-academic vocabulary’ and ‘ ‘conveying the message’ with the same mean value of 3.33. As for the subsequent speaking sub-skills, ‘grammar’ and ‘intelligibility/ comprehensibility’ with the same mean value of 2.77 and ‘pronunciation/accent’ with a mean value of 2.75 are considered ‘fairly important’ for the content courses by the teachers. As a last strategy, ‘fluency/accuracy/being hesitant’ is considered ‘not very important’ by the teachers.

The last part of the second section in this study tried to reveal the information about the skill of listening. Table 4.9. presents how often particular genres in the skill of listening are used in the content courses from the perspectives of content area specialists.

Table 4.9. Particular tasks for listening skill

Items	**N**	$\bar{x}$	**SD**
Instructions given in English in the lectures	13	4.15	0.98
Words, expressions, statements in English used in the lectures	13	4.00	1.00
Debates in English in the lectures	13	3.75	1.28
Speeches of foreigners studying the same discipline	13	3.30	1.43
Presentations in English	13	3.07	1.44
Seminars in English	13	3.00	1.47
Daily life conversations	12	2.66	1.30
Videos / Cinema films in English	13	2.53	1.33
Telephone conversations in English	13	1.92	1.38
Telephone messages in English	13	1.84	1.40
Television programs in English	13	1.76	1.16
Radio programs in English	13	1.69	1.18

Note: N: Number, $\bar{x}$: Mean, SD: Standard Deviation.

As it is shown in table 4.9., mean values of the items about particular activities for listening vary from 4.15 to 1.69, which shows that the frequency of these activities used in the classes changes from ‘never’ to ‘usually’. According to the table above, the activity that has the highest frequency is ‘instructions given in English in the lectures’ with a mean value of 4.15, which shows that this activity is ‘usually’ used in the classes by the content area specialists. Similarly, the other activities used ‘usually’ in the classes are ‘words, expressions, statements in English used in the lectures’ with a mean value of 4.00 and ‘debates in English in the lectures’ with a mean value of 3.75. Apart from these activities, according to the table above, ‘presentations İn English’ with a mean value of 3.07, ‘seminars in English’ with a mean value of 3.00 and ‘daily life conversations’ with a mean value of 2.66 are the activities that are ‘sometimes’ used in the classes based on the responses of content area specialists. As for the activities that are ‘rarely’ used in the content classes, these are ‘videos/cinema films in English’ with a mean value of 2.53, ‘telephone conversations in English’ with a mean value of 1.92 and ‘telephone messages in English’ with a mean value of 1.84 according to the responses of the teachers. Last but not least, teachers reported that ‘television programs in English’ with a mean value of 1.76 and ‘radio programs in English’ with a mean value of 1.69 are ‘never’ used in the content classes based on the data in the table above.

4.2.1. Discussion Relating to the Findings of the Research Question 2

“What are the academic English language requirements of content area specialists among the specified language tasks and strategies related to each language skill?”

As stated above, the findings regarding the second research question of the present study is presented. With the second research question, it was aimed at revealing which language skill (s) – among basic four skills – is used in the content classes and which specified tasks and sub-skills based on four language skills have an importance for the content area specialists. In regard to this aim, Question 5, 8, 11 and 14 in the questionnaire examine the language skills that the content area specialists need most in their classes. According to the results, which is one of the most important findings of the

current study, as 18 teachers out of 19 teachers reported that their students need to do reading in their courses, 17 teachers out of 20 teachers stated that the students are required to use their writing skills for their courses. As for listening and speaking skills, the percentages have low frequencies (See Table 4.2.). The importance of this finding is that there is a great difference between the respondents' perceptions of needs and their actual needs for their classes. In other words, according to the results of the first research question, the teachers stated that all language skills including translation are important for the academic success of their students. However, as for their actual needs in the content classes, as stated above, reading and writing are considered the most required language skills by the content area specialists. As 6 teachers out of 19 teachers reported that they do not exploit the listening skill in their classes, 10 teachers out of 19 teachers stated that they do need any speaking for their courses. In order to clarify this dilemma, as Richards (2001) points out, it is useful to note here that decisions should be made on which needs are critical or desirable, which needs are immediate and long-term and which ones are feasible and impractical. The critical, immediate and feasible needs should be prioritized. For this reason, in the current study, the findings regarding this case will be discussed by taking the immediate needs of the institution into consideration.

According to the results of table 4.2, reading is reported as the most required skill by the teachers, which is consistent with the result of the first research question. After reading, writing comes as the second skill to be used in the content classes, which is compatible with the beliefs of the teachers regarding the result of the first research question. For listening and speaking skills, the results show opposite findings concerning the results of the first research question. Therefore, when these results are taken into consideration, it may be concluded that as content area specialists expect their students to use their reading and writing skills in their classes, they do not require the students to use aural and oral skills as often as reading and writing skills in the English medium-departments at ZBEU.

When we discuss the findings for the existing curriculum in the preparatory school at ZBEU, the current curriculum fulfils the demands partly. As the curriculum

has been designed on the integration of four skills, each skill is taught and tested, as stated before. Therefore, unfortunately, this demand cannot be addressed. However, for reading and writing skills, in accordance with the discussion done in the section of the first research question, supplementary academic reading and academic writing courses should be involved in the current curriculum.

The other subject concerning this study is related to the specified tasks and importance of sub-skills used for each language skill. Regarding the discussion for these items, each skill, other than listening, is handled in two parts as task frequencies and the importance of the sub-skills. For the listening skill, only the task frequencies are investigated, as the questionnaire used in the current study only involves this part. In the light of the existing curriculum in the preparatory school of ZBEU, the findings are discussed and some recommendations for the curriculum are provided. Therefore, according to the results of the questionnaire, the most required task by the content area specialists for writing skill is ‘to answer short-answer question types in exams’ which is reported as ‘always’ by all teachers. When we evaluate this demand for the existing curriculum in the prep school, it can be said that the existing program addresses the demands of the content teachers. The prep students are quite exposed to answering short-answer question types in the aspect of developing writing skill in both teaching and testing process, which shows that this kind of activity is a frequent task in the prep education. However, when we look at the following writing tasks in the ranking ‘to write paragraphs/essays in exams’ and ‘to take notes in class’ which refer to ‘usually’, we can see that there are some striking results. In the first place, the content of writing skill courses is designed based on the content of the coursebook used by the preparatory school, which is ‘Speakout’ and the writing office studies done based on the descriptors of CEFR. According to this content, students are required to write paragraphs but teaching how to write essays and academic writing is not taught. In the past, the attempts of teaching academic writing had been made, however, due to student failure and the burden on the language teachers, this application was removed from the curriculum. However, for this demand of the content area specialists, integration of some basic types of paragraphs and essays into the existing curriculum may be recommended to the curriculum office. As for the task ‘to take notes in class’,

unfortunately, the current education in the prep school does not provide any teaching how to take notes or teaching note-taking strategies. The other writing tasks in the ranking which are 'sometimes' required in the courses as reported by the content area specialists are 'to write lab reports' and 'to prepare presentations'. As it seems that there are classes in which these tasks are exploited, although it is not a great demand, it is useful to evaluate this finding for the curriculum in the prep program. To start with the task 'to write lab reports', unfortunately, this demand cannot be met at present. As the exit level of the prep program is B1 based on CEFR, students are not required to do academic writing in this level. Moreover, it does not seem appropriate and feasible to integrate this task into the curriculum as writing lab reports requires teaching not only academic content knowledge and academic vocabulary but also complicated or advanced grammatical structures. However, as for the task 'to prepare presentations', we can surely say that the prep school addresses this need because this is a task which the current curriculum puts great emphasis on and students are required to prepare presentations at least once each academic term. Also, in the preparation of the presentations, students are guided and provided help by the language teachers for the content and language support such as appropriate language use. As for the other tasks in the table 4.3.,'to write summaries', 'to write descriptions of experiments', 'to write research papers', 'to write projects', 'to write CVs', 'to write business letters', and 'to write compositions' are the writing tasks that are 'rarely' used in the classes through the responses of content area specialists. As to comment on these demands for the evaluation of the current curriculum in the prep school, the tasks 'to write projects' and 'to write business letters' are done in the prep education. However, the curriculum does not require students to write detailed or comprehensive projects, rather simple, guided or controlled projects. As for the task 'to write business letters', it is not taught through the name of business letters but formal letters. Apart from these, the tasks that the current curriculum does not involve but the content teachers expect students to write are 'to write summaries', 'to write CVs' and 'to write compositions'. As these tasks do not require advanced language level as specified in CEFR and may be seen as a feasible goal, they may be recommended to be integrated into the curriculum. Unfortunately, for the task 'to write descriptions of experiments', the current program cannot meet this demand due to reasons of requirement of advanced level of language and academic

content knowledge. The most striking results are related to the tasks that are ‘never’ used in the courses, which are ‘to write personal letters’, ‘to write e-mails’ and ‘to write reviews on articles’. Although content area specialists never require their students to write personal letters and e-mails, the prep education puts great emphasis on teaching of both tasks. As to comment on these two tasks, it does not seem appropriate to remove these from the curriculum, but the importance attached may be decreased. The only matching response with the application in the prep school is the task ‘to write reviews on articles’. As writing reviews needs a high level of language use and advanced writing skill, the program in the prep school does not expect students to do this task.

In addition to the findings and discussion concerning each writing task through the mean values, it is also useful to look at the findings with a more statistical perspective. In other words, when we look at the standard deviations and maximum values of each item, we can see that some items have standard deviations lower than 1.00 and some others have standard deviations higher than 1.00. The items which have standard deviations lower than 1.00 are ‘to answer short-answer question types in exams’, ‘to write compositions’, ‘to write e-mails’ and ‘to write reviews on articles’. This low standard deviation indicates that content teachers have great agreement on the average values of each item. However, the rest of the items which have high standard deviations show that there is less agreement among the content area specialists concerning the writing genre requirements. The most important result is related to the maximum values of each item. When it is looked at these values, majority of the items-except the items ‘ to write compositions’, ‘to write e-mails’ and ‘to write reviews on articles’ whose maximum values are 3.00 referring to ‘sometimes’ – have 5.00 as maximum values which refer to ‘always’ in the scale used in this study. This indicates that at least one person checks these items. It could be argued; therefore, there is some requirement for each writing genre specified in this study.

When it is looked at the second group of writing section related to the sub-skills of writing, each item is considered ‘important’ by the content area specialists. According to the results, as the item ‘good expression of the main idea’ is considered ‘very important’ by the teachers, the other items are considered ‘fairly important’.

Among these sub-skills, those the prep program takes into consideration in the writing courses are ‘appropriate use of vocabulary’, ‘grammatical accuracy’, ‘appropriate connections between ideas’, and ‘mechanics’. However, the other sub-skills in the group which are ‘relevance of ideas to the context’ ,‘appropriate use of academic vocabulary’, ‘ sequence of items’, ‘ adequate development of ideas’ and ‘originality of ideas’ are not given much importance in aspect of both teaching writing and giving feedback to the students’ writing. These findings show that the prep education teaches writing skill by prioritizing the form rather than content or message although the curriculum adopts the process writing. It may be argued that this case may be caused from teaching the content of the coursebook which teaches writing skill through models. Therefore, academic writing courses in which content is attached importance in the writing studies should be involved in the prep program, which is a consistent result with the findings of the first research question and the requirements of the writing genres.

Finally, when we look at the standard deviations and maximum values of each item concerning the writing sub-skills, it is seen that standard deviations are lower than 1.00 for each item, which shows that there is a great agreement among the teachers on their responses for each item. The maximum values for each item show that each item is marked as 4.00 referring to ‘very important’ by at least one person. Overall findings show, therefore, all the writing sub-skills specified in this study are necessary for the content classes by the views of the teachers.

Given the discussion concerning the writing section, the findings and the discussion of the reading skill will be presented. According to the results of reading skill for particular tasks from the perspectives of content area specialists, the responses range from ‘ never’ to ‘ always’. The only item which is reported as ‘always’ is ‘to read lecture handouts’. However, when we look at this result in the aspect of the prep school, this demand cannot be met, and it seems not to be addressed in the future. To specify the reasons, the content of the reading courses is determined by the content of the coursebook used. This content in the coursebook involves reading texts which are in the appropriate level of the students’ language levels. However, lecture handouts involve advanced language level and the knowledge of academic content. Therefore, it does not

seem a feasible goal for the current curriculum at prep school at present. The same discussion may be provided for the item ‘to read textbooks’ that the teachers reported as ‘usually’. The following item ‘to read graphs, charts, tables, etc’ which is reported as ‘usually’ is carried out in the prep school. However, these tables or charts do not involve academic content or theoretical information. For the item ‘to read reference books’ referring to ‘usually’, dictionaries or grammar reference books are exploited by guiding students to use these sources in their own levels in the prep education. Among the other requirements ‘to read on the Internet’, ‘to read reports’, ‘ to read articles in academic journals’ and ‘to read instruction booklets/ user manuals’ which are reported as ‘sometimes’, the prep school can address the demand of only ‘to read on the Internet’. The prep students need to use the Internet to do their homework, to search for information and so on. However, the other requirements reported in the ranking as ‘sometimes’ cannot be fulfilled by the prep program. Reading reports, articles and instruction booklets is a lot beyond the language level of the students and requires high specific-discipline knowledge. The requirement ‘to read articles from weekly magazines’ which is reported as ‘rarely’ is not involved in the current curriculum in the prep school, but it may be involved according to the interests of the students, which leads motivation among students through authentic materials. Last but not least, ‘to read newspapers in English’ is the task that the content area specialists ‘never’ require for their students to do, and it matches with the application in the prep school.

Finally, in addition to the comments made above, when we look at the standard deviations and maximum values of each item related to the requirements of reading genres, we can see that there is a distribution among the responses, which directly affects the values of standard deviations. The items which have standard deviations lower than 1.00 are ‘to read lecture handouts’, ‘ to read reference books’, ‘to read reports’, ‘to read articles from weekly journals’ and ‘to read newspapers in English’. These low standard deviations indicate that the respondents show agreement on the mean value of these items. In contrast, the items which have standard deviations higher than 1.00 are ‘to read textbooks’, ‘to read graphs, charts, tables etc.’, ‘to read on the Internet’, ‘to read articles in academic journals’ and ‘ to read instruction booklets/user manuals’. These results show that the respondents have less agreement on the average

values of these items and the responses vary. As for the maximum values, these values show the significance of not making comments only based on the mean values. Majority of the items related to the reading requirements have 5.00 as maximum values, except the items of ‘to read newspapers in English’ which have 3.00 as a maximum value referring to ‘sometimes’ and ‘to read articles from weekly journals’ which has 4.00 as a maximum value referring to ‘usually’. As a conclusion, these maximum values indicate that each reading task specified in the present study is required to some extent by the content area specialists.

In addition to the required reading tasks, the importance of some specified reading sub-skills will be presented. According to the overall results, all the sub-skills concerning the reading skill are considered as ‘very important’ or ‘fairly important’ by the responses of the content area specialists. When we evaluate these findings for the curriculum in the prep school, the sub-skills ‘to read for specific information’, ‘to read for the main idea’, ‘to read for general information’ and ‘to scan for unknown words in general’ are taught and practiced in the prep classes. However, the sub-skills ‘to draw conclusions’, ‘to understand logical relations within the text’, ‘to recognize terminology’ and ‘to understand the writer’s attitude/point of view’ are neither emphasized nor taught. Therefore, either integration of these sub-skills into the current curriculum or designing separate reading courses involving the sub-skills specified in this study should be recommended to the prep school.

Given the discussion on the importance of reading sub-skills through the mean values, it is also useful to look at the standard deviations and maximum values of each item to get the big picture. When it is looked at the standard deviations of each item related to the requirements of reading sub-skills, it is clearly seen that the standard deviation of each item is lower than 1.00, which indicates that content area specialists show agreement on the mean values of each item. As for the maximum values of each item, it is seen that all the items have 4.00 as maximum values, which confirm the findings concerning the mean values and standard deviations and also shows that the reading sub-skills specified in the present study are required a lot in the content classes.

After reading, the discussion concerning the particular genres required for speaking skill from the points of view of the content area specialists will be presented. According to the overall results, the frequency use of the speaking tasks specified in the present study ranges from ‘never’ to ‘ always’. According to this, the most required task in the aspect of speaking skill by the teachers is ‘to ask and answer questions in class’, and the other required ones are ‘to participate in classroom discussions’ and ‘to make presentations’. When it is looked at the prep curriculum, it is seen that these demands are fulfilled. In the prep classes, the courses are taught in full English and prep students are encouraged to use English in the classroom. Also, the students are required to make presentations at least twice in one academic year. As mentioned in the discussion section of writing skill, students are provided presentation samples, help and language support when necessary by the language teachers. However, for the other tasks which are ‘to present oral reports’ and ‘to speak at seminars’ – reported as ‘sometimes’ , the current curriculum, unfortunately, cannot fulfill this demand. In the prep education, oral production is attached great importance, but these productions are not related to the reports or seminars, rather the topics are based on everyday life issues. Moreover, the language level of the students does not allow involving these tasks into the curriculum, and therefore, it is not a feasible goal for the program. The following task which is ‘sometimes’ required for the courses is ‘to speak in informal daily life situations’, which shows matching with the application in the prep school. According to the teachers’ responses, ‘to speak to foreigners about their subject’ is a type of task that is ‘rarely’ used in the classes. When it is looked at this finding for the evaluation of the current prep curriculum, it is seen that this demand cannot be met. As for the reason, the whole prep education is designed on teaching English for general purpose (EGP), not for specific purposes or disciplines. Finally, ‘to speak on the telephone’ is reported as ‘never’ required for the content courses, which indicates a mismatch with the application in the prep school. As the curriculum is based on CEFR, ‘to speak on the telephone’ is a function that the program emphasizes, teaches and assesses.

In addition to the comments regarding the requirements of speaking skill by the content area specialists, more statistical results will be presented and discussed for a sound evaluation. When we look at the standard deviations and maximum values of

each item related to requirements of speaking skill, it is clearly seen that the standard deviation values give some striking results. According to this, the items which have low standard deviations, that is, lower than 1.00, are ‘to ask and answer questions in class’ and ‘to present oral reports’. This indicates that content area specialists show agreement on the average scores of these two items. However, the rest of the items which have standard deviations higher than 1.00 indicate that the distribution of the responses of these items vary and it, therefore, shows that there is disagreement among the respondents for these items. The maximum values of each item also confirm that it is not reliable to make comments based on only the average scores of the items. According to this, the great majority of the items, except two items ‘ to present oral reports’ and ‘ to speak on the telephone’ with a maximum value of 4.00 referring to ‘usually’, have 5.00 as maximum values referring to ‘always’ based on the scale used in the present study. In other words, the items concerning the requirements of speaking skill are marked 4.00 or 5.00 at least by one respondent, which indicates there are classes in which these speaking skills are exploited.

In addition to the frequency levels of the particular genres for speaking skill, the discussion on the second group which is the importance of some speaking sub-skills / strategies will be presented. According to the overall results, the big majority of the items, except one item ‘fluency/accuracy/being hesitant’, are considered either ‘very important’ or ‘fairly important’ by the content area specialists. Accordingly, it seems that the demands of ‘non-academic vocabulary’, ‘conveying the message’, ‘grammar’,‘intelligibility/ comprehensibility’ and ‘pronunciation/accent’ are met in the prep school. As the courses are taught in full English, these sub-skills are required both in class and assessment. However, for the demand ‘academic vocabulary specific to the discipline’ considered ‘very important’ by the respondents, the current curriculum can not address this demand. As mentioned before, the prep curriculum does not include any academic teaching in language skills and it seems that it is not a feasible goal at least at present. Finally, the response on the item ‘fluency/accuracy/being hesitant’ considered ‘not very important’ by the respondents shows a mismatch with the application in the prep school. These sub-skills are taught, emphasized, practiced, and students are

assessed based on these, which shows that it may not be a logical case to remove the curriculum.

Finally, when it is looked at the standard deviations and maximum values of each item concerning the importance of speaking sub-skills specified in the present study, it is seen that all the standard deviations have a value lower than 1.00, which indicates the respondents agree on the average scores of each item and the distribution of the responses is not big. As for the maximum values of each item, all the items have 4.00, which refers to the ‘very important’ based on the scale used in this study, as maximum values. This indicates that each item is checked as ‘very important’ by at least one respondent and there may be classes in which these sub-skills related to speaking skill may be required.

The final discussion will be related to the requirements for listening skill by the views of the content area specialists at ZBEU. According to the results, the frequency of particular activities for listening used in the classes changes from ‘ never’ to ‘ usually’. The demands, which are marked ‘usually’ by the respondents, related to listening skill are ‘instructions given in English in the lectures’, ‘ words, expressions, statements in English used in the lectures’ and ‘debates in English in the lectures’. According to this, the demands that the prep school can address are ‘instructions given in English in the lectures’. As English is used as a means in the prep classes, the prep students are accustomed to hearing instructions in English. However, for the following demands of ‘words, expressions, statements in English used in the lectures’ and ‘debates in English in the lectures’ seem not to be fulfilled in the prep education although prep students are exposed to listening to debates in the classes. As these tasks involve academic content or vocabulary and this content or vocabulary vary according to the departments, it is not a feasible goal for the current curriculum. As for the other items reported as ‘sometimes’ by the respondents, ‘speeches of foreigners studying the same discipline’, ‘presentations in English’ and ‘seminars in English’, the current curriculum cannot meet these demands. As a reason, these tasks include academic content and discipline-specific vocabulary, which is not among the goals of the prep curriculum. On the other hand, the demand of ‘daily life conversations’ – stated that is ‘sometimes’ used in the

classes by the respondents – can be addressed by the current curriculum because the content of the listening courses is based on the general topics. The following items in the ranking that are ‘rarely’ used by the responses are ‘videos/cinema films in English’, ‘ telephone conversations in English’ and ‘telephone messages in English’ and the items referring to ‘never’ according to the scale used in this study are ‘television programs in English’ and ‘ radio programs in English’. When we evaluate these findings, it seems that there is a mismatch between the demands of the respondents and the applications in the prep school in regards to these listening requirements. In the current curriculum, the main content of the listening courses is constituted of videos, phone conversations, radio and television programs which are based on daily topics., Therefore, it can be concluded that it does not seem feasible for the current curriculum to address the academic demands of the content area specialists regarding the requirements of listening skill.

The most striking result concerning the listening skill is related to the standard deviation values of each item. Except one item which is ‘instructions given in English in the lectures’, the rest of the items have standard deviations higher than 1.00, which shows that the distribution of the responses deviates the mean values. According to this, the respondents do not show agreement on the average scores of the items, except one item. In addition to this, the maximum values of the items confirm that content area specialists’ responses vary. All the items have 5.00 as maximum values, referring to ‘always’. This indicates that each item is checked at least once by one respondent and there is some/little requirement concerning every item for listening skill requirements.

Put simply, when we look at the overall results concerning the second research question of the present study, it is clearly seen that reading is considered as the most important skill among four basic skills by the content area specialists at ZBEU, which is a parallel finding with the finding of the first research question. According to the overall results, when we look at the related literature, we see that Arık’s(2002), Güler’s (2004) and Canbay’s (2006) needs analysis studies also indicate that reading is the most required skill by the views of the teachers. Therefore, it could be argued that reading skill bears great importance for content area studies in tertiary levels in Turkey. In

addition to this, another important finding of the present study that the second research question puts forward is that content area specialists at ZBEU mostly agree on the academic requirements of each skill in aspect of both task types and importance degrees of sub-skills. These academic demands, as discussed before, will be taken into consideration by the prep school and will be involved – if feasible- into the current curriculum. As similar studies, Arık's (2002), Güler's (2004) and Canbay's (2006) needs analysis studies also show that content area specialists expectations are generally upon academic language skills or sub-skills. This similarity may show that content area specialists require their students in tertiary levels to have English for specific purposes(ESP), not general English for their departmental studies in Turkey. Apart from these, however, when it is looked at the results of these three studies more specifically, it is seen that the results are not the same as the current study in terms of the task types and the importance degrees of the specified sub-skills. One of the reasons for this variation is that Arık's (2002) and Güler's (2004) research settings are Turkish-medium universities, which do not provide content-based instruction. The other reasons may be caused by some contextual differences such as different educational backgrounds of teachers or proficiency levels of students.

4.3. The Findings of Data Analysis Relating to the Research Question 3

"What are the attitudes of content area specialists toward English medium education in content classes?"

a) *What are their language preferences in their classes?*
b) *What are the reasons for their language preferences?*

The third research question of the present study focuses on the attitudes of content area specialists towards CBI at ZBEU, their language preferences in content classes and the reasons under their choices. As stated before, an interview was also used in addition to the questionnaire in order to build on the quantitative findings. Accordingly, the results of quantitative findings followed by the results of the qualitative phase will be presented. In the discussion section, the findings of both data forms will be integrated.

Quantitative Data Analysis

The attitudes of content area specialists towards English-medium instruction in their departments were investigated through Question 16 in the questionnaire which is '*What do you think about 30% English instruction in your department?*'. This question includes two options as 'Approval' and 'Disapproval' and requires teachers to report their ideas on whether they approve or disapprove partial English education in content classes. Table 4.10. shows the results concerning the attitudes of content area specialists in frequencies and percentages.

Table 4.10. The attitudes of content area specialists towards CBI at ZBEU

Question 16	**Approval**		**Disapproval**		**N**
	F	%	F	%	
What do you think about 30% English instruction in your department?	4	21.1	15	78.9	19

Note: Number, F: Frequency, %: Percentage.

As it is understood from the table above, only 4 (21.1 %) teachers reported that they approve partial English instruction at ZBEU. 15 (78.9 %) teachers out of 19 teachers reported that they disapprove %30 English instruction at ZBEU.

In addition to the attitudes of content area specialists towards partial English education in content classes, as the sub- research question, the study attempted to find what language the content area specialists use in their content classes. Table 4.11. shows the results concerning the language preferences of content area specialists in frequencies and percentages.

Table 4.11. The language preferences of content area specialists at content classes at ZBEU

Questionnaire Items	F	%
I use only Turkish and I am pleased with this.	2	10
I use only Turkish but I wish I could teach in English.	1	5
I use only English and I am pleased with this.	2	10
I use only English but I wish I could teach in Turkish.	-	-
I use both Turkish and English and I am pleased with this.	3	15
I use both Turkish and English but I wish I could teach only in Turkish.	5	25
I use both Turkish and English but I wish I could teach only in English.	6	30

Note: Total number: 19, F: Frequency, %: Percentage.

As it is seen in Table 4.11. above, the language preferences of content area specialists vary. According to the table above, 6 (30%) teachers out of 19 teachers use both Turkish and English but prefer to use only English in their classes. 5 teachers use both Turkish and English, but they prefer to teach only in Turkish. 3 teachers use both Turkish and English, and they are pleased with that. While 2 teachers use only English and they are pleased with that, other 2 teachers use only Turkish, and they are pleased with that. Last but not least, as only 1 teacher uses only Turkish but prefers to teach only in English, no teacher uses only English but prefers to teach in Turkish.

As the last procedure of the quantitative method, the present study sought to answer the reasons for content area specialists' language preferences in classes. The last two questions which are Question 18 and Question 19 in the questionnaire (See Appendix B) asked teachers to report their reasons based on the options given. These two questions are based on the previous question which is Question 17 in the questionnaire. In other words, for these questions, only teachers who use only Turkish as a medium of instruction in their classes and who use only English as a medium of instruction in their classes were asked to report their answers. In these items of the questionnaire, teachers may circle more than one answer. Table 4.12. shows the results of the reasons underlying the choice of Turkish as the medium of instruction in percentages and frequencies from the views of content area specialists.

Table 4.12. Reasons underlying the choice of Turkish as the medium of instruction

Questionnaire Items	F
Turkish language should be the language of education in order to help Turkish develop as a science language.	-
I do not have adequate English knowledge to teach my lessons in English.	-
The students' proficiency level is not adequate for them to be taught in English.	2
I believe that students' being taught in their native language is more correct.	1

Note: Total number: 3, F: Frequency.

For Question 18, as it is clear in Table 4.12. above, totally 3 teachers who use only Turkish in their classes reported their reasons. According to the table above, while two teachers stated that the students' proficiency level is not adequate for them to be taught in English, one teacher reported that he believes that students' being taught in their native language is more correct way of teaching a language.

As for the reasons of using English in content classes, two teachers reported their answers and it is seen that four options were marked by the respondents. Table 4.13. presents the results in frequencies and percentages. According to the table, the reasons of teachers who use only English in their courses are that students can follow the latest developments in their fields, get an MA or Ph.D. Degree, be successful in their profession and most of the materials in the field are in English. It is clearly seen in the table that each reason mentioned is checked once although it is allowed to check more than one option.

Table 4.13. Reasons underlying the choice of English as the medium of instruction

Questionnaire Items	**F**
Students need to read materials written in English to follow the latest developments in their subject matter.	1
Students need to know English to pursue an MA or Ph.D. Degree.	1
Students need to know English in order to be successful in their profession.	1
In our department, it is compulsory to teach in English.	-
Most of the education materials in our discipline are in English.	1
I prefer teaching in English to improve myself.	-

Note: Total number: 2, F: Frequency.

Qualitative Data Analysis

"What is your attitude towards English-medium education in your department? / Do you approve? / Why or Why not? "

In this part of the study, qualitative data will be presented. As the qualitative data, interviews were used in the current study. The interviews were conducted with the heads of the departments. In these one-to-one interviews, the third research question of the current study was asked to the departmental chairs. In addition, in order to probe up the respondents, the questions 'Why?' or 'Why not' were added as a follow-up question during the interview. In regards to how the data obtained are reported, the related excerpts taken from the interview transcripts are presented with the quotes of the participants as follows.

Concerning the English-medium education in their departments, the head of Environmental Engineering Department states:

> I do not approve because the proficiency level of the students is not adequate to be taught in English. They cannot write or speak in English, or they cannot produce anything in English. Also, their grammar and vocabulary knowledge is not sufficient for the departmental studies. Every year, we start for the education with a full of hope, but every time we face with a big disappointment. We have to translate our sentences, content and everything in the courses. Although it is illegal, I prepare the exam questions in two languages – in Turkish and in English. Most of the resources in our field are English, but we –as content area specialists- have to prepare Turkish versions of these English materials. Everything we have done is for the sake of students and to decrease comprehension problems. Because the purpose here is to teach academic content and prepare students for their professional lives. But we are always dealing with language problems and seeking for solutions. It is a great workload for us. I am not an English teacher. I am a lecturer. I remember we once demanded language instructors from the prep school to deal with the language problems of the students and to help and guide us, but we did not get any response or feedback. In short, we are desperate and we are sure that the prep education cannot address our needs in any way. So, if this is the case, in other words - if we continue to teach content in English – the prep program should start doing something about this issue.

As it is seen in the excerpt above, the head of Environmental Engineering Department does not approve English-medium instruction in their department. As reasons, the respondent reported that the proficiency level of the students is not adequate for them to learn content in English and the education that the prep program has provided is inadequate.

The head of the Electrical and Electronics Engineering Department, related to the question asked in the interview, says:

> I am a great supporter of English-medium instruction, but I do not approve this kind of instruction in this university. Because we – as lecturers - feel like that we cannot teach anything. For instance, there are certain structures commonly used in our lecture notes such as 'passive'. Students do not understand the articles without knowing these structures. At least the prep school should take these common structures into account. This is not the only problem. Our exams are carried out in English and we want students to write short answers, but they cannot. There is no participation of the student in the courses. As the slides are in English, I have to use both English and Turkish in my courses. Also, I have to prepare some Turkish materials every year. It is a burden on us. The prep programme should do something as soon as possible. We are open to every idea. We can discuss and work together. You will deal with the English part and we will have the content part.

As it is understood, the head of the Electrical and Electronics Engineering Department does not approve English-medium instruction in their departments. The respondent showed the inadequacy of the proficiency level of the students as the reason by demanding from the prep school to get into action concerning the issue.

The extract from the interview conducted with the head of the Economics Department are as follows:

> I do not approve because the language level of the students is not enough for us to teach content in English. They have problems in speaking, writing, and understanding what they have read or heard. They cannot even make one grammatically correct sentence. Their grammar and vocabulary knowledge is not sufficient for us. They are not even good at Basic English, so it is unnecessary to talk about their specific or academic English knowledge. I always try to encourage them to use English, but it does not work. They prefer to use Turkish. In fact, you should come and observe my classes. In short, we are not happy with the education that the prep program has provided.

As it is seen in the response above, the head of the Economics Department does not approve content-based instruction through English in their departments. The respondent noted that the language level of the students and English education in the prep school cannot meet their demands on teaching content in English.

The head of Mining Engineering Department concerning the issue remarks:

> I do not approve because I have two reasons. Firstly, I believe that content area courses must be taught in the mother tongue. As a second, students must have a high level of proficiency in English, but they do not. In my courses, I want the students to discuss and ask questions. But as they do not understand what is going on, they do not participate in the lessons. Therefore, I

> start to teach content in English at the beginning of each term, but after a short period of time, I give up and turn my language into Turkish. I use Turkish sources because there is no other option. Although I allow the students to use their bilingual or monolingual dictionaries in the exams, the grades are low. The students are also unhappy with this instruction. These students will be mine engineers and we cannot teach content effectively just because of English. It is a great obstacle for us. When there is a mining accident, we, as the department, get stressed whether or not one of our graduate students has caused that accident because the main courses are taught in English. The important thing for us is that students understand the content. I can surely say that this partial English instruction affects us negatively. If this is the case, the prep school must take a step to solve this problem.

As it is seen in the response above, the head of Mining Engineering Department does not approve English-medium instruction in their departments by giving two reasons. Firstly, according to the respondent, content instruction must be conducted in the mother tongue. Secondly, the respondent claimed that the language level of the students is not sufficient for departmental studies by stating their expectations concerning this issue from the prep school.

Finally, the head of Civil Engineering Department states in regards to the English –medium instruction in their department:

> I do not approve because English education in the prep school is not adequate for the departmental studies. The students do not have the adequate proficiency in both academic and general English, which makes the courses hard as twice. While the academic content is really hard for students to deal with, the language also creates comprehension problems. Some courses are even taught in full Turkish. Also, the content area specialists in our department are happy with Turkish instruction because we believe if people want to communicate and negotiate, that language must be the mother tongue, so in our situation, it is Turkish. We – as the whole department – object to this instruction.

As it is understood from the response above, the head of the Civil Engineering Department does not approve English-medium instruction in their departments. As for reasons, the respondent reported that the students do not have the adequate language level and they believed the instruction must be given in the first language.

When we look at the overall results regarding the English-medium instruction, it is seen that all the departmental chairs in the present study stated that the proficiency level of their students is not adequate to be taught content in English. The respondents believe that this inadequacy of proficiency in English has caused from the education that the prep school of the university has provided, which indicates prep education does

not address the demands of the respondents. Further, while three departmental chairs stated that they expect prep school to do something for this issue, the other two departmental chairs claimed that this English-medium instruction should be removed and the instruction should be given in the mother tongue. In addition to this, all the respondents stated that they have to use both English and Turkish in their courses because of comprehension problems and they have to prepare Turkish versions of English sources by highlighting that this is a great workload.

4.3.1. Discussion Relating to the Findings of the Research Question 3

"What are the attitudes of content area specialists toward English medium education in content classes?"

a) *In terms of language preferences in their classes and the reasons for their language-teaching/learning preferences?*

As it is stated above, in this section the findings of the third research question will be discussed. The results of either data analysis will be integrated. In addition to this, similar studies from the literature will be presented to compare the results and make a general comment.

To start with, when we look at the results concerning whether the content area specialists approve English-medium instruction or not, it is clearly seen that the results of both data analysis indicate that a large majority of the participants do not approve this instruction in their departments. Therefore, it could be easily concluded that there are some problems in the implementation of CBI at ZBEU. For this aim, when we look at one of the implementation procedures, in other words, the language preferences of content area specialists in their classes, while most of the teachers use both Turkish and English in their content classes, a few teachers use totally Turkish in their classes, which all indicate that there is a great problem in the application procedures of CBI at ZBEU. Even, as a striking result, the teachers stated that neither exams have been carried out in English nor English materials have been used in their courses although the exams must be prepared in English in accordance with the regulations and materials used in the

classes must be in English. When we look at the underlying reasons of concerning the language preferences of the teachers, the results show that the inadequate proficiency level of the students is the main factor according to the teachers, which they attribute to the English instruction given in the prep school at ZBEU. In addition, a few of the teachers stated that English-medium instruction is the main reason for the failure and thereby the subject matter should be taught in the native language.

Apart from these, when it is looked at the results concerning teachers using only English in their classes, few teachers stated that they use only English in their courses. Accordingly, all the reasons for using only English in class are related to the academic success of the students such as doing MA or Ph.D. degree or following the latest developments in their fields. However, the striking result concerning this case is that the item 'In our department, it is compulsory to teach English' in the questionnaire was neither marked by the teachers nor was brought up in the interviews by the heads of the departments. However, teaching content in English is obligatory in the departments in the present study. Therefore, based on these findings, it could be argued that English-medium instruction at ZBEU is a process which has existed legally and has not been put into practice effectively. Even it could also be argued that teaching content in English has caused so many problems such as student failure and comprehension problems that teachers do not take into account whether it is compulsory or legal not.

In moving towards a conclusion, when it is looked at the overall results of the third research question of the current study, it is both purposeful and useful to make comments for the evaluation of the existing curriculum in the prep school at ZBEU. First of all, content area specialists at ZBEU are against English-medium instruction because of the inadequate proficiency in English and the belief in native language education. In order to address the demand related to the language level, as discussed before, expectations of the content area specialists concerning the first and second research questions will be taken into consideration by the prep school and feasible demands will be involved in the existing curriculum. However, for the demand of a shift from partial English to full Turkish medium instruction or the belief in the education in the mother tongue, unfortunately, there is nothing to be done by the prep school as

required by law. The only thing that seems possible is to present the results to the main department, the instructors, the participators in the current study, and presidency of the university and inform these stakeholders, which may lead to better CBI applications at ZBEU through negotiation among the stakeholders.

Finally, when we look at the literature for related studies, Somer‘s (2001) and Güler’s (2004) studies yield similar results with the current study. Somer (2001) investigated the attitudes of content area specialists towards full English-medium instruction in engineering and architecture departments at Anadolu University. According to Somer’s (2001) results, most of the participants do not support English-medium instruction and a large group of the faculty members teaches both in English and in Turkish, as in the present study. Another similar study is Güler’s (2004) study in which she investigated the same research questions with the current study at Yıldız Teknik University. However, Güler’s (2004) research setting is a university where the language of instruction has been recently switched from partial English to full Turkish medium instruction. According to the results of the study, the majority of content teachers is pleased with the change in the language policy of YTU and in general has negative views towards using English in their content teaching, as in the present study. As for the reasons of the language preferences of content teachers at YTU, unlike the current study, most of the teachers prefer to use only Turkish and they are happy with it. The reasons for using Turkish in classes are that teachers believe learning in one’s mother tongue is better and to help Turkish develop as a scientific language. However, in the current study, the main reason of using Turkish is the proficiency level of the students. When we take into consideration of the large number of the participants in Güler’s (2004) study and the difference of research settings, it might be put forth that this difference may cause from the contextual differences. When it is looked at the other similar result, we see that teachers in Güler’s (2004) study also reported that they prefer to use English in their classes based on the reasons related to the academic success of the students, as in the present study. All in all, both Somer’s (2001) and Güler’s (2004) studies have great similarities with the present study in terms of the results. Although the research settings are different, it might be argued that content area specialists in

tertiary levels in Turkish universities have negative views towards English-medium instruction and they prefer Turkish medium instruction for almost the same reasons.

CHAPTER V

CONCLUSION

5. Introduction

In this chapter, firstly, an overview of the study will be presented. Given the overview, the summary of the findings will be provided. Based on these findings, implications of the study will be discussed. Last but not least, the limitations of the study and the directions for the future research will be presented.

5.1. An Overview of the Study

This study is aimed at investigating the Academic English language needs of students in English-medium departments and revealing content area specialists' opinions towards English-medium instruction at ZBEU. Accordingly, the current study tried to provide the answers of these research questions:

1. Which English language skill(s) has the most importance for content area courses in English Medium Departments at ZBEU?
2. What are the academic English language requirements of content area specialists among the specified language tasks and strategies related to each language skill?
3. What are the attitudes of content area specialists toward English medium education in content classes?
    a) In terms of language preferences in their classes and the reasons for their language-teaching/learning preferences?

Throughout these aims, this study was performed through a mixed-methods design. Accordingly, quantitative and qualitative data were used in the study. The quantitative data were collected from questionnaires and qualitative data were gathered from semi-structured interviews after quantitative data collection. After data collection, they were analyzed separately but integrated in the discussion stage in the current study. Questionnaires were given to twenty content course teachers in six departments and interviews were conducted with five departmental chairs. The semi-structured interview consisting of one question was conducted with departmental chairs. They stated their attitudes towards English-medium education at ZBEU through the following question:

1) What is your attitude towards English-medium education in your department? Do you approve or not? Why or why not?

5.2. Summary of the Findings

The first research question in the current study investigated the most required language skill(s) among four language skills - reading, writing, speaking, and listening - in the departments teaching content through partial English through the perspectives of content area specialists. According to the results, all language skills among reading, writing, listening, and speaking have great importance for the teachers. However, although all the skills are considered ‘very important’ by the respondents, the most required skill is reading by the views of the teachers. Additionally, the literature on needs analysis studies in CBI contexts confirm this result with Arık’s (2002), Güler’s (2004), Eroğlu’s (2005), Şahbaz’s (2005), Canbay’s (2006) and Gözüyeşil’s (2014) studies in all of which reading skill is also prioritized by the participants. This confirmation of the results of these studies mentioned above may indicate that the skill of reading is attached great importance in content-based instruction in tertiary levels in Turkey.

With the second research question, it was aimed at revealing which language skill (s) among basic four skills is used in the content classes and which specified tasks

and sub-skills based on the basic four language skills have importance for the content area specialists. According to the results, reading is reported as the most required skill by the teachers, which is consistent with the result of the first research question. After reading, writing comes as the second skill to be used in the content classes by the views of the content teachers. According to the researcher, therefore, it may be concluded that while content area specialists expect their students to use their reading and writing skills in their classes, they do not require the students to use aural and oral skills as often as reading and writing skills in the English medium-departments at ZBEU. Additionally, when it is looked at the findings of the specified tasks of each skill and the importance of sub-skills based on four basic skills, content area specialists at ZBEU mostly agree on the academic requirements of each skill in the aspect of both task types and importance degrees of sub-skills.

As for the third research question in the present study, qualitative data were also gathered in order to elaborate the quantitative findings. Accordingly, semi-structured interviews were conducted with the departmental chairs. In these one-to-one interviews, the third research question was addressed to the participants as an interview question. In addition, the questions ‘Why?’ or ‘Why not’ were added as a follow-up question. The data concerning each form of data were analyzed separately. The results were integrated into the discussion stage in the present study. Accordingly, the results showed that a great majority of content area specialists at ZBEU do not approve content-based instruction in their departments.

For the 1st sub question of the third research question, which is related to the language preferences of the content teachers at ZBEU, it is clearly seen that both results of the questionnaire and the interview confirm and complement each other. According to the results of either data analysis, while a large majority of the content area specialists stated that they prefer to use both Turkish and English in their classes; a few teachers reported that they either use totally Turkish or totally English in their classes.

As for the 2nd sub question of the third research question in the present study which investigates the underlying reasons of content area specialists’ language

preferences in their classes, the results show consistent findings in the analysis of either data form. Accordingly, the main reason that the teachers who prefer to use both Turkish and English in their classes is that the proficiency level of the students does not allow content to be taught in English. In addition, the teachers emphasized that English education at the prep school is not adequate for the departmental studies. Similarly, the content area specialists who use only Turkish in their classes reported that the language proficiency level of the students is inadequate. Further, they stated that the subject matter should be taught in the native language. Finally, all the reasons of the teachers using only English in their classes are related to the academic career and success of the students such as doing MA or Ph.D. degree or following the latest developments in the field.

5.3. Implications of the Study

In line with the findings of the present study, it can be concluded that content-based instruction at ZBEU has not been put into practice effectively for a long time, which indicates that this process has only been a requirement set out in regulations or in other words, a burden as the participants stated. For an effective and sound solution, some steps are to be taken by the departments in the present study and the prep school at ZBEU. Accordingly, in relation to the purpose of the current study, the first step is that the researcher should arrange a meeting with the President of ZBEU in order to share the results of the current study. In this meeting, the researcher should also state the necessity and the importance of a curriculum renewal study to be done with specialists in their fields. Next, through the Presidency, an official letter should be sent to Faculty of the Educational Sciences at ZBEU in order to invite several experts from the fields of *Curriculum Development* and *Assesment* & *Evaluation.* The next step is to arrange an official training session(s) or a meeting(s) with the specialists invited, all the content area specialists or departmental chairs in the current study, and curriculum office members at prep school. In this meeting(s), first of all, the researcher should present the results of the current study to the stakeholders and the findings should be discussed among the stakeholders. In addition, language department should make a presentation

about their curriculum design. This presentation should involve the main teaching and learning philosophy, the syllabus design, assessment procedures of the prep program and language standards (CEFR) that are used with the examples of what they mean. Similarly, the departments in the current study should also present about their curriculum design, teaching and learning philosophy, assessment procedures and if possible, samples of materials that are used. Finally, a work schedule should be prepared through the guidance of the specialists and all the stakeholders should work together to renew the curriculum of Preparatory School and the departments in the current study.

All in all, as stated in the literature review, even if the data obtained from a needs analysis provide useful information, this does not mean that immediate changes will be made on the curriculum (Scrivener, 2011). A program may not address all of the potential needs identified through a needs analysis. Therefore, decisions should be made on which needs are critical or desirable, which needs are immediate and long-term and which ones are feasible and impractical. The critical, immediate and feasible needs should be prioritized (Richards, 2001). Also, in the cases in which there are some contradictory data, as Brindley (1989) points out, negotiation process among the stakeholders is a must and the assumptions of the stakeholders should be satisfied and clarified.

5.4. Limitations and the Directions for the Future Research

According to Price and Murnan's definition (2004, p.66), "a limitation of a study design or instrument is the systematic bias that the researcher did not or could not control and which could inappropriately affect the results". Limitations are a part of science and reporting and acknowledgement of a study's limitations should not be ignored, on the contrary, should be pointed out. It is a good opportunity to make calls and suggestions for further research and to connect the limitations to suggestions or implications for further research helps unanswered questions or unexplored issues to be explored in the next studies (Price & Murnan, 2004). Accordingly, this study has also some limitations which have to be pointed out.

To start with, first limitation of the present study is concerned to the sample size. According to Cohen, et. al. (2007), there is no definite answer for sample size as it depends upon the purpose of the study and the nature of the study group. However, it is widely believed that the larger the sample size is, the better it is as a large sample size increases the reliability of the study and allows more sophisticated statistics to be used. According to many researchers, the minimum number of a sample should be thirty, however this number is very small and it is advised that this number increased more. Another important issue in sampling is that sample size depends upon the research design of the study. For instance, a survey research requires a large sample. According to Borg and Gall (1979, p.194-195), "… survey research should have no fewer than 100 cases in each major subgroup and twenty-fifty in each minor subgroup". In this regards, the current study has a limitation as the study was completed with totally 20 participants, which is not even an anticipated minimum number. Apart from this, the current study has 6 subgroups and the distribution of the data among these subgroups does not have the expected number. While one subgroup has 6 participants, the other subgroup has 2 participants. For such cases, Cohen, et. al. (2007) suggest:

The message is clear, one needs to anticipate, as far as one is able, some possible distributions of the data and see if these will prevent appropriate statistical analysis; if the distributions look unlikely to enable reliable statistics to be calculated then one should increase the sample size, or exercise great caution in interpreting the data because of problems of reliability, or not use particular statistics, or, indeed, consider abandoning the exercise if the increase in sample size cannot be achieved (p.101).

As Cohen, et. al. (2007) stated, small sample size and the issue of the distribution among the subgroups in the current study did not allow any sophisticated statistical analysis to be made. For instance, although Basturkmen (2010) and Ferris (1998) stated that needs may vary considerably according to academic disciplines, any statistical analysis regarding each department or differences between the departments could not be made; rather the results were presented from a general point of view including all the departments in the present study. Therefore, descriptive research design was adopted in

the present study and frequencies, means and standard deviations were benefited in order to describe what exists or does not. However this limitation, as Price and Murnan (2004) pointed out in their definition of ‘ limitation of a study’, is not an issue that the researcher could control as there are totally 27 academicians who can teach content through English at ZBEU and 20 out of them participated in the current study. On the other hand, as concerned to increasing the sample size, as pointed out by Cohen, et. al.(2007), it could not be achieved for the current study as needs are specific in its nature. Thus, the present study portrays a local context and the aim of the research is to elucidate the present situation at ZBEU, therefore there might be no generalizability of the findings. However, on the other hand, in order to reduce this limitation and obtain in-depth information, as Basturkmen (2010) points out, more direct techniques can be used in the investigation process such as collecting and analyzing samples of text types used and observing learners’ performance in the target situation.

Another limitation is concerned that the current study investigated only one type of need – target needs. According to Dudley- Evans and St John’s (1998) needs analysis definition (See Chapter 2), the present study focused on *target situation analysis* in which the tasks and activities learners are/will be using English for are investigated. However, as pointed out by Hutchinson and Waters (1987), a useful and sound needs analysis process should take into consideration of both target needs and learning needs which refer to discovering needs of the learners, the conditions of the learning situation, learners’ knowledge, skills, strategies and motivation. Accordingly, Basturkmen (2010,p.32) points out that although questionnaires and interviews are useful in order to investigate people’s perception of needs, language difficulties and importance of language skills and areas, more direct means as additional information to increase the quality of the data such as “actual samples of language use or learners’ performance in events in the target situation” may be used. Therefore, as a suggestion concerning this limitation, according to Johns and Price-Machada’s list (2001, as cited in Basturkmen, 2010), these methods

> …include interviews with experts (for example, with supervisors in the target situation in which the learners will work) as well as the workers or learners themselves, job-shadowing (the everyday language experiences of workers in a typical day at work), analysis of the learning style of the learners, analysis of modes of working (for example, team work or

> individual work) and spoken or written reflections (for example, learners could be asked to reflect on what they have experienced on an ESP programme as a basis for planning a new programme or revising the current programme) (p.33).

Apart from these, another limitation is concerned that the current study was carried out from only one point of view, in other words, from only teachers' perceptions. Richards (2001) points out that it is assumed that students may not have any immediate perceptions of needs. Therefore, in many parts of the world, the process moves in this way without consulting learners. However, Ferris (1998, p.307) argues that professors "may not always be the best judges of the ways in which their students are struggling" and also "…students may not be the most accurate informants on what the professors actually require". Therefore, as an idea for further research regarding this limitation, it is important to gather ideas on needs from as many relevant stakeholders as possible (Basturkmen, 2010; Ferris, 1998; Graves, 2000; Hutchinson &Waters, 1987; Kim, 2006; Nation & Macalister, 2010; Richards, 2001; Scrivener, 2011).

Another important point to be emphasized regarding the limitation of the current study is concerned with the changing nature of "needs". As pointed out by Ferris (1998), needs are specific to the institution, academic discipline, course level, and class size. Similarly, Kim (2006) stated that instructors' preferences or ideas on needs may change and Basturkmen (2010) argued that memories are not the best source of data as they can change over time. Similarly, Hutchinson and Waters (1987) argue that needs analysis is a continuing process, not a once-for-all activity. Conclusions or decisions should be checked and re-assessed. According to Johns and Price-Machada (2001, p.49), "… in many programs, an ongoing needs assessment is integral to curriculum design and evaluation". Graves (2000) stated that needs are not static; rather they are multi-faceted and changeable. Therefore, as a suggestion for this limitation, needs analysis should be established as part of teaching, not an only prior analysis to teaching. It should be viewed as an ongoing process as it should be based on shared experiences and understanding of the situation. Regarding how an ongoing needs assessment is included in the teaching process, Graves (2000) proposes three ways as 'direct needs assessment', 'indirect needs assessment' and 'informal needs assessment'. In direct needs assessment, an activity is used to gather particular information on any type of needs. In indirect needs assessment, a regular teaching activity is used as a needs

analysis tool. In informal needs assessment, instead of using a separate activity with a focus on needs, students are observed carefully and conscientiously in a regular teaching context.

The final limitation of the current study is related to the methods used. As Basturkmen (2010) pointed out, most needs analysis studies are carried out through using either questionnaires or interviews or both questionnaires and interviews, often conducting interviews based on the data gathered from questionnaires. Accordingly, the present study was conducted through a mixed methods design. Quantitative data were collected from questionnaires and qualitative data, as a qualitative comment of quantitative data, were gathered from interviews. After data were collected, they were analyzed separately to compare, relate, confirm or disconfirm the results. Although the current study used triangulation approach in order to reduce bias and increase the validity and reliability of information (Johnson, 1992), both methods have disadvantages (Kumar, 2011). As for the disadvantages of a questionnaire, Kumar (2011) states that the disadvantages of using a questionnaire in a study do not always occur as it depends upon the study. Accordingly, the disadvantage of using a questionnaire in the current study may be that some issues in the questionnaire used could not be clarified. As the participants cannot give immediate or spontaneous responses and there is no direct contact with the researcher, respondents may either make comments on their own or consult others, which directly prevents obtaining real opinions or ideas of respondents. As for the disadvantages of the interview, first of all, it was time consuming. Also, as each interaction in the interviewing process is unique, the quality of the data is based on the experience and skills of the researcher. Therefore, in both interviewing process and coding the data, researcher bias may occur unintentionally in order to obtain expected responses or results.

All in all, as Richards (2001) points out, the data gathered through needs analysis are subjective and exposed to interpretations. For this reason, both more analysis and detailed information are required in order to be able to understand the situation more precisely. Therefore, the present study may be a call for the studies in the future.

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APPENDICES

APPENDIX A: A SAMPLE OF TURKISH QUESTIONNAIRE

Sayın Öğretim Üyesi/ Görevlisi,

Bülent Ecevit Üniversitesi Yabancı Diller Yüksekokulu'nda 7 yıldır okutman olarak çalışmaktayım. Abant İzzet Baysal Üniversitesi'nde İngilizce Öğretmenliği üzerine yüksek lisans yapmaktayım.

Anketin temel amacı BEÜ'de 30% İngilizce müfredatlı bölümlerde eğitim görmekte olan öğrencilerin akademik çalışmalarında gerekli olan yabancı dil ihtiyaçlarını belirlemektir. Bu konuyla ilgili siz öğretim üyelerinin değerli görüşlerine ihtiyaç duymaktayım. Bu çalışmadan elde edilecek bilgiler, Yabancı Diller Yüksekokulu'nun önümüzdeki yıllarda farklı bölümlerdeki dil ihtiyaçlarını göz önüne alarak yapacağı müfredat geliştirme projesinde kullanılacaktır. Anketin ikinci amacı ise BEÜ'de 30% İngilizce müfredatlı bölümlerde ders vermekte olan siz öğretim üyelerinin, 'Yüksek Öğretimde Yabancı Dille Eğitim' konusundaki fikirlerinizi öğrenmektir.

Anketi doldururken isminizi yazmak zorunda değilsiniz. Ayrıca aşağıdaki sorulara vereceğiniz kişisel cevaplarınız kesinlikle gizli tutulacaktır. Yardımlarınız ve değerli zamanınızı ayırdığınız için çok teşekkür ederim. Saygılarımla.

Sinem DOĞAN
Zonguldak Bülent Ecevit Üniversitesi
Yabancı Diller Yüksekokulu

BÖLÜM 1: ÖZGEÇMİŞ

1. Bülent Ecevit Üniversitesi'nde halen hangi fakülte ve bölümde ders vermektesiniz?
   Fakülte : _____
   Bölüm : _____

2. Meslek dalınızda kaç yıldır eğitim vermektesiniz?
   _____

3. Akademik ünvanınız:
   ☐ Profesör ☐ Doçent ☐ Yardımcı Doçent ☐ Öğretim Görevlisi
   Diğer (Lütfen belirtiniz): _____

4. Aşağıdaki İngilizce Dil Becerileri bölümünüzdeki öğrencilerinizin akademik çalışmalarında başarılı olabilmeleri için ne derece önemlidir? Lütfen her soru için yanındaki ilgili kutucuğa (X) işareti koyunuz.

	Çok önemli	Önemli	Çok önemli değil	Önemli değil
OKUMA				
YAZMA				
DİNLEME				
KONUŞMA				

BÖLÜM III: YAZMA

5. Öğrencileriniz derslerinizle ilgili çalışmaları için İngiliz dilinde herhangi bir yazı yazmak zorundalar mı ?(Eğer cevabınız '**HAYIR**' ise **Bölüm IV**'e geçiniz.)

EVET ☐ HAYIR ☐

6. Öğrencileriniz derslerinizle ilgili olarak aşağıda verilen amaçların her biri için İngilizce yazmaya ne kadar ihtiyaç duymaktadırlar? Lütfen bu soruyu aşağıda verilen sıralamaya uygun olarak ve bu sıralamadaki rakama karşılık gelen kutucuğu (√) işaretleyerek cevaplayınız.

1-asla 2- nadiren 3- bazen 4- genellikle 5- daima

		1	2	3	4	5
1.	Sınavlarda kısa yazılar / paragraflar yazmak					
2.	Sınavlarda kısa cevap gerektiren soruları cevaplamak					
3.	Sunumlar hazırlamak					
4.	Araştırma yazıları yazmak					
5.	Sınıfta not tutmak					
6.	Kompozisyon yazmak					
7.	Proje yazmak					
8.	Deney anlatımı yazmak					
9.	Elektronik posta mesajları yazmak					
10.	Kişisel mektuplar yazmak					
11.	Özgeçmiş yazmak					
12.	Laboratuar raporları yazmak					
13.	İş mektupları yazmak					
14.	Özet yazmak					
15.	Bir makale üzerine eleştiri yazmak					

Diğerleri – (lütfen detaylı belirtiniz) : _____

7. Öğrencilerinizin İngilizce yazım çalışmalarında aşağıdakiler sizin için ne kadar önemlidir? Lütfen bu soruyu aşağıda verilen sıralamaya uygun olarak ve bu sıralamadaki rakama karşılık gelen kutucuğu (√) işaretleyerek cevaplayınız.

1-Önemsiz 2- Çok önemli değil 3- Önemli 4- Çok önemli

		1	2	3	4
1.	Ana fikrin iyi ifade edilmesi				
2.	Dilbilgisi kurallarına uygunluk				
3.	Fikirlerin konuya uygunluğu				
4.	Fikirler arasında uygun geçişler				
5.	Fikirlerin sıralanması (Fikirlerin uygun düzenlenmesi)				
6.	Fikirlerin yeterli ve yerinde gelişimi				
7.	Fikirlerin orijinalliği				
8.	Uygun kelime kullanımı				
9.	İyi derecede akademik kelime hazinesi kullanımı				
10.	İmla, noktalama, düzenleme (format). vs.				

Diğerleri – (lütfen detaylı belirtiniz):_____

BÖLÜM IV: OKUMA

8. Öğrencileriniz derslerinizle ilgili çalışmaları için İngilizce okuma yapmak zorundalar mı? (Eğer cevabınız 'HAYIR' ise lütfen BÖLÜM V'e geçiniz.)
   EVET ☐ HAYIR ☐

9. Öğrencilerinizin aşağıdakilerden her birini, ne sıklıkta okumalarını istiyorsunuz? Lütfen bu soruyu aşağıda verilen sıralamaya uygun olarak ve bu sıralamadaki rakama karşılık gelen kutucuğu (√) işaretleyerek cevaplayınız.

1-asla 2- nadiren 3- bazen 4- genellikle 5- daima

		1	2	3	4	5
1.	Ders notları					
2.	Referans kaynakları (örneğin: sözlükler, ansiklopedi)					
3.	İnternet yazıları (örneğin: elektronik posta mesajları)					
4.	Haftalık yabancı dergilerdeki makaleler					
5.	İngilizce gazeteler					
6.	Akademik dergilerdeki makaleler					
7.	Talimat kitapçıkları / Kullanma broşürleri					
8.	Raporlar					
9.	Grafikler, şemalar, tablolar vs.					
10.	Ders kitapları					

Diğerleri – (lütfen detaylı belirtiniz):_____

10. Öğrencilerinizin İngilizce okuma çalışmalarında aşağıdakiler sizin için ne kadar önemlidir? Lütfen bu soruyu aşağıda verilen sıralamaya uygun olarak ve bu sıralamadaki rakama karşılık gelen kutucuğu (√) işaretleyerek cevaplayınız.

1-Önemsiz 2- Çok önemli değil 3-Önemli 4- Çok önemli

		1	2	3	4
1.	Belirli bir bilgi için okuma				
2.	Genel bilgi için okuma				
3.	Ana fikir için okuma				
4.	Sonuçlar çıkarmak / çıkarım yapmak amacıyla okuma				
5.	Parçanın kendi içindeki mantığını (mantık bağlantısını) anlama amacıyla okuma				
6.	Yazarın bakış açısını anlama amacıyla okuma				
7.	Bilinmeyen genel kelimeler için tarama amaçlı okuma				
8.	Bilim dalıyla ilgili kelimeleri anlama amaçlı okuma				

Diğerleri – (lütfen detaylı belirtiniz) : _____

BÖLÜM V: KONUŞMA

11. Öğrencileriniz derslerinizle ilgili çalışmaları için İngilizce konuşmak zorundalar mı ?(Eğer cevabınız 'HAYIR' ise, lütfen VI BÖLÜM'e geçiniz.)

EVET ☐ HAYIR ☐

12. Öğrencileriniz derslerinizle ilgili çalışmalarında aşağıda verilen amaçların her biri için İngilizce konuşmaya ne kadar ihtiyaç duymaktadırlar ? Lütfen bu soruyu aşağıda verilen sıralamaya uygun olarak ve bu sıralamadaki rakama karşılık gelen kutucuğu (√) işaretleyerek cevaplayınız.

1-asla 2- nadiren 3- bazen 4- genellikle 5- daima

		1	2	3	4	5
1.	Sınıf içi tartışmalara katılmak					
2.	Sınıfta sorular sormak ve yöneltilen sorulara cevap vermek					
3.	Sözlü raporlar sunmak					
4.	Sunum yapmak					
5.	Seminerlerde konuşma yapmak					
6.	Telefon konuşmaları yapmak					
7.	Günlük konuşma dilini kullanmak					
8.	Yabancılarla kendi alanı ile ilgili konuşmak					

Diğerleri – (Lütfen detaylı belirtiniz): _____

13. İngilizce konuşma açısından, öğrencilerinizin derslerinizle ilgili çalışmalarında başarılı olabilmesi için, aşağıda verilen maddelerden her birini ne kadar önemli buluyorsunuz? Lütfen bu soruyu aşağıda verilen sıralamaya uygun olarak ve bu sıralamadaki rakama karşılık gelen kutucuğu (√) işaretleyerek cevaplayınız.

1- Önemsiz 2- Çok önemli değil 3- Oldukça önemli 4- Çok önemli

		1	2	3	4
1.	Genel (akademik olmayan) kelime bilgisi				
2.	Bilim dalıyla ilgili akademik kelime bilgisi				
3.	Gramer / Konuşurken dilbilgisini doğru kullanma				
4.	Telaffuz, vurgu ve aksana dikkat etme				
5.	Akıcı konuşma (Tereddütsüz ve duraksamadan konuşma)				
6.	Anlaşılır ve açık konuşma (konunun anlaşılırlığı)				
7.	Verilmek istenen mesajı ifade edebilme /anlatmak istediği düşünceyi ifade edebilme				

Diğerleri – (Lütfen detaylı belirtiniz): _____

BÖLÜM VI: DİNLEME

14. Öğrencileriniz derslerinizle ilgili çalışmaları için dinleme yapmak zorundalar mı? (Cevabınız 'HAYIR' ise BÖLÜM VII'e geçiniz.)

EVET ☐ HAYIR ☐

15. Öğrencileriniz derslerinizle ilgili çalışmaları için aşağıda verilenlerin her birini dinlemeye ne kadar ihtiyaç duymaktadırlar? Lütfen bu soruyu aşağıda verilen sıralamaya uygun olarak ve bu sıralamadaki rakama karşılık gelen kutucuğu (√) işaretleyerek cevaplayınız.

1-asla 2- nadiren 3- bazen 4- genellikle 5- daima

		1	2	3	4	5
1.	İngilizce radyo programları					
2.	İngilizce televizyon programları					
3.	İngilizce video ve sinema filmleri					
4.	Derslerde kullanılan İngilizce kelime, terim ve tanımlamaları					
5.	Ders süresince verilen sözlü İngilizce talimatları					
6.	Derslerde İngilizce yapılan tartışmaları					
7.	Günlük konuşmaları					
8.	İngilizce seminerleri					
9.	İngilizce sunumları					
10.	İngilizce telefon konuşmaları					
11.	İngilizce telefon mesajları					
12.	Aynı bilim dalıyla ilgilenen yabancıların İngilizce konuşmaları					

Diğerleri – (Lütfen detaylı belirtiniz): _____

BÖLÜM VII: YABANCI DİLDE EĞİTİMİ İLE İLGİLİ GENEL BİLGİLER

16. Bölümünüzde eğitim dilinin % 30 İngilizce olması hakkında ne düşünüyorsunuz?

ONAYLIYORUM ☐ ONAYLAMIYORUM ☐

17. Aşağıdakilerden hangisi sizin bölüm derslerini anlatırken kullandığınız tercihi yansıtır?

Lütfen yalnız bir seçenek işaretleyiniz.

☐ Yalnız Türkçe'yi kullanırım ve bundan memnunum.
☐ Yalnız Türkçe'yi kullanırım, ancak İngilizce anlatabilmeyi çok isterdim.
☐ Yalnız İngilizce kullanırım ve bundan memnunum.
☐ Yalnız İngilizce kullanırım, ancak Türkçe anlatmayı isterdim.
☐ Hem Türkçe hem İngilizce kullanırım ve bundan memnunum.
☐ Hem Türkçe hem İngilizce kullanırım, ancak yalnızca Türkçe anlatmayı isterdim.
☐ Hem Türkçe hem İngilizce kullanırım, ancak yalnızca İngilizce anlatmayı isterdim.

Diğer (Lütfen belirtiniz): _____

Bölüm derslerini anlatırken <u>Türkçe'yi</u> kullanıyorsanız 18. Soruyu, <u>İngilizce'yi</u> kullanıyorsanız 19. soruyu cevaplayınız.

18. Bölüm derslerinde anlatım dili olarak Türkçe'yi tercih etmenizin sebepleri nelerdir? (Birden fazla seçenek işaretleyebilirsiniz.)

☐ Türkçe'nin bilim dili olarak gelişmesine yardımcı olmak için, eğitim dili Türkçe olmalıdır.

☐ İngilizce bilgim konuları İngilizce anlatacak kadar yeterli değil.

☐ Öğrencilerin İngilizce bilgisi anlattığım konuları İngilizce takip edebilecek düzeyde değil.

☐ Öğrencilerin kendi anadillerinde öğretim görmelerinin daha doğru olduğuna inanıyorum.

Diğer (Lütfen belirtiniz): _____

19. Bölüm derslerinde anlatım dili olarak İngilizce'yi tercih etmenizin sebepleri nelerdir? (Birden fazla seçenek işaretleyebilirsiniz)

☐ Öğrencilerin alanlarıyla ilgili en son gelişmeleri takip edebilmeleri için İngilizce yazılmış materyalleri okumaları gerekmektedir.

☐ Öğrencilerin yüksek lisans veya doktora çalışması yapabilmeleri için İngilizce bilmeleri gerekmektedir.

☐ Öğrencilerin gelecekte mesleki kariyerlerinde başarılı olabilmeleri için İngilizce bilmeleri gerekmektedir.

☐ Bölümümüzde İngilizce zorunlu eğitim dilidir.

☐ Alanımızdaki eğitim materyallerinin birçoğu İngilizce.

☐ Kendimi geliştirmek için konuyu İngilizce anlatmayı tercih ediyorum.

Diğer (Lütfen belirtiniz): _____

ANKET BURADA SONA ERMİŞTİR. DEĞERLİ ZAMANINIZI AYIRDIĞINIZ İÇİN ÇOK TEŞEKKÜR EDERİM.

APPENDIX B: A SAMPLE OF ENGLISH QUESTIONNAIRE

Dear Lecturer,

I have been working as an English language instructor for 7 years at the School of Foreign Languages at Zonguldak Bulent Ecevit University (ZBEU). I am an MA student at English Language Teaching department at Abant İzzet Baysal University (AIBU).

The main purpose of the questionnaire is to identify the required academic English language needs of the students in the departments in which content is taught through partial (30%) English at ZBEU. In addition, another purpose of the questionnaire is to investigate your ideas and attitudes towards English medium education in your departments. Therefore, regarding these two purposes, I need your valuable responses and opinions. The data obtained through this questionnaire is expected to be used in the curriculum renewal studies at the School of Foreign Languages at ZBEU next year.

You do not have to write your name to complete the questionnaire. Also, all *responses* to this questionnaire *will* be *kept strictly confidential*. If you have any questions about the study or the questionnaire itself, please feel free to contact me at the following address. Thank you very much for your help and your valuable time.

Sinem DOĞAN
Zonguldak Bülent Ecevit University
The School of Foreign Languages

PART I: BACKGROUND INFORMATION

1. Which faculty and department are you currently teaching at Bülent Ecevit University ?

Name of the faculty : _____

Name of the department : _____

2. How long have you been teaching in your profession?

a) less than 1 year c) 6 to 10 years e) 16 to 20 years

b) 1 to 5 years d) 11 to 15 years f) more than 20 years

3. What is your current title ?

a) Professor c) Assistant Professor e) Specialist

b) Associate Professor d) Instructor

Other (Please specify): _____

PART II : GENERAL INFORMATION

4. Do you think how important are the following English language skills for your students' academic studies ? Please put an (X) in the appropriate box for each item.

	Very Important	Important	Not very important	Not important
READING				
WRITING				
LISTENING				
SPEAKING				

PART III : WRITING

5. Do your students have to do any kind of writing in English for your course? (If your answer is 'NO', please skip to Part IV.)

YES☐ NO☐

6. To what extent do your students need to write in English for each of the following purposes for your course? Please answer this question by putting a tick (√) into the box referring to the number relevant to your answer according to the rank order given below.

1) Never 2) Rarely 3) Sometimes 4) Usually 5) Always

		1	2	3	4	5
1.	To write essays in exams					
2.	To answer short-answer question types in exams					
3.	To prepare presentations					
4.	To write research papers					
5.	To take notes in the class					
6.	To write notes					
7.	To write compositions					
8.	To write projects					
9.	To write descriptions of experiments					
10.	To write e-mails					
11.	To write personal letters					
12.	To write CVs					
13.	To write faxes					
14.	To write lab reports					
15.	To keep diaries					
16.	To write business letters					
17.	To write summaries					
18.	To write reviews on articles					
19.	To write synthesis papers					
20.	To write reports					

Others – (Please specify) : _____

7. How important to you are the following items for your students' writing studies?

Please answer this question by putting a tick (√) into the box referring to the number relevant to your answer according to the rank order given below.

1) Not important 2) Not very important 3) Important 4)Very important

		1	2	3	4
1.	Good expression of the main idea				
2.	Grammatical accuracy				
3.	Relevance of ideas to the context				
4.	Appropriate connections between ideas				
5.	Sequence of ideas				
6.	Adequate development of ideas				
7.	Originality of ideas				
8.	Appropriate use of vocabulary				
9.	Appropriate use of academic vocabulary				
10.	Mechanics (spelling, punctuation, format etc.)				

Others – (Please specify): _____

PART IV : READING

8. Do your students have to do any kind of reading in English for your course? (If your answer is 'NO', please skip to Part V.)

a) YES b) NO

9. To what extent do your students need to read in English for each of the following purposes for your course? Please answer this question by putting a tick (√) into the box referring to the number relevant to your answer according to the rank order given below.

1) Never 2) Rarely 3) Sometimes 4) Usually 5) Always

		1	2	3	4	5
1.	To read lecture handouts					
2.	To read reference books (e.g.dictionaries)					
3.	To read exam papers					
4.	To read on the Internet (e.g. e-mail messages,websites)					
5.	To read articles from weekly magazines					
6.	To read newspapers in English					
7.	To read articles in academic journals					
8.	To read instruction booklets/ user manuals					
9.	To read reports					
10.	To read graphs, charts, tables etc.					
11.	To read textbooks					

Others – (please specify): _____

10. How important to you are the following items for your students' reading studies?

Please answer this question by putting a tick (√) into the box referring to the number relevant to your answer according to the rank order given below.

1) Not important 2) Not very important 3) Important 4) Very important

		1	2	3	4
1.	To read for specific information				
2.	To read for general information				
3.	To read for main idea				
4.	To draw conclusions				
5.	To understand logical relations within the text				
6.	To understand the writer's attitude /point of view				
7.	To scan for unknown words in general				
8.	To make inferences				
9.	To recognize terminology				

Others – (please specify) : _____

PART V: SPEAKING

11. Do your students have to speak in English for your course?

(If your answer is 'NO', please skip to Part VI.)

a) YES b) NO

12. To what extent do your students need to speak in English for each of the following purposes for your course? Please answer this question by putting a tick (√) into the box referring to the number relevant to your answer according to the rank order given below.

1) Never 2) Rarely 3) Sometimes 4) Usually 5) Always

		1	2	3	4	5
1.	To participate in classroom discussions					
2.	To ask and answer questions in class					
3.	To present oral reports / to make presentations					
4.	To speak at seminars					
5.	To speak on the telephone					
6.	To speak in informal daily life situations					
7.	To give oral instructions					
8.	To speak to foreigners about their subject					

Others – (Please specify): _____

13. How important to you are the following items for your students' reading studies? Please answer this question by putting a tick (√) into the box referring to the number relevant to your answer according to the rank order given below.

1) Not important 2) Not very important 3) Fairly important 4) Very important

		1	2	3	4
1.	Non-academic vocabulary				
2.	Academic vocabulary specific to the discipline				
3.	Grammar				
4.	Pronunciation / Accent				
5.	Fluency / Accuracy / Being hesitant				
6.	Intelligibility / comprehensibility				
7.	Conveying the message				

Others – (Please specify): _____

PART VI: LISTENING

14. Do your students have to listen in English for your course?

(If your answer is 'NO', please skip to Part VII).

a) YES b) NO

15. To what extent do your students need to listen in English for each of the following purposes for your course? Please answer this question by putting a tick (√) into the box referring to the number relevant to your answer according to the rank order given below.

1) Never 2) Rarely 3) Sometimes 4) Usually 5) Always

		1	2	3	4	5
1.	Radio programs in English					
2.	Television programs in English					
3.	Videos / Cinema films in English					
4.	Words, expressions, statements in English used in the lectures					
5.	Instructions given in English in the lectures					
6.	Debates in English in the lectures					
7.	Daily life conversations					
8.	Seminars in English					
9.	Presentations in English					
10.	Telephone conversations in English					
11.	Telephone messages in English					
12.	Speeches of foreigners studying the same discipline					

Others – (Please specify): _____

PART VII: GENERAL INFORMATION ABOUT EDUCATION IN ENGLISH

16. What do you think about 30% English instruction in your department?

APPROVAL ☐ DISAPPROVAL ☐

17. Which of the following statements reflects how you feel when teaching content courses? Please circle only one option.

☐ I use only Turkish and I am pleased with this.
☐ I use only Turkish but I wish I could teach in English.
☐ I use only English and I am pleased with this.
☐ I use only English but I wish I could teach in Turkish.
☐ I use both Turkish and English and I am pleased with this.
☐ I use both Turkish and English but I wish I could teach only in Turkish.
☐ I use both Turkish and English but I wish I could teach only in English.

Other (Please specify): _____

While teaching content courses, if you use only Turkish, please answer the question 18, if you use only English, please answer the question 19.

18. If you prefer to teach your content courses **in Turkish**, what are your reasons? (You may circle more than one option).

☐ Turkish language should be the language of education in order to help Turkish develop as a science language.
☐ I do not have adequate English knowledge to teach my lessons in English.
☐ The students' proficiency level is not adequate for them to be taught in English.
☐ I believe that students' being taught in their native language is more correct.

Other (Please specify): _____.

19. If you prefer to teach your content courses **in English**, what are your reasons?

(You may circle more than one option).

☐ Students need to read materials written in English to follow the latest developments in their subject matter.

☐ Students need to know English to pursue an MA or Ph.D. Degree.

☐ Students need to know English in order to be successful in their profession.

☐ In our department, it is compulsory to teach in English.

☐ Most of the education materials in our discipline are in English.

☐ I prefer teaching in English to improve myself.

Other (Please specify): _____.

Thank you very much for your cooperation and for sharing your valuable time for my study.

APPENDIX C: DECLARATION OF ETHICAL PRINCIPLES (ZONGULDAK BULENT ECEVIT UNIVERSITY)

Kayıt Tarihi: 12.06.2017 Protokol No: 250

22/06/2017

T.C

BÜLENT ECEVİT ÜNİVERSİTESİ

İNSAN ARAŞTIRMALARI ETİK KURULU KARARI

ÇALIŞMANIN TÜRÜ:	Anket
BAŞLIK:	An investigation into the academic English language needs of students at Bülent Ecevit University and content area techers
SORUMLU ARAŞTIRMACI:	Sinem DOĞAN
KARAR:	Uygun

ETİK KURUL ÜYELERİ	**İMZA**
1- Prof. Dr. Hamza ÇEŞTEPE (Başkan)	
2- Doç. Dr. Ayça DEMİR (Başkan Yrd.)	
3- Doç. Dr. Ali ARSLAN (Başkan Yrd.)	
4- Prof. Dr. Rıza YILMAZ	
5- Doç. Dr. Hasan MEYDAN	
6- Doç. Dr. Ertuğrul YILDIRIM	
7- Yrd. Doç. Dr. Hasan ÖZER	

29.05.2014 tarih ve 2014/08-13 sayılı Senato Kararı ile kabul edilmiştir.

APPENDIX D: DECLARATION OF ETHICAL PRINCIPLES (BOLU ABANT İZZET BAYSAL UNIVERSITY)

Bolu Abant İzzet Baysal Üniversitesi
Sosyal Bilimlerde İnsan Araştırmaları Etik Kurulu

Sayın İlgili

Enstitünüz öğrencisi **Sinem DOĞAN**, Zonguldak Bülent Ecevit Üniversitesi Etik Kurulundan almış olduğu "**An investigation into the academic English language needs of students and attitudes of content area teachers at Bulent Ecevit University**" konulu araştırması Bolu Abant İzzet Baysal Üniversitesi Sosyal Bilimlerde İnsan Araştırmaları Etik Kurulu koşullarına uygun ve denk görülmüştür. Gereğini bilgilerinize arz ederim

02.04.2019

Prof. Dr. Hamit COŞKUN (Başkan)

APPENDIX E: THE STATEMENT OF APPROVAL

Evrak Tarih ve Sayısı: 01/04/2019-17585

T.C.
ZONGULDAK BÜLENT ECEVİT ÜNİVERSİTESİ
Genel Sekreterlik

Sayı : 39633678/302.14.03/
Konu : İzleme

YABANCI DİLLER YÜKSEKOKULU MÜDÜRLÜĞÜNE

İlgi : a) 21/03/2019 tarihli ve 86196913- 302.14.03- 15814 sayılı yazınız.
b) 28/03/2019 tarihli ve 86196913- 302.14.03- 17139 sayılı yazınız.

Yüksekokulunuzda Öğretim Görevlisi olarak görev yapmakta olan Sinem DOĞAN'ın, "An Investigation into the Academic English Language Needs of Students at Bülent Ecevit University" isimli tezi için Üniversitemizin ilgili birimlerden veri toplaması talebiniz Rektörlüğümüzce uygun görülmüştür.

Bilgilerinizi rica ederim.

e-imzalıdır
Prof. Dr. Veysel Haktan ÖZAÇMAK
Rektör a.
Rektör Yardımcısı

Dağıtım:
Yabancı Diller Yüksekokulu Müdürlüğüne

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KEP Adresi: beun@hs03.kep.tr

CURRICULUM VITAE

I was born in Kastamonu in 1988. I completed my primary education in Kastamonu and my secondary education in Çorum. In 2006, I started to study in English Language Teaching department at Anadolu University. After graduation, in 2010 I was hired as an English language instructor at the School of Foreign Languages at Zonguldak Bulent Ecevit University. I have been teaching English for ten years and I live in Zonguldak. I also have been working actively in the Professional Development Unit in our department.

Contact Information

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Telefon:0553 480 3181

TUTANAK

Yabancı Diller Eğitimi Anabilim Dalı, İngiliz Dili Eğitimi Bilim Dalı tezli yüksek lisans programı öğrencisi Sinem DOĞAN'ın 09.05.2019 tarihinde yapılan tez savunmasında "The English Language Needs of Undergraduate Students at English- Medium Departments: A Study at Zonguldak Bülent Ecevit University" adlı tez başlığının "Language Needs of Tertiary-level English- medium Departments: A Case Study of Stakeholders' Perspective" olarak değiştirilmesinin uygun olduğuna karar verilmiştir. (09.05.2019)

Dr. Öğr. Üye. Ayşe Selmin SÖYLEMEZ
Tez Danışmanı

Prof. Dr. Ayşegül Amanda YEŞİLBURSA
Üye

Dr. Öğr. Üye. Anıl RAKICIOĞLU SÖYLEMEZ
Üye