



REPUBLIC OF TÜRKİYE
BURSA ULUDAĞ UNIVERSITY
INSTITUTE OF EDUCATIONAL SCIENCES
DEPARTMENT OF ENGLISH LANGUAGE EDUCATION

**AN EVALUATION OF “CONTENT-BASED INSTRUCTION (CBI)”-
ORIENTED COURSE MATERIAL IN TEACHING ENGLISH AS A
FOREIGN LANGUAGE AT TERTIARY LEVEL: A CASE STUDY ON
THE STUDENTS OF SOFTWARE ENGINEERING DEPARTMENT AT
A FOUNDATION UNIVERSITY IN TÜRKİYE**

M.A. THESIS

Cem ŞENCAN
0000-0002-9014-8118

BURSA – 2022



T.C.
BURSA ULUDAĞ ÜNİVERSİTESİ
EĞİTİM BİLİMLERİ ENSTİTÜSÜ
YABANCI DİLLER EĞİTİMİ ANA BİLİM DALI
İNGİLİZ DİLİ EĞİTİMİ BİLİM DALI

**YÜKSEKÖĞRETİMDE YABANCI DİL OLARAK İNGİLİZCE
ÖĞRETİMİNDE “İÇERİK ODAKLI” DERS MATERYALİ
DEĞERLENDİRMESİ: TÜRKİYE’DEKİ BİR VAKIF
ÜNİVERSİTESİNDE YAZILIM MÜHENDİSLİĞİ BÖLÜMÜ
ÖĞRENCİLERİ ÜZERİNE ÖRNEK OLAY İNCELEMESİ**

YÜKSEK LİSANS TEZİ

Cem ŞENCAN
0000-0002-9014-8118

BURSA – 2022

BİLİMSEL ETİĞE UYGUNLUK

Bu çalışmadaki tüm bilgilerin akademik ve etik kurallara uygun bir şekilde elde edildiğini beyan ederim.

Cem ŞENCAN

19/09/2022

TEZ YAZIM KILAVUZU'NA UYGUNLUK ONAYI

“An Evaluation of ‘Content-Based Instruction (CBI)’-Oriented Course Material in Teaching English as a Foreign Language at Tertiary Level: A Case Study on the Students of Software Engineering Department at a Foundation University in Türkiye” adlı Yüksek Lisans tezi, Bursa Uludağ Üniversitesi Eğitim Bilimleri Enstitüsü tez yazım kurallarına uygun olarak hazırlanmıştır.

Tezi Hazırlayan
Cem ŞENCAN

Danışman
Prof. Dr. Zübeyde Sinem GENÇ

Yabancı Diller Eğitimi Anabilim Dalı Başkanı
Prof. Dr. Ayşegül Amanda Jane Audrey YEŞİLBURSA



EĞİTİM BİLİMLERİ ENSTİTÜSÜ
YÜKSEK LİSANS BENZERLİK YAZILIM RAPORU

BURSA ULUDAĞ ÜNİVERSİTESİ
EĞİTİM BİLİMLERİ ENSTİTÜSÜ
YABANCI DİLLER EĞİTİMİ ANABİLİM DALI BAŞKANLIĞI'NA

Tarih:/...../.....

Tez Başlığı / Konusu:

Yükseköğretimde Yabancı Dil Olarak İngilizce Öğretiminde “İçerik Odaklı” Ders Materyali Değerlendirmesi: Türkiye’deki Bir Vakıf Üniversitesinde Yazılım Mühendisliği Bölümü Öğrencileri Üzerine Örnek Olay İncelemesi

Yukarıda başlığı gösterilen tez çalışmamın a) Kapak sayfası, b) Giriş, c) Ana bölümler ve d) Sonuç, Tartışma ve Öneriler kısımlarından oluşan toplam 149 sayfalık kısmına ilişkin, 09.09.2022 tarihinde şahsım tarafından *Turnitin* adlı intihal tespit programından aşağıda belirtilen filtrelemeler uygulanarak alınmış olan özgünlük raporuna göre, tezimin benzerlik oranı %5’tir.

Uygulanan filtrelemeler:

- 1- Kaynakça hariç
- 2- Alıntılar hariç/dahil
- 3- 5 kelimedenden daha az örtüşme içeren metin kısımları hariç

Bursa Uludağ Üniversitesi Eğitim Bilimleri Enstitüsü Tez Çalışması Özgünlük Raporu Alınması ve Kullanılması Uygulama Esasları’nı inceledim ve bu Uygulama Esasları’nda belirtilen azami benzerlik oranlarına göre tez çalışmamın herhangi bir benzerlik içermediğini; aksinin tespit edileceği muhtemel durumda doğabilecek her türlü hukuki sorumluluğu kabul ettiğimi ve yukarıda vermiş olduğum bilgilerin doğru olduğunu beyan ederim.

Gereğini saygılarımla arz ederim.

Tarih ve İmza

16/09/2022

Adı Soyadı: Cem ŞENCAN
Öğrenci No: 802093002
Anabilim Dalı: Yabancı Diller Eğitimi
Programı: İngiliz Dili Eğitimi
Statüsü: Yüksek Lisans

Danışman
Prof. Dr. Zübeyde Sinem GENÇ
16/09/2022

T.C.

BURSA ULUDAĞ ÜNİVERSİTESİ

EĞİTİM BİLİMLERİ ENSTİTÜSÜ MÜDÜRLÜĞÜNE,

Yabancı Diller Eğitimi Anabilim Dalı'nda 802093002 numara ile kayıtlı Cem Şencan'ın hazırladığı, “Yükseköğretimde Yabancı Dil Olarak İngilizce Öğretiminde ‘İçerik Odaklı’ Ders Materyali Değerlendirmesi: Türkiye’deki Bir Vakıf Üniversitesinde Yazılım Mühendisliği Bölümü Öğrencileri Üzerine Örnek Olay İncelemesi” konulu yüksek lisans çalışması ile ilgili tez savunma sınavı 16/09/2022 günü 14:00-15:30 saatleri arasında yapılmış, sorulan sorulara alınan cevaplar sonunda adayın tezinin başarılı olduğuna oy birliği ile karar verilmiştir.

Üye (Tez Danışmanı ve Sınav Komisyonu Başkanı)

Prof. Dr. Zübeyde Sinem GENÇ

Bursa Uludağ Üniversitesi

Üye

Dr. Öğr. Üyesi Derya YILMAZ

Bursa Uludağ Üniversitesi

Üye

Prof. Dr. Birsen TÜTÜNİŞ

İstanbul Kültür Üniversitesi

ABSTRACT

Name and Surname	Cem ŞENCAN
University	Bursa Uludağ University
Institution	Institute of Educational Sciences
Field	Foreign Language Education
Branch	English Language Education
Degree Awarded	Master
Page Number	XVI + 191
Degree Date	.../.../...
Supervisor	Prof. Dr. Zübeyde Sinem GENÇ

AN EVALUATION OF “CONTENT-BASED INSTRUCTION (CBI)”- ORIENTED COURSE MATERIAL IN TEACHING ENGLISH AS A FOREIGN LANGUAGE AT TERTIARY LEVEL: A CASE STUDY ON THE STUDENTS OF SOFTWARE ENGINEERING DEPARTMENT AT A FOUNDATION UNIVERSITY IN TÜRKİYE

Content-based Instruction (CBI) has taken the attention of foreign language educators as it enables learners to learn the target language and to absorb subject matter knowledge at the same time. Although there are various foreign language teaching materials on the market, it is quite challenging to find a suitable material designed and specifically developed for each unique expertise field. The present study aims to demonstrate the evaluations of the students and of the instructor regarding a CBI-oriented English language course material developed by the researcher for the computer and software engineering students at a foundation university in Türkiye. The study also aims to find out the evaluations of the participants regarding the in-class implementation of the material and investigates its effects on the students' English language skills and on their content knowledge. For the purposes of the study determined, both quantitative and qualitative data were gathered from 40 software engineering students studying at the same foundation university and from the instructor of the course who was the developer of the CBI-oriented language course material and the researcher of this thesis study. Therefore, the present study employed mixed-method research design. The quantitative data were gathered through the Materials Evaluation Questionnaire (Işık & Altıışdört, 2010), students' scores in the content sections in the midterm and the final exam of the course, and in

the English Language Placement tests. The qualitative data, on the other hand, were collected from semi-structured interview sessions and the instructor's reflective journals. The findings demonstrated that students and the instructor were mostly satisfied with the course material and its in-class implementation. The material had positive effects on the students' content knowledge and their English language skills, except for their speaking skills, though.

Key words: content-based instruction (CBI), foreign language course material evaluation, CBI-oriented course materials

ÖZET

Yazar Adı ve Soyadı	Cem ŞENCAN
Üniversite	Bursa Uludağ Üniversitesi
Enstitü	Eğitim Bilimleri Enstitüsü
Ana Bilim Dalı	Yabancı Diller Eğitimi
Bilim Dalı	İngiliz Dili Eğitimi
Tezin Niteliği	Yüksek Lisans
Sayfa Sayısı	XVI + 191
Mezuniyet Tarihi	.../.../...
Danışman	Prof. Dr. Zübeyde Sinem GENÇ

YÜKSEKÖĞRETİMDE YABANCI DİL OLARAK İNGİLİZCE ÖĞRETİMİNDE “İÇERİK ODAKLI” DERS MATERYALİ DEĞERLENDİRMESİ: TÜRKİYE’DEKİ BİR VAKIF ÜNİVERSİTESİNDE YAZILIM MÜHENDİSLİĞİ BÖLÜMÜ ÖĞRENCİLERİ ÜZERİNE ÖRNEK OLAY İNCELEMESİ

İçerik Odaklı Dil Öğretimi, öğrencilerin hedef dili öğrenmelerini ve aynı zamanda alan bilgilerini özümsemelerini sağladığı için yabancı dil eğitimcilerinin dikkatini çekmiştir. Piyasada çeşitli yabancı dil öğretim materyalleri bulunsa da her uzmanlık alanı için özel olarak tasarlanmış ve geliştirilmiş uygun bir ders materyali bulmak oldukça zordur. Bu çalışma, Türkiye’deki bir vakıf üniversitesinde araştırmacı tarafından bilgisayar ve yazılım mühendisliği bölümü öğrencileri için geliştirilen “İçerik Odaklı” İngilizce ders materyaline ilişkin öğrencilerin ve dersin öğretim görevlisinin değerlendirmelerini ortaya koymayı amaçlamaktadır. Çalışma ayrıca, materyalin sınıf içi uygulanmasına ilişkin katılımcıların değerlendirmelerini göstermeyi ve materyalin öğrencilerin İngilizce dil becerileri ve içerik bilgileri üzerindeki etkilerini irdelemeyi hedeflemektedir. Araştırmanın belirlenen amaçları doğrultusunda, aynı vakıf üniversitesinde öğrenim gören 40 yazılım mühendisliği öğrencisi ile “İçerik Odaklı” dil ders materyalinin geliştiricisi olup aynı zamanda da hem dersin öğretim görevlisi hem de bu tez çalışmasının araştırmacısından nicel ve nitel veriler toplanmıştır. Bu nedenle, bu çalışmada araştırma yöntemi olarak karma desen kullanılmıştır. Nicel veriler, Malzeme Değerlendirme Anketi (Işık & Altmışdört, 2010), öğrencilerin dersin ara sınav ve final sınavlarındaki içerik bölümlerinden ve İngilizce Seviye Belirleme sınavlarından aldıkları puanlar kullanılarak toplanmıştır. Nitel veriler ise yarı yapılandırılmış görüşme oturumlarından ve dersin öğretim görevlisinin yansıtıcı günlüklerinden toplanmıştır. Bulgular, öğrencilerin ve öğretim görevlisinin ders materyalinden ve materyalin sınıf içi

uygulanmasından çoğunlukla memnun olduklarını göstermiştir. Materyal, öğrencilerin içerik bilgileri ve İngilizce dil becerileri üzerinde konuşma becerileri dışında olumlu etkiler yaratmıştır.

Anahtar kelimeler: içerik odaklı öğretimi, yabancı dil dersi materyali değerlendirme, içerik odaklı ders materyalleri

ACKNOWLEDGEMENTS

*I have dedicated this thesis study to Deniz Beril,
An Angel with Down Syndrome*

In the first place, I must express my gratitude to my thesis supervisor Prof. Dr. Zübeyde Sinem GENÇ. Without her guidance and help, understanding, insight and encouragement in this long journey, this thesis study would be incomplete. Undoubtedly, her own expertise and academic studies were among the factors that made me attempt to carry out this research dealing with material evaluation in ELT. I would also like to extend my thanks to the jury members Prof. Dr. Birsen TÛTÛNİŞ and Assist. Prof. Derya YILMAZ for their contributions and the invaluable feedback they offered to me.

Although writing a thesis study might be exhausting, I believe that the most crucial part is to choose a suitable topic that could make this challenging process enjoyable for the researcher and make the study very informative for the reader. In this regard, I have to claim that I have chosen the right topic for myself as the researcher of this study. I am so lucky that I have developed specific units while teaching English since the first years of my professional life. For this reason, I owe many many thanks to my coordinator at my workplace, Özlem SALI, who let me find a chance to develop content-specific language materials to be used in my own classes. She has always supported me and believed in me.

In addition, another very big thanks goes to Prof. Dr. Ali IŞIK, who was the program advisor and who gave very constructive feedback to me for my units during the material development period. However, I would be insincere if I forgot to mention the support of Gülşah SOBUCALI KIRŞAN, my peer-advisor and colleague, and Sonay DOYĞUN, my material development unit head. Without all these people, I could not have developed those units and eventually could not have conducted this research.

Moreover, I cannot deny that I am so lucky not just because I am surrounded by my wonderful coordinator and my colleagues but because I have wonderful students, too. I owe very special thanks to my students who wished to participate in this study and to provide their own evaluations for the revisions to be made on those units.

I would like to thank to my close friends and my cousins for their support in my life, too. Ayda, Esra, Özgür, Mustafa Gökçen, Egemen, Dicle, Deniz, Elif, Alper, Nilay, Kerim,

Özlem, Elvan, Bahar, Kaan, Evren and my life-long friend, Baturay, and all the others are like a big family to me, and they are indispensable part of my life.

I also want to express my thanks to The Scientific and Technological Research Council of Türkiye (TÜBİTAK) for the financial support they provided to me within the scope of the 2210-A National Scholarship Programme for Master's Students.

Lastly, the most special gratitude is allocated for my beloved family. My heroic father, my lovely mother and sister are the great people bestowed upon me, and they are the architects of the person who I am now. I cannot pay my debts to my family, who has unconditionally loved me and supported me in each and every aspect of my life.

TABLE OF CONTENTS

TEZ ONAY SAYFASI.....	iv
ABSTRACT	v
ÖZET	vii
ACKNOWLEDGEMENTS.....	ix
TABLE OF CONTENTS	xi
LIST OF TABLES	xiv
LIST OF FIGURES	xv
LIST OF ABBREVIATIONS	xvi

CHAPTER 1

(INTRODUCTION)

1.1. The Background of the Study	1
1.2. Theoretical Framework.....	4
1.3. Statement of the Problem	9
1.4. Research Questions	11
1.5. Purpose of the Study.....	11
1.6. Significance of the Study.....	12
1.7. Limitations.....	13

CHAPTER 2

(LITERATURE REVIEW)

2.1. Content-Based Instruction (CBI).....	15
2.1.1. Special Aspects of CBI:	18
2.1.2. Different Models of CBI	19
2.1.2.1. Theme-based Model	19
2.1.2.2. Adjunct Model.....	21
2.1.2.3. Sheltered Model	21
2.1.2.4. Immersion Programs	22
2.1.2.5. Cognitive Academic Language Learning Approach (CALLA):	23
2.1.3. Content and Language Integrated Learning (CLIL):.....	25
2.1.4. The Historical Underpinnings of CBI:	27
2.1.5. Research on CBI:	29
2.1.6. Research on the Implementation of CBI in Türkiye:	33
2.1.7. The Difference Between CBI and ESP	36

2.1.8. Criticisms Addressed to CBI.....	40
2.2. ELT Materials and Evaluation.....	41
2.2.1. Research on ELT Textbooks and Material Evaluation.....	44
2.3. CBI-oriented Materials.....	48
2.3.1. Research on CBI-oriented Materials.....	50
2.4. Summary and Conclusions.....	51

CHAPTER 3
(METHODOLOGY)

3.1. Research Design.....	54
3.2. Sampling, Setting and Participants.....	55
3.2.1. Sampling.....	55
3.2.2. Setting.....	56
3.2.3. Participants.....	56
3.3. The CBI-oriented Course Material and the CBI-oriented ESP Course.....	56
3.3.1. The CBI-oriented Course Material.....	57
3.3.2. The CBI-oriented ESP Course.....	59
3.4. Data Collection Tools & Procedure.....	59
3.4.1. Quantitative Data Collection Tools & Procedure.....	60
3.4.1.1. Materials Evaluation Questionnaire:.....	60
3.4.1.2. The Placement Test:.....	62
3.4.1.3. The Content Sections in the Midterm and the Final Exams.....	62
3.4.2. Qualitative Data Collection Tools & Procedure.....	63
3.4.2.1. Semi-structured Interviews.....	63
3.4.2.2. Reflective Journals.....	65
3.5. Data Analysis Procedure.....	65

CHAPTER 4
(FINDINGS)

4.1. The Evaluations of the Students Regarding the CBI-oriented Course Material.....	69
4.1.1. The General Appearance of the CBI-oriented Course Material.....	71
4.1.2. Student-related Factors in the CBI-oriented Course Material.....	73
4.1.3. Course Duration and the CBI-oriented Course Material.....	78
4.1.4. The Organization of the CBI-oriented Course Material.....	80
4.1.5. Language Teaching Approach and Method.....	82
4.1.6. Syllabus-related Factors.....	84

4.1.7. Content-related Factors	87
4.1.8. Conclusions	94
4.2. The Evaluations of the Instructor Regarding the CBI-oriented Course Material	97
4.3. The Evaluations of the Students and the Instructor Regarding the In-Class Implementation of the CBI-oriented Course Material	102
4.3.1. Student Motivation	103
4.3.2. Teaching Content Knowledge	109
4.3.3. Teaching English	112
4.4. The Effects of the CBI-oriented Course Material on Students' English Language Skills	118
4.5. The Effects of the CBI-oriented Course Material on Students' Content Knowledge	119
4.6. Summary and Conclusions	120
CHAPTER 5	
(DISCUSSION)	
5.1. Discussion on the Evaluations of the Students and the Instructor Regarding the CBI-oriented Course Material	123
5.2. Discussion on the In-Class Implementation of the CBI-oriented Course Material, its Effects on the Students' Language Skills and Content Knowledge	134
CHAPTER 6	
(CONCLUSION)	
6.1. Summary of the Study	143
6.2. Pedagogical Implications	146
6.3. Suggestions for Further Research	147
References	149
Appendices	171
Appendix 1: The first two Pages of a Sample Unit	171
Appendix 2: Course Syllabus	173
Appendix 3: Materials Evaluation Questionnaire	174
Appendix 4: The Placement Test	181
Appendix 5: Students' Semi-structured Interview Questions - Turkish Version	189
Appendix 6: Students' Semi-structured Interview Questions - English Version	190
CURRICULUM VITAE	191

List of Tables

<i>Tables</i>	<i>Pages</i>
1. The Research Questions, the Data Collection Tools Employed, the Participants and the Data Analysis Procedure	67
2. The Codes Related to the Qualitative Data on the Evaluations of the Students Regarding the CBI-oriented Course Material.....	70
3. Mean Scores Obtained on the General Appearance of the CBI-oriented Course Material	71
4. Mean Scores Obtained on the Student-related Factors in the CBI-oriented Course Material.....	74
5. Mean Scores Obtained on the Course Duration and the CBI-oriented Course Material	79
6. Mean Scores Obtained on the Organization of the CBI-oriented Course Material	80
7. Mean Scores Obtained on Language Teaching Approach and Method	82
8. Mean Scores Obtained on the Syllabus-related Factors	85
9. Mean Scores Obtained on the Content-related Factors	87
10. Comparison of the Mean Scores Obtained in Each Factor of the Materials Evaluation Questionnaire	97
11. The Codes Related to the Qualitative Data on the Evaluations of the Instructor Regarding the CBI-oriented Course Material.....	98
12. The Codes Related to the Qualitative Data on the Evaluations of the Students and the Instructor Regarding the In-Class Implementation of CBI-oriented Course Material	103
13. The Results of the Paired Samples t-tests of the Pre- and Post-Placement Scores of the Students.....	118
14. The Scores of the Students Obtained in the Content Sections in the Midterm and Final Exams.....	119

List of Figures

<i>Figures</i>	<i>Pages</i>
1. The Core Elements of CALLA	25
2. The Tree of ELT	37
3. Syllabus Inventory Exploited in EGP and ESP Divisions of ELT	39
4. Distribution of Different Syllabi Used in CBI Domains	40

List of Abbreviations

- BICS: Basic Interpersonal Communication Skills
- CALP: Cognitive Academic Language Proficiency
- CBI: Content-Based Instruction
- CEFR: Common European Framework of Reference for Languages
- CLIL: Content and Language Integrated Learning
- CLT: Communicative Language Teaching
- EAP: English for Academic Purposes
- EBE: English for Business and Economics
- EDE: Emergency Distance Education
- EFL: English as a Foreign Language
- EGP: English for General Purposes
- ELP: English for Legal Purposes
- ELT: English Language Teaching
- EMP: English for Medical Purposes
- EOP: English for Occupational Purposes
- EPI: English Proficiency Index
- ESL: English as a Second Language
- ESP: English for Specific Purposes
- EST: English for Science and Technology
- EU: European Union
- EUROCLIC: The European Network for Content and Language Integrated Classrooms
- FFI: Form-focused Instruction
- FLAC: Foreign Languages Across the Curriculum
- L2: Second language
- LMS: Learning Management System
- MFQ: Motivational Factors Questionnaire
- RQ: Research Question
- SPSS: Statistical Package for the Social Sciences
- YLE: Cambridge Young Learners English Test

CHAPTER 1

INTRODUCTION

This chapter provides the background of the study, theoretical framework, statement of the problem, the research questions addressed, the purpose of the study, the significance of the study and the limitations of the study.

1.1. The Background of the Study

In today's world, the global importance of English stems from the fact that it is extensively used as a vehicle of communication in various settings and for different purposes, which underlies the status of this language as today's Lingua Franca. According to Crystal (2003), approximately a quarter of the speakers of English are the native speakers of this language. However, the remaining three-fourths of those speakers learn English as their second language (L2), mostly through formal education offered by public and private educational institutions. As expected, various instructional approaches have been introduced and practiced in the field of English Language Teaching (ELT). One of them is Content-Based Instruction (CBI).

CBI proposes a model based on the assumption that language and content are not to be separated during forming interactions, but rather integration of the two promotes learning both the language and the content in question (Valeo, 2013). CBI is defined as “an umbrella term used to describe employing a wide range of teaching materials in which second languages are taught via a subject matter other than the language itself; for example, mathematics, social studies, psychology and other subject matters” (Valeo, 2013, p. 25). It is claimed by Brinton et al. (1989) that any possible separation between a subject matter and a foreign language is excluded by CBI. It is also argued that language skills of the students such as reading, listening, speaking and writing in a given foreign language might also be improved while students study a subject area taught in that language (Pally, 1999). So, it would not be wrong to suggest that foreign language skills and content-related knowledge of learners might be enhanced while teaching that language using the context of a subject matter through CBI, an approach used to teach a foreign language effectively (Short, 2017).

The literature also provides a very similar concept called ‘Content and Language Integrated Learning’ (CLIL). Coyle et al. (2010) define CLIL as “... a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language” (p.1). According to Dalton-Puffer et al. (2010), the term CLIL

appeared in the 1990s in Europe. Although the implementation of CBI and CLIL are reported to exhibit some different forms (Lasagabaster & Sierra, 2010; Pérez-Cañado, 2012), it is regarded that both terms refer to the same phenomenon as Cenoz (2015) points out that CBI and CLIL share the same essence in terms of the properties that they show and use, and pedagogically speaking, there is no difference between each other. Similarly, it is considered by de Zarobe (2008) that they are synonymous and CLIL is a well-known term in Europe and CBI is more commonly used in the USA and Canada.

In order to develop curriculum in ELT settings where CBI is employed, the importance of the course materials to be used is not to be ignored. Course materials, or textbooks, constitute an indispensable part of the teaching and learning process not just in CBI, but in all realms of ELT. (Uslu, 2003). They are regarded as a vital pedagogic component providing the necessary source that instructors make use of in order to address students' needs (Brooks, 2014). They are the tools that enable the instructors to present the syllabus in a carefully systematic way (Ur, 1996). Furthermore, Tomlinson (1998) regards textbooks as a vehicle to introduce the desired knowledge to the learners and to integrate four language skills into the lessons in an ELT setting.

In most cases, it is the course materials that determine the curriculum in many aspects, an assertion in line with what Brooks (2014) notes regarding the challenges for creating curriculum in CBI. There are four challenges to determine the curriculum, one of them being the course materials as mentioned above; the others being students, teachers and external factors (Brooks, 2014). All constitute the primary elements of an ELT program. However, textbooks receive less attention from ELT professionals in spite of their extensive interest in the other elements (Aytuğ, 2007). Possessing a significant aspect in informing about the practices in language learning and teaching programs, textbooks are crucial to the implementation of any ELT program (Litz, 2005; Richards, 1998). Sheldon (1988) also regards textbooks as the components acting as a route map in the language teaching process.

For effective instructional purposes, it would not be inappropriate to note that course materials should be evaluated in a planned and systematic manner by the practitioners to observe their compatibility to meet the needs of instructors and of learners, and to serve the objectives of the course (Brown, 1995; Byrd, 2001; Pakkan, 1997). Uslu (2003) lists the following criteria to assess the appropriateness of textbooks to be employed in ELT settings: the needs of the learners and instructors, the constraints imposed by the institution, the

physical environment of the institution, logical features used in the textbook, supplementary materials accompanying the textbook and the qualifications of the editor working on the textbook.

Furthermore, as for the course materials to be used in CBI contexts, the issue of scarcity related to the appropriateness of content-specific foreign language materials stands out (Coyle et al., 2010). Preparation of high-quality foreign language course materials exhibiting compatibility to unique expertise areas requires demanding effort (Ball et al., 2015; Morton, 2013; Siekmann et al., 2017) and consumes too much time as one must be competent enough both in the content area and the target language to design and implement such materials (Kong, 2015; Llinares et al., 2012; Morton, 2018; Nikula, 2015; Zhyrun, 2016). Lai and Aksornjarung (2018) also emphasize the requirement of suitability between the level of the language used in the materials and foreign language proficiency of the learner group. Therefore, before implementing the CBI-oriented course materials in the classroom settings, it should be of the utmost importance for a language teacher to assess those materials whose appropriateness to specific academic contexts is rare in the market (Coyle et al., 2010).

Another option could be preparing in-house CBI-oriented course materials dedicated to the contexts of each learner group through analyzing the needs of the learners meticulously so that they could appeal to a particular expertise area (López-Medina, 2016; Mehisto, 2008). However, developing a CBI-oriented course material requires the combination of knowledge in content and knowledge in the target language and also the material should be modified for the sake of learners' linguistic and academic progress (Mehisto, 2012). In addition, Pena and Pladevall-Ballester (2020) put forward that knowledge presentation and paying attention to the linkage of both language and content at the same time imply the requirement of showing an enormous performance.

As mentioned above, the development and implementation of CBI-oriented course materials pose huge challenges on the part of the stakeholders involved in the preparation process. These challenges might be a burden for the educators developing such materials. According to Banegas (2012) and Nikula (2015), educators may not be well-prepared to be engaged in such a task due to the lack of enough training and experience in the area of material development. Pedagogical principles and CBI program goals could be failed because of unqualified educators producing irrelevant and unattractive materials (Coyle et al., 2010; Zhyrun, 2016). In addition, Genç (2021) proposes that program developers might not handle

the distribution of the roles and the required collaboration and may have troubles in determining the amount of language and content instruction in CBI programs. Similarly, the amount of knowledge an ELT educator has in the specific area that the CBI program is based on might be quite limited and the educator might give much more emphasis on the linguistic points by ignoring the content relatively. On the contrary, instructors of the academic disciplines may not sustain a balanced way to introduce the target language and content, and content could be focused unnecessarily (Bruton, 2013; Cammarata & Haley, 2018; Oattes et al., 2018; Short, 2017; Siekmann et al., 2017). Therefore, failure might be a possible outcome as a result of developing and employing CBI-oriented course materials, which could potentially affect the motivation and confidence of students and instructors in a negative way, and in turn lead to a waste of time and money invested (Bruton, 2015).

Conducting strict needs analysis on students and being equipped with adequate knowledge in the academic area in question are required to develop and employ CBI-oriented course materials, which is very demanding. However, research on the effectiveness of CBI carried out across the globe demonstrates promising results in terms of teaching the target language and content and of hearing positive attitudes of students and teachers towards this approach (Echevarria et al., 2017; Graham et al., 2018). Through CBI, it is reported that the level of self-esteem of students increased while using the target language and they were found to be more motivated during learning both the target language and the content at the same time in CBI classrooms (Dupuy, 2000; Sylvén & Tompson, 2015).

As mentioned above, CBI is an approach by which content knowledge and foreign language skills of learners could be enhanced. No matter how hard it may be to develop and implement CBI-oriented course materials in ELT settings, this thesis study attempts to yield the evaluations of the software engineering students and of their instructor regarding the CBI-oriented course material developed by the researcher at a foundation university in Türkiye, its in-class implementation, and it examines the content knowledge and language skills of the students after employing this material in an EFL course in an academic term. As there are very few CBI studies conducted in Türkiye, this study is considered to fill the gap in the literature.

1.2. Theoretical Framework

The theoretical framework of this study deals with the rationale underlying CBI, course material evaluation, and particularly the role CBI-oriented course materials play in

CBI programs designed specifically for particular learning groups. The necessity of mentioning the rationale on these issues results from the demanding task of developing, implementing and evaluating effective and appropriate CBI course materials so that new materials could be developed and revised in a more effective manner.

Firstly, the rationale that more successful acquisition of a target language depends highly on utilizing that language as a vehicle to obtain information forms a basis for CBI (Richards & Rodgers, 2001). In other words, based on this rationale, one could argue that CBI, as an approach to foreign language instruction, facilitates the role of using the target language as a tool to acquire information in a different area, rather than viewing the language as the final end product to attain.

According to Grabe and Stoller (1997) and Heo (2006), the “Input Hypothesis” put forward by Krashen (1982, 1985) provides another basis for the implementation of CBI in ELT programs. According to Krashen (1982, 1985), foreign language learning is facilitated by the comprehensible input which learners utilize during the L2 acquisition. Parallel to this view, it could be argued that what CBI yields for the students in the form of content-specific knowledge while focusing on the target language at the same time is also said to constitute abundant comprehensible input potentially drawing students’ attention and facilitating meaningful use of the target language. This might satisfy the condition set by Krashen (1982, 1985) for the sake of successful L2 acquisition. Actually, it is claimed by Krashen (1981) that “comprehensible subject-matter teaching *is* language teaching” (p. 62).

CBI could also be consolidated by the accounts of communicative language teaching (CLT) approaches. With a scope in maintaining meaningful interactions for the acquisition of form and fluency, CLT asserts that the best way to acquire a target language is to use it to communicate, in other words, to produce utterances on meaningful topics (Celce-Murcia, 1991). Establishing communication by using a foreign language in a meaningful way might require some sorts of knowledge in different academic areas. For example, Dalton-Puffer (2007) notes that the topics included in the curriculum of the subject areas such as history and geography might account for the source of meaning to be made use of in any given communication through which authentic language use is realized.

Apart from the interconnection of CBI with the language teaching and learning theories, investigating its effects on students should also be mentioned. As CBI introduces the content of the specific areas students normally study at school, it can be said that students

might be more goal-oriented to learn the target language for the sake of learning the content at the same time. To illustrate, Brinton et al. (1989) state that promoting the effective use of the target language and enhancing the motivation students show during the L2 acquisition process could be achieved by using diverse content in foreign language classrooms. In addition, motivated students achieve the objectives of the course much better in language classes if content is included in the course material (Grabe & Stoller, 1997). Unlike mainstream EFL/ESL classes, CBI accustoms the learners to content-specific academic terminologies and special topics which they might be responsible for learning in their academic lessons at school. Ebata (2009) asserts that although CBI lessons might seem to be much more demanding than the mainstream lessons for the learners in the first place, students are reported to change their attitudes in time since CBI programs motivate them to attend and participate in lessons.

According to Ebata (2009), content learning has important implications for the intellectual development of the students and some advantages for their brain development, especially for their memory. As students are expected to use their background knowledge to learn the content, they need to apply their critical thinking skills to reflect on and to question the diverse content-related materials presented in the CBI lessons. Likewise, Kennedy (2006) reports that learning content with diverse elements enriches the learning capacity of students as this requires simulating different specialized backgrounds, which facilitates the cognitive growth of learners.

Particularity of themes and topics constituting comprehensible input is one of the novel aspects of CBI. Presenting them through CBI is reported to enhance the cognitive capacity of the students and their motivation levels in learning the target language as seen above. However, utilizing appropriate course materials in the context of CBI is crucial to derive the desired outcomes from students (Işık, 2022) as those materials need to provide comprehensible and specific input for the learners. That's why it is a necessity to assess those materials before covering them in the lessons.

According to research, there are very few instructors not utilizing published lesson materials to teach a foreign language (McDonough & Shaw, 2003; Lawrence, 2011; Littlejohn, 2011). Uslu (2003) notes that language materials in the form of textbooks have some advantages because of a variety of different reasons. In the market, it is known that textbooks are designed and developed by experts in the language teaching field. In most

cases, pilot studies of these textbooks in classroom settings are carried out before the publishing process. Also, real-life tasks are commonly offered in textbooks so that learners are introduced to the actual usage of the target language. In addition, textbooks may enhance the autonomy of learners by enabling them to practice and show their progress without the intervention of the teachers (McDonough & Shaw, 2003). Textbooks also let instructors form ties and interact with the learners and shape the way of teaching their lessons (Çakıt, 2006).

Sheldon (1988) underlies the political and financial investment of course material selection as these investments may cost too much for the stakeholders involved. That's why, appropriateness of course materials such as textbooks is highly important not to use the sources in vain in the field. However, Chambers (1997) notes that it is not always easy to choose the most suitable material for the learner group and each educator should be counseled about selecting the course material in question. Fortunately, literature provides some points to be taken into account while evaluating a course material. For example, Uslu (2003) lists some criteria to evaluate a textbook thoroughly. Firstly, a textbook to be used in a foreign language program ought to comply with the curriculum. It should also address the needs of the learners, and of the instructors. Educators assessing the textbook should pay attention to the qualification background of the author and of the publisher. Another important point is to assess the logical features the textbook in question shows. Finally, the setting into which the textbook is to be integrated should be taken into account.

The main issue in selecting the textbook is about the extent to which the textbook is appropriate for the education context (Aytuğ, 2007). Although the textbook proves to be useful and suitable in the first place, there might be some deficiencies that it carries for the specific learner group in later stages. In those circumstances, it is the instructor's and the learner group's reflections determining the suitability of the textbook implemented in the given educational environment. Although Cunningsworth (1995) notifies that no perfect textbook exists for a specific learner group, the most appropriate and useful one can be specified with the cooperation of the stakeholders by clarifying the aims and objectives.

According to Tomlinson (1998), the interest and the curiosity of the learners should be enhanced by textbooks. With the features of design that textbooks are endowed with such as graphs, pictures, use of color, textbooks can sustain and address this issue. Therefore, one should assume that textbooks should be designed in a careful and a systematic way. What's more, enough space should be included to avoid too many activities placed on the same page

(Tomlinson, 1998). By allowing them to monitor their learning progress, the activities and tasks given in the textbooks might enhance the confidence levels of the learners. As such, carefully-designed textbooks facilitating meaningful use of the target language have important impacts on the learners.

Two stages might be employed to evaluate textbooks: external and internal evaluations (McDonough & Shaw, 2003). External evaluation touches upon the examination of the content, how the textbook is organized, and what kind of explanations and exercises are included (McDonough & Shaw, 2003; Vlăsceanu et al., 2004). Through initial and detailed evaluations, external evaluation can be administered. Initial evaluation deals with the evaluation of the preface, the contents part and the back cover. In detailed evaluation, checklists and forms are used to conduct a more objective evaluation (Harvey, 2002). For the second stage, internal evaluation, instructors determine how effective the textbook is in the classroom settings (Campbell & Rozsnyai, 2002; McDonough & Shaw, 2003). This can be done through two ways: macro and micro evaluations. Macro evaluation examines the compatibility of the textbook with the classroom environment. On the other hand, micro evaluation underlies how useful and appropriate a specific unit in the textbook is (Ellis & Laporte, 1997; McDonough & Shaw, 2003; Pakkan, 1997).

As in the case of the evaluations of mainstream textbooks, it is quite natural that material evaluation constitutes a significant importance in CBI contexts. By introducing content and language simultaneously, CBI materials have different and specific aspects compared to the mainstream materials. Therefore, it is a challenging task to detect the most suitable materials for use in the CBI classrooms (Zaparucha, 2009). Furthermore, there are very few available CBI materials in the market (Lopez-Medina, 2016). For this reason, developing in-house CBI materials seems to be an alternative so that the cognitive and linguistic needs of students might be addressed.

Increasing the motivation of students to facilitate the learning process is one of the crucial points to take into consideration while developing CBI materials. Through authentic and interesting content, the interest of the learners in the lessons should be aroused. In addition, the extent to which CBI materials show resemblance to real life is another important point to take into account. So, authenticity and forming the link between the classroom and real life are significant while developing CBI materials (Ebata, 2009).

CBI seems to have a dual nature through which language and content knowledge are presented to the learner group. Students are expected to be satisfied with the learning process in CBI when they witness that they can achieve their future goals through absorbing the knowledge in content and in the target language, which is the primary objective of CBI (Bulon, 2020).

As the indispensable component of any teaching program, materials to be used require meticulous analysis in the preparation process especially for being employed in the CBI classrooms (Mehisto, 2008). Through the relevance of the materials to the academic content, motivation and learning efficiency of the learners could be enhanced (Ballinger, 2013). Facilitating interaction and meaningful use of the target language, CBI materials are said to enhance communicative language skills (Ball et al., 2015). As there are very rare readily available CBI materials to be employed in the market, determining the material evaluation criteria is significant for the stakeholders involved in the preparation of in-house CBI materials so that they can be adapted to different contexts.

1.3. Statement of the Problem

Poorhadi (2017) notes that possessing excellent command of English is a necessity for students to pursue academic studies as the English language is extensively used in the academic world in theory and practice. Swales (2004) explains that English is the truly legitimate Lingua Franca in research and in other academic settings. Also, Hyland (1998) mentions that there are a great number of academics with a different first language other than English but using English for academic purposes.

In Türkiye, although elitism and being modern are implied by being proficient in English (Doğançay-Aktuna, 1998), Coşkun (2016) mentions the so-called “syndrome” used to refer to the fact that a vast majority of people being able to understand English cannot speak English across the country. Similarly, according to Küçük (2011), Turkish society tends to view those who can speak English superior to others who cannot. However, in spite of the importance attributed to English and of all the investments made in the country, it is observed that English language proficiency cannot be promoted (Aydemir, 2007; Çelebi, 2006; Işık, 2008; Kırkgöz, 2008)

According to the EF English Proficiency Index (EF EPI) (2015), Türkiye is ranked as the 50th country among 70 others and is categorized into the group with very low proficiency. The most frequently listed reasons leading to low English proficiency levels in Türkiye are

attempted to be detected. For example, the teacher-centered approach is one of the leading factors for explaining the low proficiency levels of students in EFL/ESL settings (Gençoğlu, 2011; Güney, 2010; Özsevik, 2010). It is also argued that traditional approaches such as the grammar-translation method are still used in classroom settings despite the efforts to include communicative approaches in the current curriculum (Özsevik, 2010). Other reasons might be related to the lack of opportunities to practice speaking outside the classroom, use of Turkish by the teachers in the classroom and the course books with poor qualities (Coşkun, 2016).

The related literature informs the reader that students with poor English competence are more likely to face challenges in terms of understanding the structures and discourse of the English language in their regular academic lessons, especially in those with a scientific aspect (Chamot & O'Malley, 1986). Herron (1996) proposes that widely-used scientific concepts and terminologies cannot be easily perceived by the students in their academic lessons as students do not form their regular interactions using these items and concepts such as molecules and atoms in their mainstream English classes. In addition, Satılmış et al. (2015) state discourse and structures used in scientific issues are quite different from those of everyday language use. So, it would be wise to assert that innovative approaches should be adopted to enhance content knowledge and their foreign language skills, especially at tertiary level.

With these findings seen above, the situation does not seem to be promising. That's why, for enhancing effective language proficiency of the students, the program coordinator opted for including CBI courses in the curriculum of the ESL/EFL program at a foundation university in Türkiye where the data of this thesis study were collected. With appropriateness and authenticity in mind, it was decided by the administrators that language materials that can be packed into textbooks and that are related to the academic fields of the students were to be developed by the instructors of the program.

Although educational materials cannot possibly satisfy all the needs of students and cannot be preferred by all of them (O'Neill, 1993), it is always aimed that carefully-designed textbooks and language materials present better learning conditions and experiences (Pakkan, 1997). Focusing on this aim, CBI-oriented course material composed of different units to be packed into a textbook were developed by the researcher of this thesis study so that this material could be employed in EFL/ESL lessons offered to computer and software engineering students at tertiary level education. With this material, it was aimed that the

students would have improved their English skills and gained content-related knowledge as a supplementary support to their academic growth.

No one can deny the importance of developing language materials to be used in educational settings. The crucial nature of this task necessitates hard work and effort put systematically in the whole process. In addition, after being completed, materials need to be evaluated carefully while they are being implemented in classroom settings. Educators should also notice students' feedback. In other words, language materials need careful evaluation during the hands-on experience in classroom settings, which constitutes the problem statement of this particular thesis study.

1.4. Research Questions

The research questions developed in this particular thesis study are as follows:

RQ1: What are the evaluations of the software engineering students regarding the CBI-oriented course material?

RQ2: What are the evaluations of the instructor regarding the CBI-oriented course material?

RQ3: What are the evaluations of the software engineering students regarding the in-class implementation of the CBI-oriented course material?

RQ4: What are the evaluations of the instructor regarding the in-class implementation of the CBI-oriented course material?

RQ5: What are the effects of the CBI-oriented course material on the software engineering students' English language skills?

RQ6: What are the effects of the CBI-oriented course material on the software engineering students' content knowledge?

1.5. Purpose of the Study

The scope of this thesis study deals with the evaluations of the software engineering students and of the instructor regarding the CBI-oriented course material. In addition, the study also investigates the evaluations of the students and of the instructor regarding the in-class implementation of the material. Lastly, the study examines the impact of these materials on the students' content knowledge and English language skills.

1.6. Significance of the Study

According to Sheldon (1988), textbooks constitute the core structure of any ELT program. O'Neill (1982) states that textbooks provide much of the source learners make use of to be exposed to the input in the target language. According to Richards (2001), it is the textbooks enabling the learners to participate in the interactional activities and to get accustomed to the content of the lessons. Likewise, Çakıt (2006) asserts that textbooks facilitate communicative interactions in the target language among students, which can only be observed in classroom settings in Türkiye. On the other hand, textbooks may help the teachers to shape their way of teaching (Kırkgöz, 2009). In the context of this particular thesis study, CBI-oriented course units that can be packed into a textbook constitute the language material to be used for a specific learner group at a foundation university in Türkiye.

The related literature states that there is a need of using a cumulative sequence in which course content and educational materials are specified (Reynolds-Young & Hood, 2014; Short, 2017). So, with the aim of enhancing the content knowledge and English language skills of the computer engineering and software engineering students, the CBI-oriented course units were developed by touching upon the basics in their fields such as the hardware components, the history of the computer technology and coding and upon more advanced topics like computer networking, cybersecurity and the use of artificial intelligence.

It is also argued that program goals require a commitment through which administrators, content and language instructors can cooperate while developing educational materials (Lorenzo, 2007; Lorenzo et al., 2010). Therefore, while developing these materials, the researcher had weekly discussion meetings with the advisor in the related program who had offered courses regarding the development and implementation of CBI materials in the ELT departments at several universities in Türkiye. The faculty members in the related academic disciplines were also consulted about the presentation of the content knowledge in the course materials from time to time. Lastly, after being completed, the CBI-oriented course units were packed into a textbook for their practical use in the classroom.

Blanton (1992) notes the importance of CBI in creating an environment where language skills and content knowledge are enhanced simultaneously. As mentioned before, the course materials to be used in such an approach like CBI are crucial for the sake of meeting the program objectives. However, language materials showing appropriateness to the intended fields are very rare in the market. In addition, their evaluation in terms of their

effectiveness in the classroom and of their appropriateness to the students' needs is a necessity. Therefore, this particular thesis study is expected to reveal promising findings in terms of the progress the students show thanks to these materials and in terms of the assessment of the course materials in question. Based on the findings, it is believed that this study will fill the gap in the literature on the use of CBI and will enable the revision of these materials for future use in classroom settings.

1.7. Limitations

This thesis study has some certain limitations. First of all, participant selection was based on purposive sampling strategy as the CBI-oriented course material evaluated was used in a CBI-oriented ESP course in a single institution, which is a private university in Istanbul, Türkiye. The participants were, of course, the students of the aforementioned course. In other words, the participants were not randomly selected from a general population since the population of the lesson was already formed. Thus, this research is a case study, which means that the results may not be generalized.

Secondly, the researcher of this study was the instructor of the course, and also the developer of the CBI-oriented course material evaluated. Therefore, especially the findings obtained through his observations and evaluations kept in his reflective journals may be biased.

A Placement Test was administered at the beginning and at the end of the first semester in the 2021-2022 academic year. Then, the mean scores obtained in these tests were compared through paired samples t-test in order to see whether the CBI-oriented course material had any impact on the students' English language skills. This test, however, was prepared by combining the questions from the Placement Test implemented in the institution where this study was conducted and the questions from the Oxford Practice Test. Therefore, the Placement Test was not an internationally-accepted exam and did not assess students' listening and speaking performances, which means it might lack content validity. Instead, some of the findings obtained through the semi-structured interviews and the reflective journals were utilized to see the effects of the course material on the students' listening and speaking performances. On the other hand, a standardized and internationally-accepted English language placement test would have yielded different results.

The effects of the course material on students' content knowledge were shown through demonstrating the scores students got from the "Content" sections in the midterm and

the final exams. However, since there was not a control group to compare the CBI students' performances on content knowledge, the researcher had the only chance to show the mean of their content section scores. The qualitative data obtained through the students' semi-structured interviews and the instructor's reflective journals were also demonstrated to show the effects of the course material on the student's content learning to consolidate the quantitative data.

The course material evaluated in this thesis study offered relevant and overlapping content for both computer and software engineering students. However, the data were collected only from the students studying at the software engineering department as they were registered in the course the researcher was the instructor of while the study was being carried out. Although the great majority of the students were quite satisfied with the relevance of the content evaluated, there were some who complained about those units providing content associated with only the computer engineering department. Therefore, it can be said that the study evaluated a language course material that was not uniquely prepared for only one academic area.

Lastly, this research was carried out during the post Covid-19 era. All of the EAP and ESP courses were held online by the Department of Foreign Languages at the university where this research was carried out at the time of the study. Thus, the students could not benefit from the interactive tasks in the course material, which was also supported by the findings obtained through the students' semi-structured interviews and the reflective journals kept by the researcher. This must have affected their evaluations regarding the effects of the course material on their communicative competence development.

CHAPTER 2

LITERATURE REVIEW

This chapter intends to demonstrate the review of literature pertaining to CBI, ELT materials and their evaluation, and CBI-oriented course materials. To be more specific, the review chapter firstly delineates what CBI is, some of the special aspects of CBI, different CBI models, what Content Integrated Language Learning (CLIL) is, the historical underpinnings of CBI, some of the empirical research conducted on CBI, and on the implementation of CBI in Türkiye, the difference between CBI and English for Specific Purposes (ESP), and some criticisms addressed to CBI. Then, the chapter touches upon the issue of ELT materials and their evaluation and the research on ELT textbooks and material evaluation by underlying some details about the role they play in ELT, and about the criteria determined in textbook and material evaluation. Lastly, the chapter concludes with the research findings devoted to the development and the use of CBI-oriented materials, followed by the conclusions of the chapter.

2.1. Content-Based Instruction (CBI)

Richards and Rodgers (2001) define CBI as “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” (p.204). Its implementation relies on the skills being enhanced and can be administered through employing a wide range of teaching methods ranging from the traditional ones such as grammar-based teaching to those underlying communicative teaching (Crandall, 1999).

Grabe and Stoller (1997) note that various language teaching programs became aware of the growing interest in the application of CBI in the late 1980s. Earlier, it was commonly used as an instructional extension of the contexts offering English for Specific Purposes (ESP) lessons, vocational second language courses, and instructional programs with a focus on learning and teaching English related to workplace environments. Then, later, other settings like K-12 classrooms and foreign language teaching programs at tertiary levels got acquainted with the implementation of CBI.

There are various explanations related to CBI. For example, CBI proposes a common ground through which academic content knowledge and target language skills are improved (Brinton et al., 1989). Students are observed to achieve the requirements and the objectives of the programs in which they are enrolled in a much better way (Heo, 2006). Dupuy (2000)

highlights the simultaneous enhancement of students' foreign language skills and academic content knowledge thanks to CBI. In this approach, the crucial aspect that it employs is that the linguistic points in a target language and a subject matter are interwoven.

According to Richards and Rodgers (2001), three crucial theories of language form a basis for CBI: "language is text and discourse-based," "language use draws on integrated skills," and "language is purposeful" (p. 208). Firstly, CBI allows the learners to utilize the information and meaning through meaningful content presented in discourse or various texts, without exposing them to separate sentences. In addition, CBI is known to make students "read and take notes, listen and write a summary, or respond orally to things they have read or written" (p. 208). Lastly, CBI presents purposeful use of the target language in a meaningful way. Therefore, with the discourse-based and purposeful language use accompanied by enhancing integrated language skills, CBI allows students to "interact with authentic, contextualized, linguistically challenging materials in a communicative and academic context" (p. 4).

It is asserted by Grabe and Stoller (1997) and Heo (2006) that the "Input Hypothesis" put forward by Krashen (1982, 1985) supports the implementation of CBI since the hypothesis presupposes that learners need comprehensible input to acquire the target language. The link here is that CBI helps the learners to monitor their progress through enabling them to enjoy academic content in the form of "comprehensible input". Furthermore, Crandall (1999) states that CBI makes use of such properties as "learning a language through academic content, engaging in activities, developing proficiency in academic discourse, fostering the development of effective learning strategies" (p.604). Therefore, there is an emphasis on "learning about *something* rather than learning about *language*" (p. 604), potentially serving the condition asserted by Krashen (1982, 1985) to accomplish successful acquisition in the target language as what is focused in the acquisition process is meaning rather than form. Thus, it is claimed that CBI is an effective method to teach a foreign language due to the contextualized curriculum being used (Brinton et al., 1989).

In addition to Krashen's hypothesis (1982, 1985) mentioned above, another theoretical support comes from the notion of "Cognitive Academic Language Proficiency (CALP)" mentioned by Cummins (1979). According to this notion, many students can develop "Basic Interpersonal Communication Skills (BICS)" in a short period of time thanks to mainstream ESL/EFL instruction. Yet, it might not be possible to show progress in academic contexts by

using BICS. Therefore, students need to develop CALP to succeed in those contexts requiring academic L2 proficiency. However, developing CALP requires a great deal of effort and time, approximately five to seven years (Collier, 1989; Wong-Fillmore, 1994). Any delay in content instruction may result in impracticality in terms of the development of CALP. In other words, students need to be exposed to content education while they are learning the target language at the same time (Cummins, 1979), which underlies the role of CBI.

As the primary nature of CBI, the integration of both content and language teaching is also supported by other arguments. For example, “form-content integration” as opposed to the “form versus content” debate is an issue discussed by many authors such as Garrett (1991), Lightbown and Spada (1994), Swain (1995), and Tarone and Swain (1995). What these researchers state is that both form and meaning (in the case of CBI, the content) are not to be separated as the learners need both for successful L2 acquisition. Likewise, Halliday (1993) and Wells (1994) mention the need of accuracy in form and of consistency in content showing relevance to each context the speaker makes utterances in. As can be seen, such discussions are consistent with the implementation of CBI.

Advantages of learning a second language through academic content have been mentioned in the related literature. For example, students in CBI classrooms are reported to show more positive attitudes towards the foreign language being learned, improve higher levels of self-esteem related to their capacity to use the target language, and become more interested in learning it. In addition, their motivation levels are higher compared to those in the mainstream ESL classrooms (Dupuy, 2000; Sylvén & Tompson, 2015). The high motivation levels reported on this issue provide important implications as it is stated by Ebata (2009) that there is a strong correlation between motivation and learning a foreign language. Likewise, Lai and Aksornjarung (2018) posit that motivated students comprehend the goals of the lessons better, facilitating the learning process.

Apart from motivation, CBI also provides some benefits for the students in terms of their cognitive and intellectual growth and development. Genesee and Lindholm-Leary (2013) state that CBI has huge positive effects on the learners’ progress as it requires the use of demanding and challenging content with the aim of extending the horizons and perspectives of the students. They have to notice and process the additional content combined with the target language, and the input that they are exposed to becomes proceduralized, giving rise to

well-integrated knowledge, which facilitates the cycle in their cognitive capacity (O'Malley & Chamot, 1990).

CBI is an approach integrating language and content instruction with a focus of accuracy in form and enhancing incidental use of the target language in a meaningful way. It has fruitful and promising outcomes for the learners and its theoretical underpinnings show consistencies with the current second language learning and teaching theories.

2.1.1. Special Aspects of CBI: Er (2011) notes that CBI operates on the notion that there is a subject matter which the organization of foreign language study is based on. According to Nunan (2004), students learn a target language best when the language is used as a medium to learn a subject. That's why, the importance of content in CBI cannot be ignored as it lays the foundation of the context facilitating the acquisition of the target language while that target language acts as a vehicle of access to the subject matter.

Coyle et al. (2010) report that content in question can include a wide range of topics such as those subjects in an official curriculum and in projects related to education. In addition, topics which are thematic like sports, cross-curricular like economics and interdisciplinary like technology can constitute the content. On the other hand, the focus on language in CBI enhances students' language skills as they are expected to produce utterances in oral and written form. Acquisition of foreign language skills is another goal of the implementation of CBI. (Nunan, 2004).

The dual nature CBI presents through its focus on content and language is significant (De Smet et al, 2018). The conceptualization of a framework which is called 4Cs Framework and which is composed of four different constructs put forward by Coyle (1999) proposes a foundation to consolidate the implementation of CBI. These four constructs are as follows: content referring to subject knowledge, communication referring to language pragmatics, cognition referring to learning and thinking processes and culture referring to enhancement of intercultural awareness. With this framework, it is aimed at increasing students' speaking duration and decreasing that of the teacher. In addition, the inclusion of reasoning, thinking in a creative way and evaluation is also among the objectives of this framework. De Smet et al. (2018) notes that this framework accounts for the four objectives set by CBI: content learning, proficient use of a foreign language, cognitive growth and intercultural understanding. The following principles should be incorporated effectively into a CBI-oriented course:

Content: Subject matter knowledge enhancement, understanding of specific points related to the content in the curriculum.

Communication/Language: Using the target language to learn the content while learning the target language in question.

Cognition/Learning: Enhancing thinking skills underlying conceptualization of the content topics, and understanding the target language.

Culture: Facilitating the awareness of self and others through exposing them to different perspectives. (Coyle, 1999).

This framework sees CBI students as active learners while their foreign language skills are enhanced and their content knowledge is developed. Therefore, students are expected to realize their own learning process while being cognitively improved in the CBI lessons.

In brief, CBI takes its roots from the dual nature it exhibits in both language and content education. Content is regarded as the source of the knowledge of the subject matter while language is attributed to being the vehicle to get information in the whole acquisition process of the target language skills such as speaking, writing, listening and reading. The dual nature in question is shaped by the 4Cs framework consolidating the effectiveness of the implementation of CBI with the constructs such as content, communication, cognition and culture. All these aim at enhancing the awareness of language learners regarding their learning process.

2.1.2. Different Models of CBI: Different models regarding the implementation of CBI have been proposed so that they could serve the objectives of each unique context. Lai and Aksornjarung (2018) state that each model within CBI programs vary depending on the predetermined objectives. Siqi (2017) notes that three different models of CBI (theme-based model, adjunct model and sheltered model) stand out at tertiary level though there are five different types in foreign language education as stated below.

2.1.2.1. Theme-based Model: Since it is devoid of complexity, the theme-based model is the most widely used instruction type of CBI (Satılmış et al., 2015). Tsai and Shang (2010) report that it is the certain themes and topics that determine the form of the content and language skills to be emphasized, which constitutes the basic rationale for theme-based language learning. What is aimed in this model is that students' foreign language competence

is to be enhanced through certain themes chosen. Siqui (2017) puts forward that academically interesting content in the form of social issues is offered to the students and they are accompanied by different language tasks. Therefore, student-centeredness is initiated through the course content determined depending on the needs of the learners. Kızıltan and Ersanlı (2007) speculated that instructors act as facilitators or guides during the integration of topics and content areas and students are supposed to be actively involved in the classroom activities in the theme-based model.

In the theme-based model, it is not a requirement for a content specialist to intervene in the lessons (Crandall, 1999). The topics are structured based on the topics and themes selected. Yugandhar (2016) lists six issues for educators to consider while implementing a theme-based curriculum in their lessons:

1. Exploiting academic texts for the sake of learning the target language,
2. Giving utmost emphasis on underlying ideas and structures appearing in the discourse of the academic texts to be used,
3. Strengthening the strategies the learners make use of in the learning process,
4. Making use of thematically-integrated units so as to facilitate achieving language proficiency in a holistic fashion,
5. Exploiting texts and themes extracted from other content areas for the sake of improving academic foreign language skills,
6. Creating and designing tasks and organizing themes and topics parallel to the specified content.

In the theme-based model, students are expected to learn by doing and their active participation in the tasks is promoted. In addition, an interactive learning atmosphere can be created through discussion sessions and negotiation of the topics. It is possible for them to be actively engaged in the lessons through the themes taken from different content areas, which potentially affects their knowledge in both language and content (Yugandhar, 2016).

Stoller and Grabe (1997) view theme-based instruction the same as CBI and claim that "all CBI is fundamentally theme-based" (p. 81). Snow (2001), however, indicates that the term 'theme-based' should be allocated for those programs where educators design language learning exercises based on the content from the academic topics chosen. Therefore, the content does not have to be structured around one single topic. That's why theme-based programs are more language-oriented rather than content.

This model may also set a foundation for the future use of adjunct and sheltered models. Kızıltan and Ersanlı (2007) notes that the theme-based model is the most widely used type of CBI as it does not require a partnership between language and content teachers contrary to adjunct and sheltered models.

2.1.2.2. Adjunct Model: Blanton (1992) argues that the adjunct model underlies the integration of two coordinated courses, one for enhancing language skills of the learners and the other for enhancing their knowledge in various academic areas. Therefore, this model asserts the teaching of a language lesson and another course for content/subject separately (Kızıltan & Ersanlı, 2007). However, the coordination between these two separate courses is essential (Satılmış et al., 2015). Therefore, the syllabus employed for such a teaching and learning environment must be reciprocally interwoven so that both courses address the needs of the learner group. For example, related homework and projects might be assigned since this might enhance the success of the students in both lessons.

According to Snow and Brinton (1988a), many universities made use of this model with their scope in trying to give equal stress and responsibility to two separate modalities in question. In addition, Snow (2001) argues that it would be more practical to implement this model at universities as “adjuncting” of the coordinated courses is a lot easier at this level. It is also known that adjunct instruction is a subdivision of the movement “Foreign Languages Across the Curriculum (FLAC)” at US universities (Stryker & Leaver, 1997).

In this model, teaching traditional academic concepts in the content/subject area is delivered by the content/subject instructor. On the other hand, academic foreign language skills are to be emphasized by the language instructor (Snow & Brinton, 1988b). So, what is aimed in this model, like the other models in the realm of CBI, is to develop academic language proficiency along with the content knowledge enhancement. However, Baecher et al. (2014) warns that language teachers might be overwhelmed by the diversity of the content.

2.1.2.3. Sheltered Model: Sheltered model is mostly used at tertiary level education, in a context requiring the use of the target language (Davies, 2003). In this model, a content specialist who is, most of the time, a native speaker delivers content-based courses through the use of the target language as the primary focus in this model is on the content mastery, rather than the equal stress given upon both language and content (Brinton et al., 1989).

The learner group consists of non-native speakers of the target language, and what is aimed is to enhance their content knowledge to a certain degree so that they can follow the

content courses as their native counterparts do at the university (Satılmış et al., 2015). These non-native students are placed in another class, and therefore, segregated or “sheltered” from the native ones, the aspect giving the model its name (Brinton et al., 1989). The content specialist may adjust the level of the target language while teaching the lessons according to the learner group’s proficiency level. These modifications may include simplifying the written materials and focusing more on the written texts (Satılmış et al., 2015).

According to Davies (2003), the sheltered model can be administered by two teachers as well. The first teacher is again the content teacher and the second one is a foreign language teacher. They teach the lessons together at the same time, or a duration division can be possibly made between them. While the content teacher teaches the subject in question, the foreign language teacher tests students’ comprehension, which underlies the role of teamwork dedicated to planning the curriculum.

2.1.2.4. Immersion Programs: Although it is not implied by the name of the term, immersion programs are compatible with the models of CBI since these programs aim at teaching the subject matter through the use of the two languages of bilingual students. (Lyster, 2007). These programs were initiated in the 1960s in Canada. According to Alsulami (2017), immersion programs were specifically designed for bilingual students. It has been noted that bilingual students might have a chance to study different subject matters ranging from math, science to social sciences since what these programs targeted was to enhance bilingualism (Swain & Lapkin, 2013).

Although content lessons are offered through two languages, there is always the focus on improving second language skills of the learners. Schleppegrell et al. (2004) note that the characteristic feature of these programs is to acquaint students with complex content through the contextualized use of the second language of the learners. What’s more, Hoare and Kong (2008) indicate that the utmost importance is to be given to learning the content through the use of the second language compared to other CBI models that may place more importance on learning the target language through the content.

Baker (2011) reports that there are two factors that shape the nature of the immersion programs: the age of the students and the amount of time spent in the immersion. Three different types have been proposed for the age factor: early, middle and late immersion. The early immersion programs are designed for infants, especially for those in kindergarten. The middle immersion programs might be introduced to those children aged between 9 and 11.

The late immersion programs can be organized at the secondary school. Concerning the second factor, the amount of time spent in the immersion, there arise two types of immersion: total and partial immersion programs. Total immersion employs the target language in the teaching of the content at a rate of 100%, on the other hand, partial immersion utilizes the target language at a rate of 50%.

Immersion programs are known to have promising effects on the learners. For example, Lazaruk (2007) notes that immersion programs result in additive bilingualism. According to Genesee (1987), additive bilingualism enables the students to be proficient in both their first language and the target language. Similarly, Lyster (2007) indicates that “students perceive less social distance between themselves and native speakers, and develop more positive attitudes towards the second language and its native speakers” (p. 13). In addition, immersion students “develop high levels of communicative fluency” (Swain, 1996, p. 531). Likewise, according to Knell et al. (2007), students of an early immersion program offered by a Chinese primary school did better “on the English word recognition, vocabulary, and oral language measures” compared to their non-immersion counterparts (p. 408).

2.1.2.5. Cognitive Academic Language Learning Approach (CALLA): Cognitive Academic Language Learning Approach (CALLA) is an instructional type presented by Chamot and O’Malley (1987) in the United States. The aim, as in other models of CBI, is to enhance students’ content knowledge and foreign language proficiency. According to Chamot and O’Malley (1994), there is an emphasis on the learning process rather than that of teaching in CALLA so that educators may find an opportunity to discover how the learning process might take place from the perspectives of the students.

CALLA was designed based on the assertions of cognitive psychology (Chamot & O’Malley, 1987). According to Anderson (1981, 1983, 1985), there are two forms in which information is encoded in the human memory, one being declarative knowledge and the other being procedural knowledge. Here, declarative knowledge refers to what people know about a given issue, and procedural knowledge refers to how people know what they know (Chamot & O’Malley, 1987). Some examples of declarative knowledge might be about definitions of different words, facts and rules stored in the long-term memory. On the other hand, procedural knowledge refers to the principles and dynamics regulating performance of a given cognitive task (Anderson, 1981, 1983, 1985).

It is stated that the acquisition of declarative knowledge might be quite simple and does not require a great deal of time, the acquisition of procedural knowledge such as foreign language proficiency, however, could take a lot of time and require repeated practice (Anderson, 1981, 1983, 1985). Chamot and O'Malley (1987) devised CALLA based on the theoretical principles seen above.

The content employed in CALLA refers to declarative knowledge as the content is presented through facts and concepts related to math, science and social studies, etc. On the other hand, the language development strategies used in CALLA refers to the enhancement of procedural knowledge as the students are involved in language-related activities so that they might use the target language as a tool to learn the content matter. What is aimed with these strategies is to make the language production automatic through repeated practice (Chamot & O'Malley, 1987).

According to Chamot (2009), there are 5 steps through which the teaching and learning process takes place in CALLA. The preparation step deals with the concentration on students' data such as their background knowledge in the subject matter or their proficiency level in the target language. The presentation step is the phase where learning strategies such as demonstrations and use of visuals are utilized to introduce the content topic. The practice stage has to do with the conversion of declarative knowledge into procedural knowledge through collaborative activities, and problem-solving tasks with the aim of mastery of the content. In the evaluation stage, the students are offered an opportunity to evaluate their progress using self-assessment tools such as checklists, and finally, the expansion stage allows the students to perform the application of the learning strategies that they have already learned to new content areas.

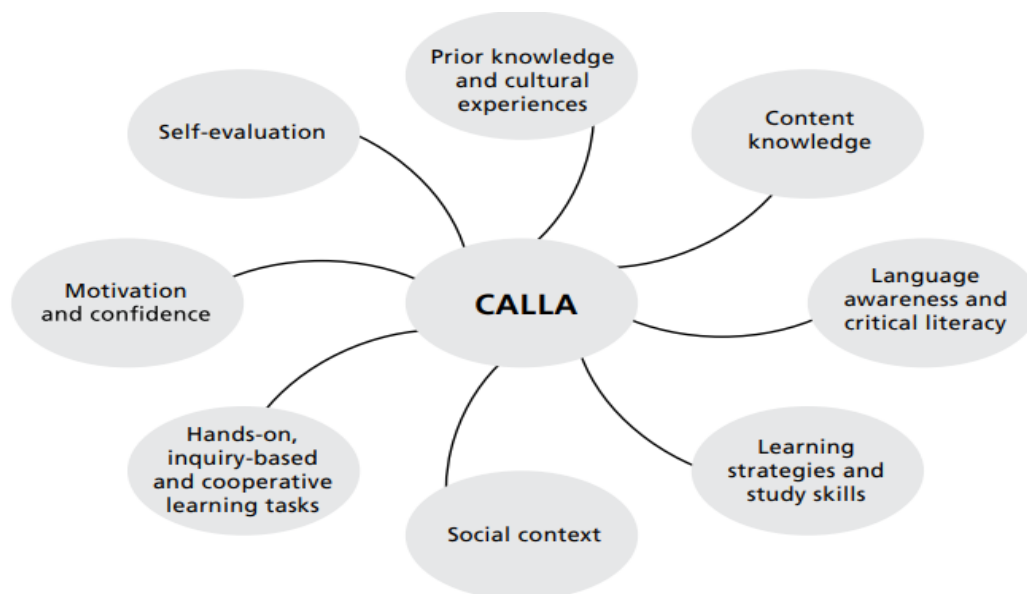
The social-cognitive learning model combines the prior knowledge of the students, the skills underlying learning through collaboration, cognitive awareness and self-reflection (Barón, 2013). This learning model also shapes the foundations of CALLA, which aims to make students independent learners through enabling them to use their own learning strategies and to employ higher levels of thinking in content and language learning (Chamot et al., 1999). With this approach, it is understood that students can become more independent and evaluate their own learning progress in a better way.

CALLA acts as a bridge to connect EFL teaching and regular content area education. With a focus on cognitively-engaging content-based approach in scientific and social studies,

various programs are employing this instruction type (Chamot & O'Malley, 1987). Figure 1 summarizes the core elements of CALLA below.

Figure 1

The Core Elements of CALLA



Note. From *The Learning Strategies Handbook* by Chamot et al., 1999, New York, NY: Pearson Education.

2.1.3. Content and Language Integrated Learning (CLIL): Content and Language Integrated Learning (CLIL) appeared in Europe as a direct extension of immersion programs for teaching a target language and its focus is to teach a subject lesson through the use of a foreign language (Coyle et al., 2010; Dalton-Puffer et al., 2010). Although CLIL is a commonly used term in Europe, its counterpart is CBI in North America (de Zarobe & Catalan, 2009). In other words, CBI is known as CLIL in the European context, and this is one of the most prominent differences between the two as many researchers use these two terminologies interchangeably (Cenoz, 2015; de Zarobe, 2008).

According to Coyle (2007), the European Network for Content and Language Integrated Classrooms (EUROCLIC) used the term CLIL in their educational policies in the 1990s. Since new countries are joining the European Union (EU), it is not surprising for educational policies to be adjusted and legislated so that interaction may be facilitated through better second language education attempts among different cultures in the union. Moreover, Mehisto et al. (2008) notes that CLIL consolidates and is highly linked to immersion programs, and to others dedicated to enhancing bilingualism.

As stated above, CLIL shares the same essence with CBI. However, Coyle (2007) posits that though there are very similar aspects used by CLIL and other types of CBI, there could be one distinctiveness shown by CLIL. It is more or less, if not precisely, on a continuum where there is not a preference or an inclination towards either language or content, unlike the sheltered model. Similarly, to stress the equal importance given in both language and content, Marsh (2002) notes that CLIL is an approach through which “a foreign language is used as a tool in the learning of a non-language subject in which both language and the subject have a joint role” (p. 58).

Although there is a strong link between CLIL and immersion programs, there arises another difference between the two. According to Lasagabaster and Sierra (2010), the language enhanced in CLIL is a foreign language which is yet to be fully acquired by the students and not used outside the classroom. However, in the immersion programs, the language enhanced is the second language of the students which they have an access to as that language is most probably the majority language of the region. That’s why, most language teachers are non-native speakers of the language in CLIL contexts whereas the language teachers are native speakers in the immersion programs. This is also mentioned by Bayyurt and Yalçın (2014) claiming that CBI is implemented in ESL contexts where students have the opportunity to acquire English outside of the classroom, and on the other hand, CLIL programs are offered in EFL contexts where students are exposed to English mostly in the classroom.

The effectiveness of CLIL is reflected by its growing popularity among different institutions all across the globe since its main aim is to enhance both language learning and content knowledge of the learners, the aspect attracting many professionals in Latin America (Doiz et al., 2013), in Asia (Iyobe & Lia, 2013; Yang, 2016), and in Australia (Smala, 2014; Turner, 2013a; Turner, 2013b). In addition to its popularity witnessed, the related literature shows various studies displaying the advantages of CLIL observed thanks to students’ satisfaction and teachers’ feedback (Heras & Lasagabaster, 2015; Whittaker et al., 2011). For example, Wolff (2007) reports that the motivation levels of CLIL students are higher than those of the mainstream EFL/ESL learners due to the development of more complex concepts. Likewise, Nikula (2010) indicates that students in a biology CLIL lesson offered in English are more likely to be active and form more interactions among each other and with the teacher, compared to the biology content lesson offered in the first language of the students. However, it is also reported by Nikula (2010) that the same teacher giving biology CLIL

lessons using English for one class and biology content lessons using his first language for another class did not show the same level of foreign language competence in their lessons, and his language use was more restricted and limited in his biology content lessons. That's why, various warnings are made in the literature regarding the appropriate selection of the staff appointed into CLIL classrooms. In other words, there needs to be a meticulous selection of staff to determine that they have adequate knowledge in the content areas and possess highly proficient levels of the target language to be used in the CLIL programs (Klimova, 2012; Madrid Fernández, 2006; Marsh et al., 2010).

As stated above, CLIL is the European version of CBI. However, compared to some types of CBI, there might be some possible and slight differences such as the extent of the importance or priorities given to either component of the program over the other one. With its probable advantages, CLIL is one of the most effective instructional approaches used in the field of foreign language education. Yet, there needs to be precautions taken in the selection of the teachers as in the case of CBI.

2.1.4. The Historical Underpinnings of CBI: Ramos (2009) notes that CBI takes its roots from the immersion programs in Canada in the 1960s. At that time, the Canadian education system administered immersion program projects to enhance French language skills of the students who were English speakers. Through academic subject lessons with their medium of instruction in French, learners of French found an opportunity to exploit the content matter while improving their French academically (Banegas, 2013). However, although the origins of CBI are attributed to those immersion programs, the concept dealing with studying an academic area in a target language is too old to guess. Brinton et al. (1989) report that it was St. Augustine who favored this concept in the late 4th century A.D. for the sake of learning a target language for religious purposes. Besides, Swain and Johnson (1997) indicate that only the languages of certain dominant empires and religions had been considered to be worthy of being the medium of instruction in formal education by the time nationalism rose in different parts of the world.

When modern times are concerned regarding the implementation of CBI, however, it could be seen that the Quebec area was among the first places where immersion programs were initiated so that learners of French who were English speakers were introduced to content-related academic terminologies in French in classroom settings (Işık, 1995). The way

these immersion programs used the target language as a tool to acquire knowledge in the content area formed the underlying core of CBI.

Here, it is important to mention what is meant by “content” in the implementation of CBI. According to Curtain and Pesola (1994), content exploited in CBI constitutes some concepts and themes found across the curriculum and taught through the target language adjusted to the level of the students. Genesee (1987) does not limit the nature of content to only academic topics and asserts that any interesting and engaging topics, themes or non-language issues might account for the content in the curriculum. Met (1991) mentions the need for the positive cognitive effects content is supposed to underlie for the students’ intellectual growth and development as content needs to be challenging and demanding for the learners. Furthermore, Eskey (1997) notes that content does not stand on its own and teaching the discourse of the content along with all the necessary analytical skills is required for effective teaching in CBI, which might potentially empower the students to implement and carry out analyses in a content-related issue. Therefore, CBI learners must be acculturated to the content area.

CBI, which appeared as a by-product of the immersion programs in Canada (Duenas, 2004), spread to the US and the UK whose educational policies started to initiate different CBI-oriented language programs at different levels such as secondary and tertiary level education (Genesee & Lindholm-Leary, 2013). CBI seemed to be an appropriate fit as an ESL instructional approach in the US, the UK and Canada as they hosted millions of students and migrants from different countries (Dalton-Puffer, 2007).

In the US, following the huge increase in immigration from South America, CBI was first implemented in Spanish immersion schools using the Canadian model (Brinton et al., 1989). Later, different CBI-oriented language education programs were organized in Culver City, Montgomery County, Cincinnati, and San Diego in the US and participants were observed to exhibit more advanced progress both in the target language skills and the content knowledge (Genesee, 1987). Some other similar findings were also obtained in other studies carried out in different regions of the US (Hickman, 1992; Snow & Brinton, 1988a).

In the UK, CBI appeared as a reaction to the need for educational reform (Honeychurch, 1990). There was a demand for a more focused emphasis on the English language to be used in various disciplines, leading to the growing popularity of CBI in the country (Sato et al., 2017). Similarly, in Japan, CBI originated first in elementary schools

where the children of foreign citizens were enrolled so that they could improve their Japanese language skills and be integrated into the school environment and eventually into the society (Murata & Harada, 2008). As seen, CBI appeared as a direct response to the demands of society (Sato et al., 2017).

A great deal of research on the pedagogical and theoretical aspects of CBI has been carried out so that its effectiveness in the development of the target language and content learning could be specified (Grabe & Stoller, 1997). Although its simultaneous enhancement of both language and content has always been emphasized, Sato et al. (2017) claim that communicative language learning approaches asserting that the ultimate goal of language teaching is to enhance communicative competence have led to the separation of the content learning from language learning, which has created a gap between them at the curricular level. This, in turn, has resulted in an imbalance while trying to determine the organization of the content courses and language courses separately (MLA Ad Hoc Committee on Foreign Languages, 2007). To eliminate any probable bifurcation, Sato et al. (2017) propose that CBI should answer to integrated aims through which the mastery of both language and content learning can be achieved along with the criticality underlying the skills students can make use of while applying their critical thinking strategies in the educational process implemented.

2.1.5. Research on CBI: Programs employing Content-based Instruction or Content and Language Integrated Learning in ELT settings across the world have always been a subject of study so that their effectiveness on all the learners involved could be specified (Heras & Lasagabaster, 2015; Lai & Aksornjarung, 2018; Ngan, 2011; Satılmış et al., 2015; Tseng, 2017). Research mostly focuses on the orientation of the teachers towards language and content instruction while implementing CBI in their lessons; and on the effects of CBI and CLIL on the students' motivation and overall L2 development. However, it is seen that most CBI research includes teen or young adult participants. For example, according to Yalçın (2007), there is limited research conducted to investigate the effectiveness of CBI on young learners as most CBI research deals with the implementation of the approach in bilingual or immersion programs designed to promote ESL skills of the adult students.

Although de la Cruz and Vázquez (2018) report that CBI students were proficient in maintaining communication in the target language, they were not observed to attain a certain level of grammatical accuracy (Ranta & Lyster, 2007; Swain, 1996). This might partially stem from the fact that the orientation of CBI instructors towards content and language instruction

varies, which potentially shapes the L2 development of the learners in a negative way (Hoare & Kong, 2008; Lyster, 2007; Södegård, 2008; Swain, 1996). For example, according to Arias and Izquierdo (2015), there is little attention to language teaching in some forms of CBI compared to the more focused emphasis on content education. Similarly, Burger and Chrétien (2001) conclude that “a great deal of attention is paid to the students’ understanding of content and little time is left to focus on language” (p.98), which hinders progress in students’ L2 development (de la Cruz & Vázquez, 2018).

Swain (1996) and Swain (2001) deal with the orientation of CBI instructors towards content and language education at the elementary level. Based on the observations reported by Swain (1996), it was concluded that teachers were involved in too much content teaching in the immersion programs administered in elementary schools where they did not focus on the target language use of the students. Similarly, Swain (2001) demonstrates that teachers in CBI classrooms did not pay attention to accuracy of the target language produced by their students at all in elementary school settings.

Research conducted on the orientation of CBI instructors at the secondary level education displays similar findings. Hoare (2010) demonstrates that the students in the secondary school CBI classroom tried to learn the language forms of English in an incidental way rather than in a carefully planned way and through purposefully extracted forms from the content presented in the curriculum. Kong (2009) notes that only 1 CBI lesson out of 4 at a high school gave specific attention to the language forms in an explicit way. Likewise, Schleppegrell et al. (2004) report that teachers employed limited techniques to deal with the grade-level history content material texts used, therefore students could not have access to the meanings in those texts. Duff (2001) mentions the little attention given to overtly specific language forms such as structures in the texts and the vocabulary items.

The situation is not so different at the university level. Arias and Izquierdo (2015) have analyzed 401 lesson sessions and concluded that language integration into the content teaching was very limited. Airey (2012) criticizes the CBI teachers observed as they did not seem to be aware of their own responsibility to teach the target terminologies in physics despite their higher expectations from the students to make utterances correctly. Costa (2012) believes that ELT professionals are far from reaching a balanced way to deal with language and content instruction in CBI at tertiary level education as CBI instructors tend to view teaching explicit language use inferior to the importance of content. However, Hynninen

(2012) mentions the satisfactory integration of language and content education at the university level.

In spite of the strong orientation of CBI instructors towards content, it does not mean that CBI research has not yielded any promising results. The related literature informs the reader about the increased self-esteem and motivation of CBI students in terms of forming interactions using the target language and displaying a higher interest in pursuing academic studies (Echevarria et al. 2017; Graham, et al., 2018). For example, Ngan (2011) evaluates how effective the CBI implementation was in enhancing English language skills and content knowledge of accounting students at a university in Vietnam. In this study, the data were collected through a questionnaire and from the results of pre-test and post-test administered to investigate whether there was a difference in the level of English language proficiency and content knowledge of the students before and after the implementation of CBI. The results indicate that the implementation of CBI resulted in more student satisfaction and more participation in the lessons. In addition, the students were observed to score higher both in language and content knowledge tests.

Janzen (2002) reports an organization of a reading course affiliated with an Intensive English language program at one of the US universities. The reading course was based on an EAP course aiming at increasing the reading strategies of the students through enhancing their academic vocabulary knowledge, reading speed, and independent reading behavior. The researcher designed the syllabus based on a theme, “special effects in the movies”. Here, what Pally (1999) notes for the importance of sustained content is important to mention: Sustained content seems vital to develop the reading skills of the learners as building knowledge in vocabulary and in content itself is easier when a single theme as the content is offered to the learners. That’s why, the researcher tried to benefit from the advantage of using a single theme around which the syllabus could be organized. The course aimed at introducing effective strategic reading behaviors with the help of related activities and assignments. Yet, the researcher only mentions the course designed without reporting any evaluation or measurement of a variable.

Song (2006) mentions a study analyzing the outcomes of CBI on ESL students studying at a college. The study compares CBI ESL students to non-CBI ESL ones. The CBI courses offered to the first group were designed based on regular academic subject courses such as “Introduction to Psychology”. The implementation of the CBI courses were tracked

over a five-year period to enable the researcher to analyze their effects in the long term. The results of this study demonstrate that CBI students outperformed significantly in the upcoming language courses compared to non-CBI students.

Heras and Lasagabaster (2015) demonstrate what kind of effects CLIL had on such factors as motivation and self-esteem of the learners and the gender differences in following the lessons to learn vocabulary in the learner group composed of 42 students at a secondary school. They employed a background questionnaire, a survey to assess the level of motivation and self-esteem of the students and a language test consisting of pre-, immediate post-, and delayed post-tests to evaluate the vocabulary knowledge of the students. Results obtained demonstrated that gender differences in motivation diminished thanks to the CLIL program implemented. In addition, students, irrespective of their gender, were seen to acquire technical vocabulary items, enhanced by the CLIL program.

Sylvén and Thompson (2015) analyze the motivation of students in learning a foreign language and how their motivation shaped L2 acquisition in a CLIL program. This longitudinal study was carried out at a secondary school in Sweden and included 109 CLIL and 68 non-CLIL participants. The data collection period continued up to 3 years. Motivational Factors Questionnaire (MFQ) was employed at the beginning and at the end of the data collection process. According to the results, the motivation levels of CLIL students were found to be higher than those of the non-CLIL students in terms of their interest in forming interactions in the target language, their participation in the lessons, and the level of self-confidence in maintaining communication through the use of their L2.

Tseng (2017) examines what kind of perspectives students might have regarding the effectiveness of CBI implemented in a course designed to enhance cross-cultural communication. The study included 60 English language learners at a Taiwanese university. The study employed a questionnaire and semi-structured interviews as the data collection tools. The results reported higher levels of achievement both in the content knowledge and language proficiency of the students. It was also found that the student developed higher levels of confidence and motivation and made use of more critical thinking skills in tasks requiring cooperation. However, the participants reported some minor difficulties in understanding the input and making utterances in an effective manner.

Lai and Aksornjarung (2018) analyze the attitudes of students towards CBI lessons and their motivation that they showed in these lessons at a Thai university. The researchers

used a questionnaire to collect data from 71 EFL students besides using the data obtained from classroom observations and students' midterm and final scores. The results indicate positive attitudes towards the implementation of CBI and a moderate level of motivation although no correlation was found between the attitudes and the level of motivation shown by the students. In addition, a significant difference was observed between the attitudes shown by the students at the Medical School and those shown by the ones at the Faculty of Nursing, which might be attributed to the different instructional styles of each teacher and the quality of the materials used in each department.

Goris (2019) piles up the results of longitudinal CBI research examining the effects of CBI on the primary school students' L2 acquisition in English. The longitudinal study's results came from European countries such as Italy, the Netherlands and Germany; and in this study, 4 different groups - 2 groups receiving CBI-oriented English education and 2 groups receiving mainstream English education - were formed. The mainstream English education aimed at teaching grammar through traditional approaches. After pre- and post-tests were administered, it was determined that CBI yielded more promising results for the primary school students in terms of their English language skills.

In the light of aforementioned research, one could argue that CBI has yielded fruitful findings in terms of developing self-esteem, better communicative skills, and motivation. However, it is of utmost importance for the CBI instructors to use a balanced way while dealing with content and language education. Ignoring language forms while trying to focus on content may result in delayed acquisition in grammatical accuracy. Besides, instructional styles and the quality of the materials may shape the perceptions of CBI students.

2.1.6. Research on the Implementation of CBI in Türkiye: Perez-Cañado (2012) mentions the CBI and CLIL programs implemented across Europe. However, it is seen that no program or study from Türkiye has been introduced. Despite the popularity of CBI in the world, no specific and sufficient attention has been paid to CBI by most of the educators and ELT professionals in Türkiye. Bayyurt and Yalçın (2014) also notes that the research on CBI is mostly composed of the studies conducted in contexts such as immersion and ESL settings, which excludes the EFL contexts like Türkiye. In addition, Bozdoğan and Karlıdağ (2013) notes that CBI is partially applied in the Turkish education system; apart from some faculty settings in universities, CBI has not been extensively utilized in language teaching programs.

Rather, language programs in Türkiye try to enhance general language skills of students in the target language, which potentially leads to a void in terms of acquiring the necessary technical terminology and subject matter knowledge. However, this does not mean that no researcher is interested in the implementation of CBI in Türkiye. The following summarizes some research on CBI carried out in Türkiye.

Işık (1995) compares CBI to mainstream English education and their effects on the Turkish EFL learners' language skills. The results indicate that CBI students were found to be more competent in listening and speaking skills compared to those in the mainstream group. In addition, cumulative scores obtained by CBI EFL learners were higher than those of the mainstream group. Therefore, Işık (1995) concludes that CBI is an effective method in enhancing foreign language skills of the learners.

Alptekin et al. (2007) analyze how effective theme-based syllabi were for young learners for their English development. It was a longitudinal quasi-experimental study lasting for two years. It analyzes the effects of theme-based syllabi for the primary school students who were fourth and fifth graders. The participants were divided into two groups, one being the experimental group in which the theme-based syllabi were exploited, and the other one being the control group in which a grammatical syllabus developed by the Turkish Ministry of Education was utilized. In order to assess the language development of the pupils, Cambridge Young Learners English Test (YLE) was used three times during the course of the study. According to the mean scores obtained from the both groups, those in the experimental group were found to score higher in the listening and reading comprehension tasks and also their writing proficiencies outperformed those of the control group. The participants' motivation levels in the theme-based syllabi group were also found to be higher as they reported their own positive perceptions towards the CBI implementation during the interviews conducted. The authors conclude that theme-based syllabi were effective for instructional purposes in ELT for young learners' contexts.

Arslan and Saka (2010) shows the effects of CBI designed specifically for science students at a preparatory school program. Since the participants were aware of the progress that they had achieved in their content knowledge, they reported higher levels of motivation and positive attitudes towards the CBI program implemented. The authors state that CBI is a good instructional method to meet the needs of the learners and enhance their language skills and academic knowledge.

Genç (2011) proposes a new CBI-oriented language curriculum that could be implemented by the School of Foreign Languages at a state university in Türkiye. This new curriculum was designed to meet the English language needs of the students who were taught in Turkish in their academic departments. The scope of the curriculum was to enhance the students' use of English in professional settings and to make them prepared for the sophisticated English used in the related industries where they were going to work in the future. According to the new curriculum proposed, it was decided that there were two main components: The Intensive English Program (IEP) and The Content-Based Program (CBP). The IEP was actually to be offered in the preparatory year where beginner and pre-intermediate students would be expected only to improve their English proficiency skills. In other words, it meant that they would not receive any content-based lessons before they reached a certain level of English language proficiency. On the other hand, the intermediate and upper-intermediate students would be offered an introduction to the CBI program before they passed the proficiency exam and started to study their academic areas in their own departments. In this way, the high-level proficiency group would be exposed to content-related knowledge related to language learning strategies and to various academic themes before they passed the proficiency exam and were placed in their own departments. All the lessons -whether they were CBI-oriented or not – would be taught by a language specialist.

After the students completed the IEP, they would start studying at their own departments. In addition to their own departmental courses, it was planned that students would be provided with the CBP, which incorporated theme-based, CALLA and Language-Content-Task courses in which language and content would be integrated, as part of their curriculum. The reason why different models were to be utilized was that the program was to be implemented throughout the university education of the students till their graduation. The theme-based courses were to offer advanced writing, reading and speaking lessons. These lessons put greater emphasis on language rather than content, and they were to be taught by a language instructor and supported by a content specialist when necessary. On the other hand, Language-Content Task courses aiming to enhance students' knowledge on professional English, the use of English in the workplaces and how to write a research paper in the context of the learner groups' academic content, and the CALLA courses put greater emphasis on content rather than language and these courses would be taught by the content specialist and the language instructor cooperatively.

The new curriculum developed by Genç (2011) as mentioned above underwent some modifications imposed by the Council of Higher Education. Since the 2002-2003 academic year, the Council has recommended the final version of the curriculum as a model to be implemented in other universities where the medium of instruction is Turkish.

Satılmış et al. (2015) examines the effectiveness of the adjunct model. This study was conducted outside of Türkiye but with Turkish-speaking engineering and natural sciences students at a university in Kazakhstan. In the study, the researchers divided their participants into two groups, one being the experimental group and the other being the control group. In the experimental group, the content/subject teachers introduced technical vocabulary and gave CBI-oriented courses. On the other hand, the control group received mainstream language education and learned the technical vocabulary in a traditional fashion from a language teacher. The results indicate that students in the experimental group scored higher in the test administered at the end of the study and the authors conclude that adjunct model is an effective type of CBI, and that CBI can be securely used for instructional purposes. Similar findings on content knowledge and language skills are also reported by İlhan and Kayabaşı (2014).

Most recent findings related to implementation of CBI came from a study conducted in a private primary school in Türkiye. Kışlal and Gezer (2021) report the perceptions of EFL teachers towards the effectiveness of a CBI program implemented at a private primary school in Türkiye. The researchers collected data from 3 EFL non-native teachers through interview questions. The results show that young learners were observed to benefit from CBI a lot and enjoy learning both language and content at the same time. The teachers shared their positive experiences and perceptions regarding the implementation of CBI at their institution.

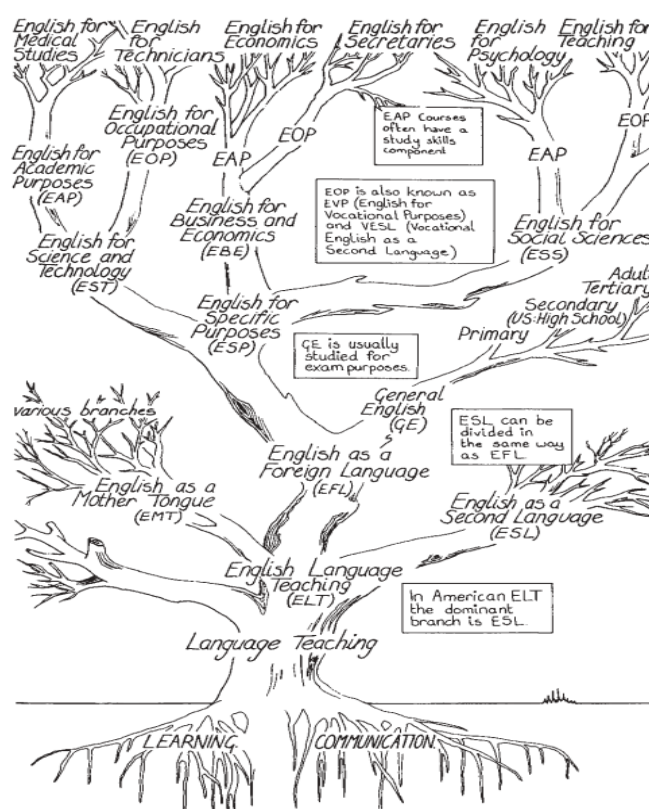
The aforementioned research makes up most of the scarce literature on CBI in Türkiye and the results obtained from the research shows the fruitful findings of CBI. As there is an English syndrome noted by Coşkun (2016), it would be sensible to assert that CBI-oriented language instruction should be developed in more institutions and more research should be conducted. Likewise, these findings obtained imply certain modifications and planning to be made by the educational policy makers in EFL education across the country.

2.1.7. The Difference Between CBI and ESP: For a long time, there have been many attempts to determine the territory of “English for Specific Purposes (ESP)” (Hutchinson & Waters, 1987; Johns, 1991; Johns & Price-Machado, 2001; Jordan, 1997; Strevens, 1977). It

is known that there are various sub-branches of ESP: “English for Science and Technology (EST), English for Business and Economics (EBE), English for Legal Purposes (ELP), English for Medical Purposes (EMP), and English for Occupational Purposes (EOP)” etc. (Brinton, 2012). In order to visualize these sub-branches, a map on ESP, EAP and other related terms designed by Hutchinson and Waters (1987) is provided in Figure 2 below.

Figure 2

The Tree of ELT



Note. From *English for Specific Purposes: A learning-centred Approach* by Hutchinson & Waters, 1987, Cambridge, England: Cambridge University Press.

At first glance, it is seen in Figure 2 that there is a concrete distinction between “ESP” and “English for General Purposes (EGP)” as “EGP” is depicted as a separate branch. The second point to discuss could be that “occupational/vocational ESP” such as “English for Technicians” is separate from those varieties designed for special academic purposes such as “English for Medical Studies”, which are under the branch of “English for Academic Purposes (EAP)”, and which take place at academic institutions. In addition, it should be noted that “EAP” grows out of “ESP”, meaning that “ESP” is the more general term. Therefore, based on the hierarchy of the branches illustrated in the figure below, there is not a

same-level distinction between “ESP” and “EAP”. Rather, “EGP” diverges from “ESP” in the same level in the hierarchical structure.

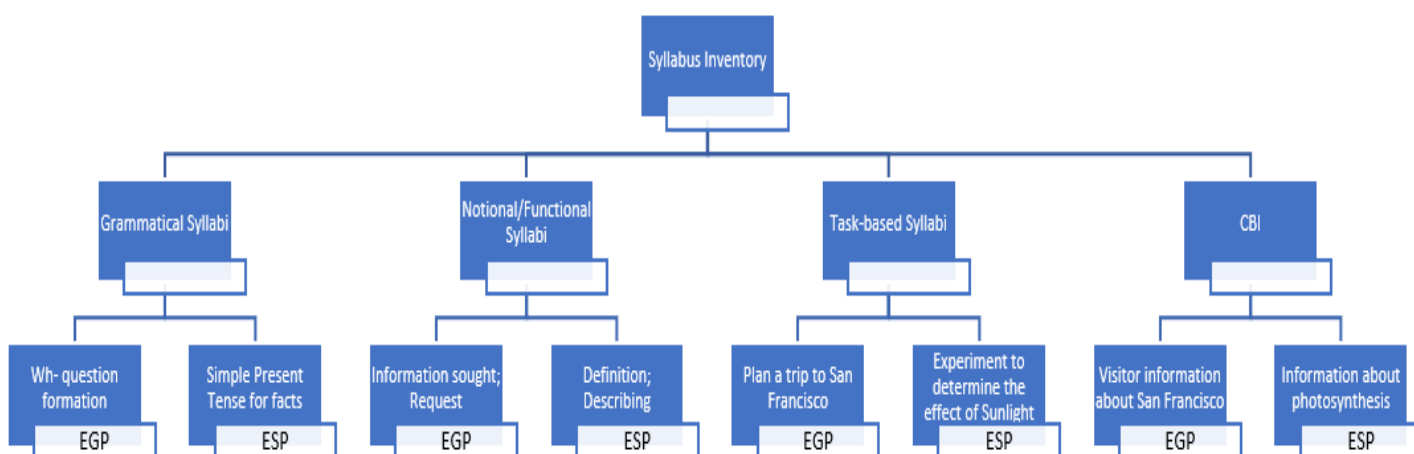
When it comes to mentioning the relationship between ESP and CBI, certain researchers discuss the similarities and differences ESP and CBI show. For example, it is argued that both of them have a concern related to the mainstream English courses as mainstream instruction cannot possibly enrich students’ capacities to deal with the expectations and requirements of the real challenging world (Johns, 1992, 1997; Snow & Brinton, 2019). In addition, both ESP and CBI aim at enhancing students’ communicative competence through enabling them to use the target language in a meaningful way and both of them also aim at enhancing cognitive growth of the students and developing their critical thinking skills (Johns, 1992, 1997; Snow & Brinton, 2019). However, Johns (1992, 1997) argues that ESP has been analyzed more carefully and supported by more research compared to the younger CBI. Furthermore, Johns (1992, 1997) puts forward that ESP works well with adult language learners in international settings, contrary to CBI which is employed mostly in the English-speaking world and is more suitable to be used in elementary and secondary level education. On the other hand, according to Snow and Brinton (2019), both CBI and ESP are internationally implemented and there is sufficient research addressed at sheltered instruction. In addition, as CBI addresses the academic needs of the students, it may be incorporated in language programs at academic institutions such as universities.

Although the related research tells the reader about the possible territories shared by CBI and ESP, some confusion might still persist. In response to this, a direct and clear definition for both of them comes from Eskey (1997), also supported by Master (1997/8). According to Eskey (1997), CBI is a syllabus, and just like EGP, ESP is a division of ELT. In addition, CBI can be employed in ESP. Master (1997/8) also notes that CBI is an analytic-type syllabus, unlike the synthetic one. This analytic-synthetic syllabi distinction was made by Wilkins (1976) who asserts that synthetic syllabi represent the end edge of a continuum in which the students are supposed to re-synthesize the pieces of a target language as in a course utilizing a grammatical syllabus. Therefore, a grammatical syllabus is a synthetic syllabus. On the other hand, analytic syllabi such as notional/functional ones or CBI allow students to learn the language progressively and incidentally as the target language is not seen as an entity to be decomposed into smaller pieces, and learners might be exposed to complex structures from the very beginning, which may act as the comprehensible input.

Here, a question may arise: If CBI is a syllabus and can be incorporated into an ESP lesson, can it be used in an EGP lesson, too? It is known that different types of syllabi are utilized in ESP and EGP settings. For example, grammatical syllabi make students analyze language forms decomposed into smaller units (Master 1997/8), notional-functional syllabi may require the use of communicative functions (Wilkins, 1976), rhetorical syllabi utilize definitions, narratives and summaries (Trimble, 1985), task-based syllabi may assign students to do experiments, draw diagrams and take notes (Master 1997/8), and content-based syllabi make use of themes like social-sciences, mathematics, business and industry as their content around which the lessons are organized (Cantoni-Harvey, 1987). In order to summarize the use of different syllabi in EGP and ESP, the reader is provided with a diagram in Figure 3.

Figure 3

Syllabus Inventory Exploited in EGP and ESP Divisions of ELT



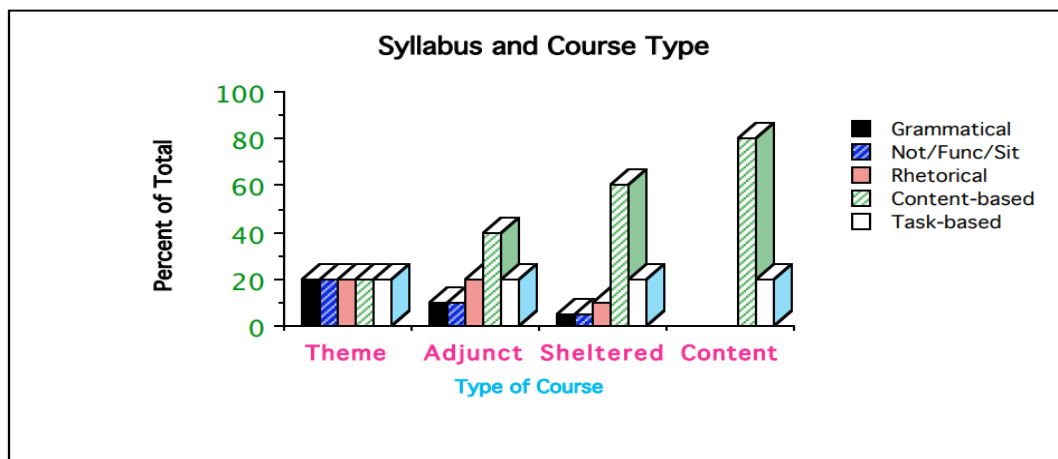
Note. Adapted from *Content-based instruction vs. ESP* by Master, 1997/8, TESOL Matters.

As can be clearly seen on the diagram above, CBI can constitute a syllabus of an EGP lesson as it can in an ESP one. However, Master (1997/8) notes that certain CBI models such as theme-based, adjunct and sheltered models do not employ a “pure” syllabus which is 100% synthetic or 100% analytic as this might not comply with the needs of the students, especially those whose first language is not English. In addition, only theme-based models can be implemented in an EGP setting although the theme selected could be science or some other topic affiliated with an ESP division. The other models (sheltered and adjunct) are seen to

belong to ESP (Master, 1997/8). Figure 4 illustrates the distribution of different types of syllabi employed in different CBI domains.

Figure 4

Distribution of Different Syllabi Used in CBI Domains



Note. From *Content-based instruction vs. ESP* by Master, 1997/8, TESOL Matters.

ESP is one of the two main branches of EFL, the other branch being EGP. It is argued above that CBI is a syllabus to be exploited both in EGP and ESP divisions of EFL. Therefore, it would be inappropriate to make a comparison between ESP and CBI as they do not belong to the same hierarchy structured in the field of ELT.

2.1.8. Criticisms Addressed to CBI: Although the theoretical foundations of CBI consolidate successful L2 acquisition and there is strong empirical evidence coming from research on CBI in diverse settings, some criticisms have been addressed to this model. As mentioned earlier, CBI program goals may be failed due to unqualified instructors and material developers and students' satisfaction and motivation levels may decrease (Coyle et al., 2010; Zhyrun, 2016). In addition, it is really difficult to find an appropriate material designed and developed for each unique expertise area (Ball et al., 2015; Morton, 2013; Siekmann, et al., 2017).

Criticisms addressed to CBI are mostly about the shortcomings of the model in developing the productive skills efficiently. For example, Cummins and Swain (1986) note that students in the immersion programs do not enjoy as much competence in productive skills as they do in receptive skills. In other words, although immersion students are observed to display native-like competence in receptive skills, they do not go beyond non-native level

in productive skills. Similarly, Canadian CBI immersion programs have not been found to be effective in enhancing speaking and writing skills, unlike their fruitful contributions to teaching subject matter knowledge (Swain, 1993). As a response to this, Swain (1993) comes up with the “Output Hypothesis”, which asserts that students need explicit attention to productive skills during the learning process.

Another criticism has been addressed on the issue of the difficulty in determining content appealing to everyone in the learner group. Carrell and Carson (1997) argue that students become more motivated on condition that content specified is engaging and interesting. However, no one can guarantee that everyone in the class will be interested in that content already determined.

As the needs and expectations of the learners regarding the content may vary over time, this poses challenges for the face validity of CBI courses (Yalçın, 2007). In such cases, the benefits of content learning cannot be obtained especially in pre-tertiary level settings as most students will choose different academic disciplines to pursue at their university education, which, of course, shapes their immediate and actual content needs. On the other hand, Carrell and Carson (1997) put forward that the communicative needs of the students require more face validity. That’s why, it is argued that CBI may not be a good fit as it is not suitable for choosing a common content which everyone can benefit from based on their academic needs in circumstances where the learner group consists of individuals with different academic backgrounds. Instead, the authors suggest that task-based learning might be a better option to serve the face validity issue.

2.2. ELT Materials and Evaluation

According to Tomlinson and Masuhara (2017), the backbone of the ELT field is shaped by ELT materials. There are plenty of researchers viewing ELT materials as the ‘de facto syllabus’ and a roadmap directing the educators into what to teach, and reminding of them the sequence to be followed in the teaching process, and enabling them to adjust the density of the teaching process (AbdelWahab, 2013; Allen, 2015; Garton, & Graves, 2014). In addition to the content provided thanks to them, the ELT materials underlie a teaching philosophy, or an approach that they have been based on (Richards, 2006). Therefore, it would not be wrong to suggest that ELT materials are not just a source of content, but rather they give rise to a teaching methodology to be enjoyed by both the teachers and the students (Hart, 2003; Tomlinson, 2010). So, when an ELT material is used in a different context apart

from the original setting, it is highly likely that the language methodology is also imported into the new context. According to Harwood (2010), adjusting the degree of compatibility of the language teaching methodology with that of the objectives of the foreign language programs is an indispensable part of the success or failure, which depends on the congruence.

ELT materials also contribute much help to novice teachers' progress (Garton & Graves, 2014; López-Medina, 2016). They do so with the exercises they include or some teaching advice they yield, which increases the level of knowledge of new teachers and makes them efficient in the classroom. In addition, apart from the teachers, most ELT materials are known to scaffold students, and some of their specific tasks requiring students to reflect their language learning processes might encourage them to be more successful in the classroom environment (Işık, 2018). Therefore, it would not be wrong to argue that material evaluation for the sake of exploring their effectiveness on the students and their appropriateness to the learner group especially in new contexts is highly important.

Since this thesis study deals with the effectiveness of CBI course materials that can be packed into a textbook, the literature review section of the study should naturally touch upon the issue of course material and textbook evaluation in ELT. Although it may seem an easy job, Korkmaz (2016) regards textbook evaluation as a challenging process which requires meticulous analysis and paying close attention. Similarly, Litz (2005) notes that textbooks should be evaluated meticulously in terms of quality, usefulness and appropriateness according to the learners' current situations. Hence, different researchers and professionals have devised some checklists or criteria to evaluate textbooks (Brown, 2001; McDonough & Shaw, 2003).

According to Littlejohn (2011), textbooks should be evaluated as they are. In other words, textbook evaluation should be carried out irrespective of the classroom settings where textbooks are used because there may be many different purposes to using textbooks. Consequently, this perspective has to do with enabling evaluators to come up with making their own inferences based on the textbook implemented rather than prescribing the features textbooks should comply with. The textbook evaluation checklist that Littlejohn (2011) employs operates on three dimensions: what there is, what is required and what is implied. First dimension concerns analyzing physical features of textbooks such as layout, font and how durable the textbook is. The second one explores the activities presented and the content. The third dimension investigates the teaching philosophy, the method employed, and the

aims. The objective analysis implemented in the first dimension gradually becomes the subjective analysis towards the third dimension.

Another checklist was introduced by Brown (2001). The categories specified in this checklist deals with how the content is organized in textbooks, the goals set, the compatibility of the textbooks with the background of the students, theoretical approach, the importance given to four language skills, how quality the exercises are, the order the linguistic structures are presented, vocabulary teaching, and the presence of supplementary materials and a guide for teachers.

According to Işık (2018), there are not many other checklists developed specifically for ELT material evaluation except for those devised by Reinders & Lewis (2006), Angell et al., (2008), Shave (2010), Işık & Atmışdört (2010), AbdelWahab (2013), and López-Medina (2016). The checklist developed by Reinders and Lewis (2006) assesses self-access materials. In addition, Lopez-Medina (2016) has devised a checklist for CLIL materials. On the other hand, it seems that not only have Işık & Altmışdört (2010) and AbdelWahab (2013) developed their checklists, but they have assessed the effectiveness of their checklists, as well. Furthermore, Işık (2018) argues that in none of the checklists developed so far, there is an item about “software evaluation”, which, however, accompanies most of the commercial language teaching materials today. That’s why, the author concludes that comprehensive and contemporary checklists are needed.

Another point to highlight is the type of evaluation that might be employed while dealing with ELT materials and textbooks. For example, McDonough and Shaw (2003) mention the two stages that can be utilized to deal with textbook evaluation: external and internal evaluations. Vlăsceanu et al. (2004) regard external evaluation as a vehicle to evaluate the textbooks in terms of its organization, and the quality of the explanations and the activities included. Furthermore, Harvey (2002) notes that initial and detailed evaluation should be employed to carry out the external evaluation process. The former touches upon the evaluation of the preface, the contents part and the back cover page. On the other hand, in the latter, the detailed evaluation, checklists and criteria such as those mentioned above are employed for the sake of objectivity.

According to McDonough and Shaw (2003), there are some criteria to consider while administering external evaluation. These criteria include specifying the intended audience, determining the proficiency level of the textbook being evaluated, the context around which

content presented is organized, and the organization of the target language into appropriate sections and units for the sake of effective teaching and learning processes.

The second stage, internal evaluation, deals with the effectiveness of the textbooks in terms of their implementation in the classroom (Campbell & Rozsnyai, 2002; McDonough & Shaw, 2003). In this stage, one can make use of macro and micro evaluations. The former assesses how compatible the textbook is with the learning groups' needs, and the latter examines the appropriateness of a specific section such as a unit of the textbook (Ellis & Laporte, 1997; McDonough & Shaw, 2003; Pakkan, 1997).

In addition to internal and external evaluations, McDonough and Shaw (2011) mention summative evaluation, which should be addressed after the textbook is used in classroom settings for a certain period of time. Summative evaluation is administered to see whether any problem occurs during the whole process. This evaluation is highly based on the feedback provided by the students and observations made by the teacher.

As mentioned above, the related literature informs the reader about different types of evaluation to be employed to assess textbooks in ELT settings. In this study, the researcher has made use of macro evaluation to investigate the overall effectiveness of the CBI materials. This thesis study shows the reader the overall perceptions of the students and the instructor regarding the CBI materials in question, and their in-class implementation based on the experiences and observations of the instructor of the course in which these materials were utilized.

2.2.1. Research on ELT Textbooks and Material Evaluation: There seems to be a need to come up with a more systematic and comprehensive way to deal with material evaluation because it is seen that all of the commercial foreign language course materials do not possibly satisfy the needs of each particular learner group (McDonough & Shaw, 2003; McGrath, 2002). As a response to this, it is observed that various authors have touched upon the issue of the effectiveness of textbooks and course materials commonly used in EFL/ESL classrooms (Azarnoosh, 2014; Bermudez, 2014; Rahimpour, 2011; Riazi & Aryashokouh, 2007; Zohrabi et al., 2012).

To start with, Riazi and Aryashokouh (2007) examined four textbooks used in the secondary and university EFL classrooms and try to determine whether the textbooks could enhance the students' consciousness and awareness in their vocabulary knowledge. It was found that only one percent of the vocabulary activities could be classified as those that were

awareness-raising. In addition, nearly 26% of the activities aimed at teaching only individual words without touching upon phrases and collocations. The authors have reported that it would be better to include more collocation activities so that students might learn how different individual words can be used together in a meaningful way.

Rahimpour (2011) carried out another study to explore the opinions of teachers regarding three textbooks used in secondary schools in Iran. In this study, a 4-point Likert-type questionnaire consisting of 46 items was developed based on the five objectives of the textbook: teaching vocabulary, assessing reading comprehension, appropriate use of language functions, and teaching pronunciation. 50 high school teachers with at least 5 years of working experience participated in this study. The data obtained from the questionnaire were quantified. The results have demonstrated that the participants of the study were not satisfied with the effectiveness of the textbook assessed.

Zohrabi et al. (2012) assessed the effectiveness of a textbook utilized in Iranian secondary school context. In this study, some criteria were determined to reveal how effective the material in question was. These criteria were associated with the physical appearance of the textbook, the content included, the organization of vocabulary and grammar activities, the presentation of the target language skills, the importance given to pronunciation, the functional use of the target language, and the enhancement of socio-cultural awareness of the students. The data collection tools consisted of questionnaires and interviews and the data were collected from 126 students and 10 teachers. According to the results obtained, neither the students nor the teachers thought the textbook assessed met their needs and expectations. In addition, it was also reported that the textbook placed too much emphasis on focus-on-forms and very little attention was paid to communicative competence of the students.

Azarnoosh (2014) employed Cunningsworth's (1984) textbook evaluation checklist in the study assessing the effectiveness of the textbook "Select Reading" used in an upper-intermediate English class. The study aimed at exploring the effectiveness of the textbook in terms of content, the selection of the vocabulary items, the integration of the language skills, the importance given to communicative competence of the students, the quality of the additional materials, and the effects of the textbook on students' motivation. The results indicated that students found the texts used in the material engaging and suitable for their proficiency level. In addition, grammar was taught in an implicit way. On the other hand, it was reported that the material lacked enough exercises and listening activities.

An evaluation of a well-known English language material “New English File: Elementary” was reported by Bermudez (2014). This qualitative study aimed at comparing the appropriateness of the textbook in terms of the book design, curricular design, task design, usability, and multimedia. According to the results, the textbook employed a practical curriculum and a syllabus design. In addition, the aims of the textbook met the requirements of Common European Framework of Reference for Languages (CEFR). Yet, the author concluded that it was not fully convenient to use this textbook as there was not enough authentic material in it for young learners, who constituted the target group of the textbook.

When it comes to talking about the studies examining the effectiveness of foreign language course materials, or specifically textbooks, in Türkiye, the interested reader may not come across a great many except for some well-known studies. For example, Aytuğ (2007) examined the effectiveness of the coursebook “New Bridge to Success for 9th Grade New Beginners” and questioned the opinions of the teachers regarding this textbook. In the data collection, a questionnaire was employed to collect data from 60 EFL Turkish teachers and 12 of them participated in interviews. According to the findings, there was a common agreement among the participants that the physical appearance of the textbook and the efficacy of the supplementary materials were found to be sufficient in terms of both quality and quantity by the participants. Even so, the participants stated that the presentation of the target culture and the importance given to communicative competence of the students were not sufficient.

In a similar study conducted by Özdemir (2007), an evaluation of the textbook “Time for English 4” was documented. The researcher evaluated the textbook in terms of the aims and objectives, the method employed, the visuals used, vocabulary teaching, and the quality of the activities and the supplementary materials. 102 students and 15 teachers participated in this study. The data from the students were collected through a questionnaire. For the teacher participants, interviews were administered to collect data from them. The researcher obtained positive findings from the participants regarding the physical appearance of the textbook, its design, layout, and the colors used in it. In addition, the textbook was found appropriate to the age and proficiency level of the students by the teacher participants. However, it was suggested by the teacher participants that the book should have given much more emphasis on the communicative activities.

Işık and Altmışdört (2010) devised a blueprint for “material design, development and evaluation”. To prepare this blueprint, they worked together with 21 Turkish EFL teachers at

a high school. Later, a scale was developed by the researchers and this scale was used to collect data from these 21 teachers regarding their opinions and perceptions towards the textbooks they used in EFL classroom settings. The data highlighted that the materials being used were far from being sufficient and appropriate for the learner group and the aims of the lessons. The researchers stated that there should be a cooperation between the material developers and designers to make the materials appealing and appropriate for the objectives determined earlier.. In addition, according to the researchers, they should have also dedicated more time and effort to carry out a substantial needs assessment.

Tok (2010) investigated the pros and cons of the textbook “Spot on”, used at a primary school setting and analyzed the perceptions of 46 EFL teachers. The data were collected from a questionnaire. The criteria determined to evaluate the textbook dealt with physical appearance, design, the content of the activities, the content in the textbook, and the importance given to 4 language skills. The findings revealed that the textbook did not have a successful design and layout. In addition, the type of the activities did not seem to be helpful for the learner group and the textbook was not appropriate for the objectives set for the learning environment. The author argued that there should have been more emphasis on communicative approach-oriented exercises.

Korkmaz (2016) examined the effectiveness and the quality of the reading materials in the textbook “Speakout”, used at a preparatory school at a higher education institution for intermediate students in Türkiye. The researcher employed questionnaires and interview questions to collect data from 60 EFL teachers so that their perceptions towards the book were to be heard. In addition, the teachers provided reflective essays to keep a record of their experiences with the textbook in the classroom settings. The criteria to determine the quality of the texts were based on the appropriateness of the texts used in the textbook, the purpose to present these texts to the learner group, the needs of the learner group and the progress that students had made in vocabulary knowledge thanks to the texts used in the lessons. According to the findings, the participant teachers argued that the texts in the textbook were long, authentic and complex enough for the learners’ proficiency levels. In addition, the texts were found to be sufficient in presenting the target culture. However, the participant teachers evaluated the textbook in a negative way in terms of the visuals, genre and vocabulary teaching. Therefore, some innovative changes were suggested by the participants in the study.

As seen above, the reader has been provided with some of the research findings mostly obtained from students and teachers regarding the effectiveness of course materials and specifically of textbooks. Most research concludes that there is a need to give more emphasis on communicative approach and to adjust the compatibility of language level of the materials with the proficiency levels of the learner group.

Apart from those mentioned above, the related literature shows that there are only a few researchers attempting to devise effective checklists and criteria to evaluate the textbooks and foreign language materials (AbdelWahab, 2013; Angell, et al., 2008; Işık & Atmışdört, 2010; López-Medina, 2016; Reinders & Lewis, 2006; Shave, 2010). However, almost all of the studies focus their investigation on the effectiveness of well-known and international publishers' commercial language materials. However, it is known that all the ELT materials on the market cannot always address the educational needs of each learner group. For this reason, there is sometimes a need to adapt ELT materials according to the needs of the students (Coyle et al., 2010). Therefore, locally-produced or in-house language materials could be the subject of inquiry in future material evaluation studies.

2.3. CBI-oriented Materials

The relevant and challenging content presented in CBI-oriented course materials attracts students' attention and results in an engaging learning atmosphere in classroom settings (Banegas, 2012). If students become aware of the advantages of CBI materials such as helping them to gain enough knowledge and the skills they are required to master for their academic aims, it is highly likely that they will delightfully absorb the content of the lessons and take part in the learning process actively to learn both the target language and the content (Bulon, 2020). In addition, it might be asserted that CBI materials which are relevant to the academic interests of the learner groups increase the motivation level of the students and their self-esteem in both expressing themselves and talking more about academic subjects (Ballinger, 2013). Therefore, CBI materials can trigger the formation of a learning environment where negotiation and comprehension of meaning in the target language is realized, which enhances the communicative competence of the learners (Ball et al., 2015).

If prepared relevantly to the academic interests of the learner groups, CBI materials can facilitate the enhancement of content knowledge and boosting language skills of the students (Mehisto, 2012). Yet, it is quite difficult to find appropriate CBI materials for each learner groups' interests (Coyle et al, 2010; Uğurer, 2018). That's why developing in-house

CBI materials can be another option to choose in language programs and language teaching institutions. Here in this point, it is claimed that preparing CBI materials for each academic field requires demanding effort (Ball et al., 2015; Morton, 2013; Siekmann, et al., 2017). Furthermore, Zhyrun (2016) notes that CBI material preparation consumes too much time and is really challenging and demanding, necessitates substantial amounts of knowledge in both content area and in target language. In addition to combining language and content knowledge in CBI materials, it is necessary to adapt them to the academic interests and proficiency levels of the students (Banegas, 2012; Coyle et al., 2010; Mehisto, 2012). Taking presenting academic content in an appropriate order into account while combining language education with that content is hugely important and requires too much effort (Pena & Pladevall-Ballester, 2020).

Mehisto (2008) notes that CBI materials should be designed based on the needs of the learner group, and a diligent needs analysis may help the material developers a lot during the preparation process. According to Short (2017), language program goals are shaped by exploring students' needs meticulously, and course content and learning materials should be prepared in a consecutive order to meet the aims of the goals set earlier. Furthermore, all educational stakeholders should cooperate and show commitment in order to develop relevant language materials for unique contexts (Lorenzo, 2007; Lorenzo et al., 2010).

Research suggests that developing relevant CBI materials is also risky. For example, Banegas (2012) highlights that neither novice teachers nor teacher candidates usually find a chance to develop appropriate materials as they are never given training at the university and at the workplace. Therefore, teacher-related factors may cause a delay in the preparation process and result in the production of inappropriate materials (Nikula, 2015). CBI programs' aims might be adversely affected by irrelevant materials full of mechanical tasks that do not enhance communicative competence of the learner group (Coyle et al., 2010; Zhyrun, 2016). Research also highlights that ELT educators may not have enough academic content knowledge to deal with developing such materials, and therefore, they may ignore the content presentation and focus more on the linguistic aspects of the material. In contrast, content instructors, if they are engaged in the material development process, might not handle teaching the target language and may focus more on the content (Bruton, 2013; Cammarata & Haley, 2018; Oattes et al., 2018; Siekmann et al., 2017; Short, 2017). As can be seen, those problems may impede the material development process and might have negative effects on

the motivation of students and teachers and lead to a waste of time and money invested in the program (Bruton, 2015).

In spite of the possible disadvantages shown above, the related research exhibits the positive effects of CBI, too. CBI studies carried out in various countries demonstrate the effectiveness of this approach and the perceptions of teachers and students towards this approach (Echevarria et al., 2017; Graham et al., 2018). For example, CBI students have been found to be more motivated and have more interests in following academic study thanks to the combined language and content education in CBI classes (Dupuy, 2000; Sylvén & Tompson, 2015). Dalton-Puffer et al. (2009) attributes the positive attitudes and increased satisfaction of the students to the CBI materials designed and developed in a relevant way. Likewise, Alonso et al. (2008) express that teachers have similar positive attitudes towards CBI.

CBI-oriented materials may carry their own benefits and risks depending on the conditions surrounding the preparation process. If material developers show commitment and coordination, and are given a substantial amount of training, it is highly likely that both students and teachers can be satisfied with the results that could be obtained at the end of such programs. As can be understood from some of the research findings on the positive effects of CBI and CBI materials, this approach may yield important implications in terms of the academic growth of the students and the teachers.

2.3.1. Research on CBI-oriented Materials: In addition to the positive effects on student satisfaction, self-esteem and motivation, CBI materials consolidate improved content knowledge especially when they are used together with other materials utilized in mainstream content education courses (Papai, 2000). Contrary to the aforementioned advantages of the CBI model and CBI-oriented course materials, research evaluating the effectiveness of CBI materials is rare. This is probably because appropriate CBI materials are not easily found on the market and developing in-house materials for each unique expertise area is already challenging (Ball et al., 2015; Morton, 2013; Siekmann, et al., 2017). Yet, one can see a couple of research findings showing the effectiveness of CBI materials in the related literature (Barón, 2013; Dávila & Vela, 2011; Siekmann et al., 2017).

Barón (2013) examined the effectiveness of CBI-oriented course materials designed to be used in an ESP course based on CALLA. The main objective of this course was to introduce crime-related knowledge and vocabulary for Spanish-speaking students at a police training institute. The focus of the study was to investigate whether the reading

comprehension skills of the students were enhanced thanks to these materials. In order to collect data, self-evaluation reports provided by students and two surveys and field notes were employed. According to the findings, students benefited from the reading comprehension tasks as they were required to use effective learning strategies and self-evaluation. The author concluded that the CBI materials developed in the program enhanced the reading comprehension skills of the students.

Davila and Vela (2011) explored the effects of CBI materials designed and developed by a group of ELT faculty members for primary school students. Their aim was to facilitate the language learning process of these students through different subject areas and to motivate them to learn English in a better way. The results indicated that students had higher levels of motivation after being exposed to the content of these materials. It was concluded that CBI materials used in this case study were found to be effective in motivating students and increasing their foreign language skills.

Siekmann et al. (2017) mentioned a project developed to teach Yup'ik language and culture to primary school students in an immersion program in Alaska. In this study, the authors touched upon the materials used for this program. According to the results, it was determined that two books were successfully developed as a result of commitment and cooperation among the stakeholders and they were utilized within the scope of the aims to develop a sustainable immersion program.

As CBI material development requires too much time and effort and poses lots of challenges, the material developers should be highly knowledgeable in the expertise areas and in the target language and cooperate among each other to come up with the most suitable related materials designed for certain learner groups. The research on CBI-oriented material development and its evaluation is too scarce and needs to be supported by more empirical studies to demonstrate its unique effectiveness on the students' content knowledge and foreign language skills development.

2.4. Summary and Conclusions

CBI aims to integrate both content and language teaching simultaneously. When the advantages of CBI are considered, it is understood that it is an effective approach that can be implemented in foreign language teaching, an assertion supported by both theoretical and empirical studies conducted especially in immersion classrooms and ESL settings.

The theoretical underpinnings of this model are mostly based on Krashen's (1982, 1985) "Input Hypothesis", which asserts that successful L2 acquisition requires exposure to comprehensible input, which is formed as the content in the CBI contexts. Another theoretical support is based on the distinction between CALP and BICS as the latter may be developed in a short period of time through mainstream foreign language education, contrary to the former one which requires a substantial amount of time ranging from 5 to 7 years to develop (Cummins, 1979). In order to show progress in different academic areas, developing CALP is a must to attain a certain level of second language proficiency in diverse academic contexts. CBI is also supported by the rationale of CLT approaches as it may yield promising results in favor of enhancing communicative competence of the students through enabling them to use the target language in a meaningful and incidental way while introducing the subject matter knowledge to them (Dalton-Puffer, 2007).

The empirical studies focusing on the effectiveness of CBI demonstrate increased student motivation and satisfaction in CBI classes, and the students become deeply interested in pursuing academic studies (Dupuy, 2000; Sylvén & Tompson, 2015). In addition, with authentic materials being used, students become engaged in challenging and innovative content, which facilitates the development of their cognitive and intellectual growth (Echevarria et al. 2017; Genesee & Lindholm-Leary, 2013; Graham, et al., 2018; O'Malley & Chamot, 1990). On the other hand, due to unqualified educators involved in the process, CBI implementation may fail the objectives of the language programs, which might result in decreased level of satisfaction for the students and of self-esteem for both students and teachers (Coyle et al., 2010; Zhyrun, 2016). In addition, it should be noted that developing CBI-oriented materials to be employed in CBI contexts poses huge challenges for the material developers and novice material developers might cause a delay because of their lack of training and experience in the field (Nikula, 2015). That's why, it is always necessary to consider each step while developing and implementing CBI-oriented course materials in CBI contexts.

Studies related to ELT material evaluation and specifically textbooks are mostly about the effectiveness of the materials in question and their effects on students' L2 proficiency development. However, the related literature lacks enough scales and checklists to evaluate the ELT course materials in an effective way. In addition, most ELT material evaluation studies deal with internationally-recognized language textbooks and ignore the locally-produced ones and in-house materials such as those developed for CBI contexts. The studies

analyzing the commercial language textbooks reveal that the immediate need to be determined is to include more communicative tasks and to adjust the level of language used in the materials to the foreign language proficiency of the learner group (Azarnoosh, 2014; Bermudez, 2014; Rahimpour, 2011; Riazi & Aryashokouh, 2007; Zohrabi et al., 2012). In addition, it has been concluded by Coyle et al., (2010) that ELT materials need to be adapted to the needs of the learner group.

In spite of the challenges and difficulties that might be encountered during the implementation of CBI and developing CBI-oriented course materials, no one can deny the fact that CBI is an effective instructional approach with all its different models if certain precautions are taken to overcome the difficulties that may arise. Although the literature provides the reader with CBI studies conducted in various ESL contexts and in immersion settings, there seems to be not many studies specifically investigating the effectiveness of in-house CBI materials on students' content knowledge and foreign language development, and investigating students' and their instructor's perceptions towards these materials. That's why, this thesis study is expected to fill the gap in the literature.

CHAPTER 3

METHODOLOGY

This chapter deals with the core elements of methodology employed in this thesis study. To be more specific, the chapter touches upon the research design selected, sampling, setting and participants, a thorough presentation of the CBI-oriented course material evaluated and of the CBI-oriented ESP course, the data collection tools utilized and the procedure of data analysis.

3.1. Research Design

Akhtar (2016) defines research design as the conceptual skeleton which the research is based on. As it is known, there are two main research paradigms that are seen to be differentiated. The quantitative research makes use of quantifiable data expressed in numbers and statistical information to find out facts that the researchers can generalize, and the qualitative research deals with data expressed in words to comprehend, analyze and work on detailed concepts, ideas or experiences (Creswell & Creswell, 2003). However, Brown (2004) notes that researchers should suppose there is a continuum between the two paradigms instead of a clear-cut distinction.

In this thesis study, mixed methods research design was used. Therefore, both quantitative and qualitative data were collected through different instruments. The quantitative data were collected through Materials Evaluation Questionnaire (Işık & Altmışdört, 2010), the students' Placement Test scores and their "Content Section" scores in the midterm and final exams. On the other hand, semi-structured interview questions developed by the researcher and the reflective journals kept by the instructor were the qualitative data collection instruments.

Employing only quantitative or only qualitative approaches might be inadequate to find answers to the complex problems addressed by different branches of science (Creswell & Creswell, 2003). According to Cohen et al. (2017), although utilizing only quantitative or only qualitative methods yields advantages to a certain extent, there could arise some disadvantages depending on the area investigated, too. On the other hand, Ma (2015) suggests that using mixed methods research design benefiting from both quantitative and qualitative methods might be useful in avoiding the insufficiency arising from using only one of these approaches. Sandelowski (2000) reports that mixed method studies are being increasingly

conducted in order to deepen the understanding of a phenomenon under investigation. In addition, according to Korkmaz (2016), mixed methods research works best with the research questions which need diverse perspectives to be analyzed. Mixed methods research design is also helpful to wrap up scientific research based on the perspectives underlying its theory and philosophy (Johnson et al., 2007).

In this mixed-method study, explanatory sequential design was employed. According to Creswell and Clark (2017), in explanatory sequential research, the researcher firstly collects quantitative data from the participants by using questionnaires or scales. Later, the researcher gets qualitative data from them by administering interview sessions or observations with the aim of supporting the findings obtained from the quantitative data. In addition, Dörnyei (2007) notes that conducting academic and scientific studies necessitates triangulation, which requires the use of different data collection tools, methods, samples and resources in order to avoid from biases that may arise over the course of the study and to increase the validity of the research being conducted. By utilizing different data collection tools, the aim of the researcher of this study was to ensure that triangulation would be achieved in order to get a clearer picture of the findings obtained.

As can be seen, this study made use of a mixed methods research design with the explanatory sequential design. The quantitative and qualitative data were obtained through various data collection tools that are introduced in the following sections. By employing different data collection tools, the researcher tried to ensure trustworthiness and triangulation so as to enjoy an in-depth understanding of the findings obtained.

3.2. Sampling, Setting and Participants

3.2.1. Sampling: This study made use of purposive sampling strategy, one of the non-probability sampling strategy types, because the sample consisted of the student participants in an ESP course, which was a CBI-oriented EFL course where the CBI-oriented course material was used as the course material. According to Muzata (2020), this type of sampling is used to gather data from the participants with certain characteristics that comply with the objectives of research to be conducted. In addition, according to Dörnyei (2007), there are a variety of sampling strategies that could be affiliated with the broader category “purposive sampling”. One of them is criterion sampling, which is commonly used in studies where predetermined criteria are of great importance in terms of choosing the participants (Patton,

2001). In this research, criterion sampling was utilized so as to answer the research questions addressed.

3.2.2. Setting: The study was carried out at a foundation university in Istanbul, Türkiye. At this university, students from different departments take compulsory mainstream EFL courses and CBI-oriented ESP courses from the Department of Foreign Languages, irrespective of the medium of instruction in their departments. The sample of the study consisted of software engineering students enrolled in an ESP course in the Fall term of the academic year 2021-2022. This course utilized the CBI-oriented course material that can be used by computer and software engineering students. Therefore, the course aimed at enhancing students' content knowledge and EFL skills. A detailed explanation on the CBI-oriented ESP course is given in section 3.3.2.

3.2.3. Participants: There were 40 software engineering students enrolled in the CBI-oriented ESP course where the CBI-oriented course material was used as the course material. They were in their 2nd-year at the university and were not taking any other EFL course at the time of the study. However, they had been learning English since they were 4th-grade students at the primary school, complying with the policy adopted by the Ministry of Education in Türkiye. At the university, they had already taken some EFL courses utilizing mainstream English for General Purposes language materials before. The medium of instruction in their department was Turkish. 23 of the participants were male students and 17 of them were female students. Their age ranged from 18 to 25.

In accordance with the purposes of this study, part of qualitative data was obtained through the reflective journals kept by the researcher as the instructor of the CBI-oriented ESP course, which made the researcher a participant, as well. The researcher was also the developer of the CBI-oriented course material evaluated in this thesis study. The researcher was a male EFL instructor aged 28 and had 4 years of working experience at the university where this thesis study was carried out.

3.3. The CBI-oriented Course Material and the CBI-oriented ESP Course

In order to provide more comprehensive details regarding the setting and the course material evaluated, this section demonstrates additional information about the CBI-oriented course material and the CBI-oriented ESP course, which offered the content of the material to the students.

3.3.1. The CBI-oriented Course Material: Although the content of the CBI-oriented course material was determined mostly by the researcher, there were other stakeholders contributing a lot to the preparation process. In the first place, the researcher investigated the trends to come up with the most suitable content in the subject matter. Then, the researcher prepared a blueprint which yielded some information about the content and the type of the activities in each unit. After that, the researcher worked with the program advisor in weekly discussion meetings where the program advisor provided his insights and expertise that he gained through his prior experiences in different ELT departments at several other universities in Türkiye.

In the next step, the researcher also consulted other faculty members in the related academic fields about the presentation of the content from time to time. In addition, a peer-colleague from the Department of Foreign Languages gave feedback for each unit in the course material based on her prior experiences in the material development field. Based on these discussions and feedback provided, suggested changes were made when necessary. The units were prepared in the academic year 2018-2019. After they were developed, a graphic designer worked on the design of the material while preserving the layout and the visuals found and prepared by the researcher as the developer. Finally, the units were packed into a textbook. Since then, the Department of Foreign Languages has been using this material in ESP courses offered to computer and software engineering students.

The CBI-oriented course material has 4 modules each of which consist of 3 units, making up 12 units in total. The main content presented in each of these units deals with some theoretical and practical knowledge related to computers, computer technology, computer and software engineering fields. The content was shaped by the curriculum of related disciplines at the university. In addition, special topics in these disciplines were included in the content. To be more precise, the course material presents and discusses the basics in the field such as the hardware components, the history of computer technology and coding and more advanced topics like cybersecurity, computer networking and the use of artificial intelligence. Each module in the course material has its own independent general topic based on the fields determined earlier. Therefore, the units in each module are related to each other and were presented sequentially. In addition, the researcher paid attention to the transitions within the units, between different units and different modules.

At the beginning of each unit, there is a “Warm-up” part that introduces the topics and issues to be discussed in the unit. The activities included in the “Warm-up” part in each unit are matching, brainstorming, fill-in-the-blank, guessing, and discussion tasks. After that, the main content is presented through 2 reading texts requiring the students to complete comprehension tasks and through a “Watching” part in which students are expected to watch a video on a related topic and do some related tasks. The content of the reading texts was extracted from different sources such as tech-blogs, university portals, articles, etc., and modified by the researcher. The videos are mostly found on YouTube. Comprehension tasks in the “Reading” and “Watching” parts are in the form of matching, fill-in-the-blank, open-ended, true-false and multiple-choice activities. All of the references for each content shown were provided in the “Reference” List at the end of the course material.

At the end of each unit, there is a “Language Focus” part consisting of two sections: vocabulary and grammar. In this part, the main technical vocabulary items and the grammatical points presented in the unit are reinforced through the related tasks such as unscrambling the words with their relevant definitions provided, fill-in-the-blanks, word puzzles, or applying the grammatical rules on the forms given in each blank, etc.

In the last unit of each module, students are presented with a real-life task in which they are assigned to complete a task or a project through delivering presentations, organizing interview sessions with the faculty members in their academic departments to discuss the related issues given in the topic, or for other academic and professional issues, etc. The “Real-Life Task” part also asks students to find answers through discussions for the questions specified in the task given. In addition, the last unit of each module has an exercise based on a contextualized dialogue between the fictional characters “Jane” and “John” in the “Everyday Conversation” part. Students are expected to order the flow of the dialogues and/or make inferences based on their content in these exercises. In certain units, the students are required to write a paragraph based on the related topics specified, as well. These “Writing” parts might be assigned as homework, too.

The logic behind developing CBI-oriented course material was to introduce academic topics, concepts and current issues related to students’ academic areas and to teach English by employing the content presented in this material, which is the actual function of CBI (See Appendix 1 for the first two pages of a sample unit).

3.3.2. The CBI-oriented ESP Course: The course offered by the Department of Foreign Languages was mandatory for the 2nd-year software engineering students in the Fall term of the academic year 2021-2022. It was a weekly 4-hour course. The objective of the course was to teach content-related topics and vocational English as a foreign language so that the students would be able to improve their English skills and use them properly in the academic and professional contexts.

The students took this course during the post Covid-19 period. As the outbreak did not fully disappear and some precautions still needed to be taken against the Covid-19 pandemic, the lessons were held online in line with the requirements imposed by the Rectorate of the institution. Therefore, all the lesson sessions were delivered to the students through the online meeting platform, Zoom.

The assessment employed in the course consisted of 1 midterm exam score making up 30% of the total course grade, 1 final exam score making up 50% of the total course grade, participation score making up 10% of the total course grade and the assignment score making up 10% of the total course grade.

Both midterm and final exams consisted of “Content”, “Reading”, “Writing”, “Grammar” and “Vocabulary” parts. Students were expected to give short and long answers to the open-ended questions, answer comprehension questions, circle the most suitable option in the multiple-choice questions, match the relevant items listed, and write a paragraph based on a topic given in these exams. They were required to get at least 50 points on average based on the percentage of the required assessment types in order to pass the course. There was a course syllabus given to the students and indicating the weekly schedule and the course content (See Appendix 2).

3.4. Data Collection Tools & Procedure

According to Teherani et al. (2015), selection of the data collection tools, or instruments are of great importance as the way the data collected is utilized, and the type of the information that is obtained are determined by the methodological approach employed by the researcher. Therefore, it is important to select appropriate tools to get reliable conclusions.

Quantitative data collection tools such as surveys, questionnaires, observation checklists and physical tests are used to obtain data that are numerical and that can be analyzed statistically (Creswell, 2012). On the other hand, qualitative data collection tools like

interviews, group discussions and focus groups are widely utilized to investigate the views, experiences, and the beliefs of the addressees (Gill et al., 2008). As mentioned before, this study employed different data collection tools used in both research paradigms.

In order to carry out this study, and therefore to collect data from the participants, the Research Ethics Committee of Bursa Uludağ University provided ethical approval. In addition, the necessary consent was requested from the Rectorate of the foundation university where the data were collected. After the consent was obtained, the researcher started to employ the data collection instruments, which this section demonstrates in detail.

3.4.1. Quantitative Data Collection Tools & Procedure: In this thesis study, the quantitative data were collected from 40 students through the Materials Evaluation Questionnaire (Işık & Altmışdört, 2010). Pre- and post-Placement Test scores and the scores obtained from the content sections in the midterm and final exams administered in the CBI-oriented ESP course were also used. The details about the quantitative data tools and the procedure employed are given in this section.

3.4.1.1. Materials Evaluation Questionnaire: Materials Evaluation Questionnaire developed by Işık & Altmışdört (2010) was employed to investigate students' evaluations about the CBI-oriented course material (See Appendix 3). The statistical analysis showed that Cronbach's alpha reliability coefficient of the whole questionnaire used was 0.94. The literature does not specify an optimal value for the Cronbach's alpha reliability coefficient. However, the values between 0.70 to 0.95 are seen to be acceptable for internal consistency (Tavakol & Dennick, 2011). In addition, Işık and Altmışdört (2010) reveal that the items in the current questionnaire were valid as they conducted several factor analyses and removed those items that were seen to be insufficient so that the questionnaire could be revised and conform to academic validity requirements during the development process.

There were 8 sections in the questionnaire that was used in this thesis study. The first section was designed to collect demographic data from the respondents such as age, gender, their department at the university, the medium of instruction in their department, and what year they were in at the university. The other sections of the questionnaire were actually the factors of the Materials Evaluation Questionnaire. Students were asked to evaluate each item in each factor making use of a 4-point Likert scale on which the value "1" stands for "insufficient", "2" stands for "partially insufficient", "3" stands for "partially sufficient" and "4" stands for "sufficient".

The second section of the Materials Evaluation Questionnaire deals with the general appearance of the CBI material and has 7 items. The third section is about the effects of the material on student-related factors such as the opportunity given to student-centeredness and self-evaluation, and this section has 11 items. The fourth section is about the course duration and has only 2 items. The fifth section deals with the evaluations of the students regarding the organization of the material and has 5 items. The sixth section questions the quality of the language teaching approach and the method employed in the course material that is being evaluated and has 9 items. The seventh section is about syllabus-related factors and has 6 items. Finally, the eighth section is about the content-related factors and has 54 items. Therefore, there were 94 items used when the first section dealing with the demographic data of the participants was excluded. It is a four-point Likert scale whose answer choice ranges from 1 being “insufficient” to 4 being “sufficient”. Işık & Altıncı (2010) notes that they did not want to include an additional choice such as “neither insufficient nor sufficient” as they thought that this might decrease the distinguishing aspect of the scale.

In the original questionnaire, there are 8 additional items, the 5 of which are under the factor “Supplementary Materials Accompanying the CBI Material”, and the 3 of which are under the factor “Instructor-Focused Factors”. The former was designed to question the views of the participants regarding the assessment component, workbook, visual and audio materials, and the software and internet support accompanying the material that is being evaluated. However, the CBI-oriented course material does not have these accompanying components. Therefore, this factor was removed from the questionnaire. On the other hand, the latter was designed to question the views of the instructors regarding the preparation of the course materials, the contributions of the materials to the instructors in terms of getting prepared for the lessons, etc. As this questionnaire was utilized to get data only from the students in this thesis study, this factor was removed from the questionnaire, as well. One of the developers of the questionnaire was also informed about the removal of these items from the original questionnaire, and the necessary permission was granted from him.

All of the items excluding those removed as mentioned above were entered on Google Forms. Before the actual data collection procedure, in order to see the validity of the tool, the time spent to fill out the questionnaire and how the participants would interpret the items addressed, the questionnaire was piloted on 10 students, in line with the views of Saunders et al. (2007) who propose that the questionnaires used as quantitative data collection tools

should be piloted in order to ensure that the participants will not experience any difficulty in comprehending the items and providing their answers accordingly.

The quantitative data were collected from 40 students anonymously in the Spring term of the 2021-2022 academic year. In order to fill out the questionnaire, the participant students were required to click on the button stating that they declared the information provided by them could be collected and used for this thesis study, the details of which were described in detail in a written form at the beginning of the questionnaire.

3.4.1.2. The Placement Test: An exam consisting of grammar & vocabulary, reading and writing sections were taken by the students at the beginning and at the end of the term so that the researcher would analyze the results of pre- and post-test scores to see whether any difference was observed after the use of CBI-oriented course material. The grammar & vocabulary part was taken from the placement test implemented by the university where this research was conducted. The reading questions and the writing task were selected from the Oxford Practice Test. There were 30 grammar, 8 vocabulary and 12 reading comprehension questions and 1 writing task in the test. The writing section was worth 30 points. The other sections were worth 70 points in total. The tests were entered on Google Forms which were turned into a quiz, through which the students could take the exams. (See Appendix 4)

As stated above, the course was offered to the students through online sessions. The Placement Tests were also administered in online settings at the beginning and at the end of the semester. In both exam sessions, students took the tests on Google Forms through accessing the digital exam documents on their computers. At the same time, they joined the Zoom sessions through their mobile devices. They were asked to turn on their cameras and then to locate their mobile devices in a position where the instructor could proctor the exams and check their computer screens during the examinations. This procedure was in line with the online exams policy of the Department of Foreign Languages at the university where this research was conducted.

3.4.1.3. The Content Sections in the Midterm and the Final Exams: Both of the midterm and the final exam questions were entered on the Learning Management System (LMS) of the university through which the course was offered. Students had to take the midterm and the final exam through LMS systems using their computers. Due to the online exams policy of the department stated above, the students also had to join the Zoom sessions through their mobile devices so that the exams could be proctored.

The midterm and the final exam administered in the CBI-oriented ESP course had 5 sections in total: content (35 points), vocabulary (20 points), reading (20 points), grammar (10 points) and writing (15 points). The content section assessed students' knowledge related to what they have learned in terms of the topics discussed in the course material. To illustrate, in one of the content questions in the midterm exam, students were asked to match the name of the computer network to their appropriate description. In another one, they were supposed to provide the most effective cyber security measures that could be taken against the threats asked in open-ended questions. The mean scores obtained in these sections in both the midterm and the final exams were analyzed and demonstrated to see the effects of the course material on students' content knowledge.

3.4.2. Qualitative Data Collection Tools & Procedure: In addition to the quantitative data collection tools mentioned above, the study employed two different qualitative data collection tools. Semi-structured interview questions were addressed to the students to explore their evaluations about the CBI-oriented course material and its in-class implementation more thoroughly. Besides, the researcher kept reflective journals about the material's and the course's contributions to students' motivation, to their content knowledge and to their English language skills throughout the course. Therefore, the reflective journals provided additional observations of the instructor about the issues investigated in the semi-structured interviews.

3.4.2.1. Semi-structured Interviews: According to Kvale (2007), researchers make use of semi-structured interviews to investigate the opinions of the participants much more thoroughly. Dörnyei (2007) states that in semi-structured interviews, the interviewer is leading the interviewee by giving some directions, which refers to the "structured" part in the term, and is trying to encourage the interviewee to provide additional information on the issues discussed by letting them to act more independently during the sessions, which refers to the "semi-" part in the term, this time.

In order to collect more comprehensive data and get an in-depth understanding of the findings obtained from the Materials Evaluation Questionnaire, 16 semi-structured interview questions were developed by the researcher based on the factors in the Materials Evaluation Questionnaire (See Appendices 5 and 6).

According to Poggenpoel and Myburgh (2003), the role of the researcher is of utmost importance in data collection as the researcher collects the data, maintains communication

with the participants, and converts the data obtained into meaningful information. They argue that the researcher should avoid biases during the development of the interview questions and carrying out interview sessions, as biases could result from unpreparedness and not analyzing the questions addressed and the data obtained thoroughly. In line with this, Van Teijlingen and Hundley (2001) point out that it is the pilot studies that informs the researchers if the data collection tools prepared may work, and whether they might be applied or not. Therefore, to avoid the biases that might have appeared, the semi-structured interview questions were piloted on 3 students, and the final version of the interview was analyzed and determined with the supervision of 2 different ELT professionals so that the inter-rater reliability of the interview questions might be increased.

10 volunteer students from the sample were individually addressed the final version of the semi-structured interview questions through the online platform, the Zoom Application in the Spring term of the 2021-2022 academic year. All the interview meeting sessions were recorded. In the beginning of each interview meeting, the participants were informed about the scope of the study and were assured that their identities would be kept confidential and all the data provided by them would be used for research purposes only. The verbal consent of the participants was gained in order to use the data provided by them in this study. Therefore, their approval to participate in the study were also recorded during the online meetings.

The participants were addressed the interview questions in Turkish so that they could express themselves a lot more comfortably. After all the data were obtained, the recordings lasting for nearly 170 minutes were transcribed into English by the researcher. Since the interviews were held on Zoom application, the participants also accepted the Terms of Use and Conditions of Zoom, too.

The questions investigated the students' evaluations regarding the CBI-oriented course material in terms of its design, its effects on their content learning and academic growth, learning English, and its in-class implementation. The first question was about how long they had been using the course material. The second one asked about their evaluations about the general appearance of the course material. The third one was about the visuals used and their effects on enhancing students' content knowledge. The fourth question investigated their motivation levels after the use of the course material. The fifth one was about the effects of the course material on student autonomy. The sixth one explored the appropriateness of the language used in the course material to the proficiency levels of the students. The seventh

question was about the sufficiency of the educational materials presented in the course material for use in an academic term. The eighth one was about the sufficiency of the educational materials presented in the course material for use outside the classroom. The ninth one asked the students to evaluate the organization of the units in terms of transitions, intensity, flow, etc. The tenth question investigated the relationship between the topics in the course material and the other subjects taught at the university. The eleventh one made the students evaluate the grammar presentation in the course material. The twelfth one questioned the students' needs and purposes to learn English. The thirteenth question asked whether the course material and the course itself met their needs and aims. The fourteenth one asked them to evaluate the variety of the content presented in the CBI-oriented course material. Finally, the last question asked them to evaluate the vocabulary exercises in promoting the technical terminology that they needed.

3.4.2.2. Reflective Journals: According to Göker (2016), teacher reflective journals in the form of dialogue journals, narratives or diaries help teachers to keep a record of their thoughts, feelings and reflections while they observe what is happening in the classroom. Therefore, these notes enable the instructors to analyze what has happened before in the classroom and to establish a critical framework in their professional lives, which enhances reflective and critical thinking.

For the sake of this study, the researcher kept his observations in a reflective journal during and after the lessons as the instructor of the CBI-oriented ESP course. The notes were mainly about the implementation of the CBI-oriented course material and the attitudes of the students observed by the researcher towards this course material, which could be used as feedback to revise the material in the future. Specifically, the journals provided the instructor's observations regarding the course materials' contributions to students' motivation, to students' content knowledge and to their English language skills. However, the instructor also took down some notes concerning the issues analyzed in the semi-structured interviews.

3.5. Data Analysis Procedure

Data analysis is a term that can be defined as a procedure in which ample data are decreased to a certain extent that the researchers can get sufficient information on an issue being investigated, and also in which certain interpretations are made to come to reliable conclusions (Kawulich, 2004; LeCompte & Schensul, 1999; Patton, 1987)

According to Creswell and Creswell (2003), the data obtained through the collection instruments employed in quantitative research are numerical data that are analyzed using statistical procedures. In this study, the quantitative data received from the Materials Evaluation Questionnaire and the scores obtained from the pre- and post-Placement Tests and from the content sections in the midterm and final exams were analyzed using SPSS (Statistical Package for the Social Sciences) Version 28.0.

The mean scores obtained for each item in the questionnaire were listed for each factor. In addition, the Cronbach alpha coefficient for each factor and for the whole questionnaire were calculated to determine the reliability of the questionnaire. The mean scores obtained in the pre- and post-Placement Tests were compared using paired-samples t-test to investigate whether there was a significant difference in student's English language skills before and after the in-class implementation of the CBI-oriented course material. Similarly, the mean scores of the students' marks on the content sections in the midterm and final examinations were listed to see how successful they were in understanding the content of the course material and the CBI-oriented ESP course itself.

To complement the quantitative data so that the triangulation would be achieved, this study also collected qualitative data through semi-structured interviews and the instructor's reflective journals. According to Kawulich (2004), qualitative data analysis procedures may not be the same for each study conducted as the nature of the study, research questions addressed, and the techniques to interpret the findings obtained may require different procedures to be implemented. Therefore, in qualitative data analysis procedures, what is important is to comprehend the message obtained through analyzing the findings and to convert the data into a narrative that exhibits the stance of the participants on any concept that is being explored (Kawulich, 2004).

The qualitative data obtained through the semi-structured interviews were transcribed into English by the researcher in order to attain an in-depth understanding of the issues discussed, as supported by Dörnyei (2007), who points out that transcribing the qualitative data allows the researchers to focus more on the message and the information provided though it consumes too much time. In addition, the researcher also had the qualitative data kept in the reflective journals.

After transcribing the interview data, the researcher implemented qualitative content analysis to explore the findings obtained through the semi-structured interviews and on the

data kept in the reflective journals. According to Kawulich (2004), in the content analysis approach, it is mandatory to focus on the items that are similar or different based on general certain themes and concepts that are generated. In order to investigate the evaluations of the student participants regarding the CBI-oriented course material, the semi-structured interview data were categorized into conceptual themes parallel to the factors of the Materials Evaluation Questionnaire. Likewise, to analyze the data obtained from the reflective journals kept by the instructor, similar conceptual categorization of the data was implemented. Namely, the findings were listed under similar themes such as motivation and satisfaction of the students, the problems that arose during the course, the possible impacts of the course materials on the students' content knowledge and their English language skills, etc. With these journals, the researcher found an opportunity to go back in time and to analyze what happened in the course.

As understood, there were different sources utilized in this study to obtain data: the Materials Evaluation Questionnaire (Işık & Altmışdört, 2010), semi-structured interview questions, the reflective journals, the pre- and post-Placement Test and the content sections in the midterm and final exam. The reason why different data collection tools were employed in this thesis study was to obtain a clearer picture of and a more in-depth understanding related to the findings. Although using multiple data collection tools may be tiring for researchers, coming to concrete conclusions supported by findings obtained through different channels should always be the scope of conducting research. With this aim determined, researchers also give a chance to others to conduct further studies on the related issues, thereby contributing to the scientific literature.

To summarize the research questions, data collection tools, participants and data analysis employed in this thesis study, the reader is provided with an overview table below.

Table 1

The Research Questions, the Data Collection Tools Employed, the Participants and the Data Analysis Procedure

Research Questions	Data Collection Tools	Participants	Data Analysis
RQ1: What are the evaluations of the software engineering students regarding the CBI-oriented course material?	Questionnaire	Students	SPSS 28.0
	Interviews		Content Analysis

RQ2: What are the evaluations of the instructor regarding the CBI-oriented course material?	Reflective Journals	Instructor	Content Analysis
RQ3: What are the evaluations of the software engineering students regarding the in-class implementation of the CBI-oriented course material?	Interviews	Students	Content Analysis
RQ4: What are the evaluations of the instructor regarding the in-class implementation of the CBI-oriented course material?	Reflective Journals	Instructor	Content Analysis
RQ5: What are the effects of the CBI-oriented course material on the students' English language skills?	Placement Test	Students	SPSS 28.0
RQ6: What are the effects of the CBI-oriented course material on the students' content knowledge?	Midterm & Final	Students	SPSS 28.0

CHAPTER 4

FINDINGS

This chapter reports the findings obtained from the Materials Evaluation Questionnaire (Işık & Altmışdört, 2010), and semi-structured interview questions, both of which were addressed to the students to investigate their evaluations regarding the CBI-oriented course material and its in-class implementation. The chapter also shows the findings obtained through the reflective journals kept by the researcher as the instructor of the course throughout the whole semester in order to provide the reader with a detailed explanation regarding his evaluations on the course material and the in-class implementation of the course material.

This chapter presents impact of the course material on students' English language skills and on their content knowledge, the former of which was explored through analyzing students' pre- and post-placement test scores, interview data and the observations of the researcher kept in the reflective journals; and the latter of which was investigated through looking at the students' achievement scores in the content sections in the midterm and the final exams of the course, and through exploring the interview data and the researcher's observations again.

4.1. The Evaluations of the Students Regarding the CBI-oriented Course Material

The first research question in this thesis study explores the evaluations of the participating students regarding the effectiveness of the CBI-oriented course material. This section shows how these students evaluated the course material in question. The data related to students' evaluations were collected through the Materials Evaluation Questionnaire (Işık & Altmışdört, 2010) and the semi-structured interview questions. Therefore, both quantitative and qualitative data were utilized to address the first research question of this thesis study.

The findings obtained through the questionnaire and the semi-structured interview data – and, in a couple of sections, the data obtained from the reflective journal kept by the researcher as the instructor of the course - are presented under each factor of the Materials Evaluation Questionnaire. Thus, it is possible to see the quantitative data obtained for each factor and the related qualitative data together. The quantitative data are composed of the mean scores obtained for each item in each factor and these data were tabulated below. The mean scores for each item on the scale range from 1 to 4. The items evaluated to be below the

sufficient level by the students were marked on the relevant tables in this section. On the other hand, the qualitative data were categorized according to the factors of the questionnaire, so that triangulation could be achieved. Table 2 shows the codes that emerged in parallel to the factors of the questionnaire.

Table 2

The Codes Related to the Qualitative Data on the Evaluations of the Students Regarding the CBI-oriented Course Material

The Factors of the Questionnaire	The Codes that Emerged in Parallel to the Factors of the Questionnaire
The General Appearance of the CBI-oriented Course Materials	The General Appearance & Design Font Size Visuals
Student-related Factors in the CBI-oriented Course Material	Student Motivation & Interest Student Autonomy Language Proficiency
Course Duration and the CBI-oriented Course Material	The Quantity of the Material to be Used in the Classroom Settings The Quantity of the Material to be Used Outside the Classroom Settings
The Organization of the CBI-oriented Course Material	The Transition within a Unit and between the Units The Flow of the Units The Intensity of the Units
Language Teaching Approach and Method	The Ability of the Material to Relate to other Subjects while Teaching English
Syllabus-related Factors	The Aims of the Students to Learn English The Ability of the Syllabus to Meet the Aims of the Students
Content-related Factors	The Variety of Academic Content The Effects of the Material on the Students' Language Skills, their Grammar, and Vocabulary Knowledge

4.1.1. The General Appearance of the CBI-oriented Course Material: The first factor of the Materials Evaluation Questionnaire deals with the general appearance of the course materials evaluated. To be more specific, this factor questions the evaluations of the participants regarding what they think about the information provided on the front cover, on the back cover, regarding how the table of contents are listed and designed, how the page layout is prepared and used, the use of the font, size and the type, the pictures, graphs, and the tables, and the quantity and quality of the authentic texts in the course material. This factor has 7 items in total. The mean scores for each item in this factor obtained from the participating students are presented in Table 3 below.

Table 3

Mean Scores Obtained on the General Appearance of the CBI-oriented Course Material

Items	M	SD	N
1. Information on the front cover	3.80	0.40	40
2. Information on the back cover	1.60	0.49	40
3. Table of contents	3.68	0.47	40
4. Page layout	3.75	0.43	40
5. Font, size and type	3.70	0.46	40
6. Pictures, graphs and tables used	3.78	0.42	40
7. The quantity and quality of authentic texts	3.65	0.48	40

Note. Insufficient=1, Partially Insufficient=1-2, Partially Sufficient=2-3, Sufficient=3-4

According to Table 3, only 1 item was not evaluated as sufficient. The students did not find the information provided on the back cover of the CBI-oriented course material sufficient. The back cover shows a visual and does not include any relevant information on the course material, compared to the front cover which shows the name of the series, the content field, the university and the related department. The cover page also exhibits a relevant visual. The other items in this factor were evaluated as sufficient by the students.

The statistical analysis reveals that the Cronbach's Alpha coefficient calculated for this factor is 0.80. In addition, the mean score obtained in all of the items in this factor is 3.42, which indicates a high satisfaction rate in terms of the students' evaluations.

In addition to the quantitative data shown above, the qualitative data obtained through semi-structured interviews report consistent findings. The design, appearance and font size were found to be adequate by all the students and they were also reported to be helpful for them to understand the instructions and follow the course more easily. For example, a student reported:

“The fonts and the design used were attractive and kept my attention. There was a simple design and the layout enabled us to understand the instructions more clearly. Thanks to the font size and simple design, I did not have difficulty in understanding what we were expected to do in the course.” (Student 1)

Another student commented:

“The general appearance of the course material drew my attention and helped me to focus more on the content as I am a person who learns anything more easily with visual support.” (Student 2)

Another one said:

“I really liked the design of the material and the visuals used as they helped me to learn the content in a better way.” (Student 8)

The visuals used in the material seems to have drawn the students’ attention. There were some students who provided positive comments specifically about the visuals utilized in the course material. Here are some sample excerpts from the interview:

“The visuals seemed to have been selected appropriately so that the content of the topic being covered could be supported. I am highly satisfied with the selection of the visuals. There were related pictures or depictions related to the content of the texts or the activities.” (Student 5)

“Most of the visuals chosen were related to the topic presented. The visuals in the watching parts enriched the activities because we were provided with the relevant visuals of the scenes that we saw in the videos. In this way, most of the tasks we were supposed to complete in the units enabled us to work on the exercises that included familiar visual elements. That helped me a lot to understand the content of the videos better as my listening skills were quite weak.” (Student 7)

“There were a few reasons why I liked your course a lot, sir. One of them was, of course, the course units and the visuals used in them. I remember that I saw the illustration of the ancient Greek God “Atlas” bearing the whole world on his shoulders and then we talked about his story and punishment. After that we read a text about the robot “Atlas” and its capabilities. I really liked the connection here and I thought that your course not only

increased my knowledge in computer science, but also in history and general world knowledge.” (Student 3)

There was only one student who reported relatively negative comments about the visuals used in the material, which stemmed from his own personal preference related to the design of the visual elements in general:

“Although I liked the visuals used in general, I can say that I would rather have seen more real-life pictures than those illustrations and depictions which were actually computer-generated images. I do not claim that these were not related to the topic. I am just talking about the design and the selection of the types of the visuals, which I personally would not prefer to use.” (Student 9)

As a related response to Student 9, the researcher as the instructor of the course himself realized that the visuals selected were mostly computer-generated images called “vectors”. Here is his own data from the journal kept:

“Although it was fully because of my own choice, I later realized that students might find the visuals childish due to their design. Although I have never received any negative feedback from the students on this issue, a revision on the design of the visual elements could be considered.” (Instructor, Reflective Journal Data)

To summarize, students were quite satisfied with the general appearance of the course material. All of the items except for the information on the back cover were found to be sufficient on the Materials Evaluation Questionnaire. The back cover page of the material does not inform the readers about the material developer or any further detail related to the preparation process or does not touch upon any issue related to the institution. It only shows a visual which was found suitable and relevant for the computer and software engineering fields earlier. On the other hand, the qualitative data indicate that students evaluated the visuals, font size and the layout and the design of the units positively and they thought these aspects of the units were helpful for them to learn the topics in a better way and to focus more on the content presented.

4.1.2. Student-related Factors in the CBI-oriented Course Material: The second factor of the Materials Evaluation Questionnaire explores whether the course materials evaluated fosters student-centered teaching, contributes to students’ cognitive growth, presents appropriate content to students’ background knowledge, enables students to make

use of the material easily, has positive effects on students' motivation, addresses students with different interests, presents the foreign language in an appropriate way according to the level of the students, guides the students on how to study the target language, encourages them to conduct research, introduces the students to learning responsibility, and allows them to evaluate themselves. Therefore, it can be said that this factor specifically deals with the contributions of the course materials evaluated to the learning group in terms of various aspects. This factor has 11 items in total. The mean scores obtained for each item in this factor are presented in Table 4 below.

Table 4

Mean Scores Obtained on the Student-related Factors in the CBI-oriented Course Material

Items	M	SD	N
1. Fostering student-centered teaching	3.73	0.45	40
2. Contribution to students' cognitive growth	3.50	0.50	40
3. Appropriateness of the content of materials to student background	3.48	0.50	40
4. Ease of use of materials by students	3.63	0.49	40
5. Short- and long-term effects of the material on student motivation	3.62	0.49	40
6. Addressing students of different interests	3.64	0.49	40
7. Compatibility of materials with the students' foreign language proficiency	3.53	0.50	40
8. Guiding students on how to study the foreign language	3.52	0.50	40
9. Encouraging students to do research	3.55	0.50	40
10. Charging students with learning responsibility	3.58	0.50	40
11. Self-evaluation opportunity for students	3.48	0.50	40

Note. Insufficient=1, Partially Insufficient=1-2, Partially Sufficient=2-3, Sufficient=3-4

All of the items in this factor were evaluated as sufficient by the students. The statistical analysis reveals that the Cronbach's Alpha coefficient calculated is 0.90. The mean score obtained in all of the items in this subscale is 3.57, which shows a high satisfaction rate observed in the participants. On the other hand, the qualitative data obtained through interview questions show how the students felt about the effects of the course material on their motivation, whether it enhanced their autonomy and whether they found the English level in the material appropriate to their own English proficiency.

In order to show the effects of the course material on student motivation, some of the interview data are summarized below. 9 students reported that they were very motivated. For example, a student related her high motivation to the course material by saying:

“The course material offered a different context where I could relate certain topics to my department, which was a motivating factor for me to focus on learning English in these lessons.” (Student 2)

Another one attributed her high motivation levels to the visuals and the content presented in the material, which might also be categorized under the visual evaluation discussed in the previous subsection and the content evaluation to be discussed in the last subsection:

“Without the visuals and the interesting content, maybe I would be unmotivated. In other words, the material motivated me to attend the lessons and learn content-specific issues and topics.” (Student 3)

Interview data also shows that some students became more interested in the lessons due to the nature and logic of the CBI-oriented course and the material utilized, which in turn increased the level of motivation experienced. Here is an example:

“The logic behind the course and the use of this material motivated me a lot. It was my first time to attend such a course like this and use these types of units each week. I had never heard or witnessed a lesson where you had to learn department-related knowledge while trying to learn English. I wish each English lesson were like your lesson, sir.” (Student 6)

However, there was a student who was not quite satisfied with all of the topics and issues discussed in the material as his motivation decreased from time to time:

“I got bored while we were covering some of the units. But that was not because of the whole course book or its implementation, but because of certain topics and issues discussed. I can say that we were sometimes presented with too many topics during just one lesson and I felt overwhelmed from time to time.” (Student 5)

One of the interview questions explored the effects of the course material on student autonomy and whether it enhanced their responsibility as an active learner. 4 students attributed this role of the course material to the assignments and some of the tasks during the lessons. They commented on this issue that:

“I think it definitely addressed student autonomy. Because there appeared some topics that required us to brainstorm and do extra research in some real-life task sections. For

example, there was a project assignment that questioned which software language could be used more easily to design software programs developed for cyber security. For such extensive assignments, we had to organize extra research and discussion sessions among ourselves. Personally, I noticed that I got used to studying more autonomously at the end of the semester.” (Student 3)

“Instead of memorizing some facts presented in a regular coursebook, I had to act more independently to learn the content as this material includes engaging tasks and brainstorming activities.” (Student 4)

“There were certain sections which required additional research and individual work and I believe that helped me to be more autonomous and more active during the lessons.” (Student 7)

“I had some certain limited knowledge in computer science and software technology fields earlier. However, especially some homework assignments required us to do some further research on certain issues, and therefore I became more interested in those issues while trying to learn them and started to act more independently during the learning process. In other words, the lessons and the material itself made me a more responsible student.” (Student 10)

The remaining 6 students thought that they had to become more autonomous as this was their first course material with which they could learn English through a content related to their own department. Therefore, they tried not to miss anything in the course material during the course. Here is a sample excerpt:

“The course material offered English education combined with knowledge related to my academic interests. I had no other choice but to be more autonomous and alerted. I thought I needed to be more independent where there were such cases in which I did not fully understand something. Therefore, I had to revise the content and take more responsibility in my time management each week.” (Student 1)

Language proficiency was another issue to be discussed during the interview sessions. Although there was no language-barrier observed among the students or no language proficiency-related problems that occurred during the lessons (except for their low speaking performance), unknown vocabulary items – or those items that differ in different contexts - were reported to be a big problem for some of them. Here are the related sample data:

“The most important obstacle for me was the unknown vocabulary items in the course material. That was partly because of the insufficient role of my previous English teachers and the limited-quality English education that I was offered earlier. I cannot say that the level of English used in the material was above my own proficiency level. However, I have to admit that I had a moderate level of difficulty in understanding the content especially due to the vocabulary items that I did not know.” (Student 1)

“I was challenged by the technical vocabulary items, in particular. There were some instances in which I was sure that I knew the meaning of certain words. Nevertheless, it turned out that I was wrong because I did not know their other meanings in content-specific context and I had never used them in this sense before. Other than this, I cannot say that I had difficulty in following the course due to my English level.” (Student 9)

The same was reflected in the journal kept by the researcher:

“Most of the students were shocked by the technical meaning of “packet” when they learned that it was being used to refer to the smaller units of messages assembled by Transmission Control Protocol (TCP), which is one of the procedures to be used to maintain end-to-end communication over the Internet.” (Instructor, Reflective Journal Data)

Claiming that there is a huge distinction between the level of English in the course material and students’ English proficiency, however, would be wrong. Here are some other comments provided by the students on this issue:

“[...] There were more reading, writing and listening activities compared to the number of speaking activities. I am much better at these last three skills. So, yes, it was suitable for my level of English proficiency. [...]” (Student 3)

“I think the level of English used in the course material was a little bit above my proficiency level. Yet, that does not mean that I had difficulty in understanding the gist of the content.” (Student 4)

“The level of English used in the first couple of units was relatively easy. However, the language became more difficult towards the end, which I believe improved my English. I can say that the level of English in the course material appealed to my proficiency level.” (Student 6)

“In the first place, when you talked about the content of the course and the requirements, I was shocked and a bit frightened as we were supposed to learn English while learning department-related subjects. I was really unconfident as I had not felt that my English knowledge background had been sufficient in my prior education. However, I got relaxed after we covered the first 3 units. The language was quite understandable and with your explanations, it was a very informative course. However, I have to admit that I had difficulties in later units towards the end because of my inadequate knowledge, especially in vocabulary.” (Student 8)

However, 1 student reported the difficulties he faced due to the incompatibility between his proficiency level and the level of English used in the material.

“We were supposed to read the texts by ourselves in the first place and then discuss the issues. I can hardly tell you that I would fully understand the topics by myself. I always needed your explanations to understand the texts. On the other hand, the watching parts were the most demanding sections in the units to me. Therefore, I started to put extra effort to get prepared before the lessons and took some notes beforehand. For example, I read the texts and watch the videos thanks to the links shared earlier. After some time, I got used to the language level and the requirements of the tasks. Especially doing the assignments made me more focused and feel a lot more confident. I believe the problems I faced had something to do with the insufficient English education in my prior school years.” (Student 10)

To sum up, it would not be wrong to conclude that students did not face a serious English language gap between their proficiency levels and the level of English used in the material. Most of those reporting incompatibility in terms of English language level attributed this to their prior English education, which they believed to be poor or insufficient. The researcher also observed that most of the language-related problems experienced stemmed from the unknown technical vocabulary or different usages of some familiar words in the context of the content area. There was no student reporting that the material was fully incomprehensible to them.

4.1.3. Course Duration and the CBI-oriented Course Material: The third factor of the Materials Evaluation Questionnaire is about the link between course duration and the suitability of the material for use in the classroom settings. In addition, the factor evaluates the course material in terms of the quantity of the content that can be used and enjoyed outside of

the classroom by the learner group. This factor has only 2 items. The quantitative data are tabulated in Table 5 below.

Table 5

Mean Scores Obtained on the Course Duration and the CBI-oriented Course Material

Items	M	SD	N
1. The quantity of material for classroom use throughout the course	3.50	0.50	40
2. The number of materials for use outside the classroom throughout the course	1.33	0.47	40

Note. Insufficient=1, Partially Insufficient=1-2, Partially Sufficient=2-3, Sufficient=3-4

Most of the students reported that there were enough materials to be used during the course in the classroom as the first item was evaluated as sufficient with the mean score 3.50. However, the great majority of the students did not find them sufficient for use outside the classroom, which is indicated by the mean score 1.33 obtained for the second item. The statistical analysis reveals that the Cronbach's Alpha coefficient calculated is 0.74. The mean score obtained in both of the items in this factor is 2.41, which points out that this subscale was below the purely sufficient level due to inadequate materials that could be used outside the classroom.

The qualitative data also support the quantitative data. All of the students agreed that the number of materials to be covered was adequate during the lessons for one academic term. Here are some sample excerpts:

"There was a sufficient amount of material presented and discussed each week during the whole course in the last term when we excluded the exam weeks." (Student 1)

"I believe there were enough materials for use in one academic term in the lessons." (Student 2)

"There were enough units and topics to be discussed in the course material in one academic term in the lessons." (Student 3)

In addition, one student commented that there were too many topics and issues covered, which made him overwhelmed:

"As I said earlier, I believe that the material included too many topics and we were supposed to complete too many tasks in the last term in your course. I think that would be better if you could exclude some texts because some of the reading passages were actually

telling the same or very similar concepts, which was redundant, I think. I do not say I am a lazy person, but I was really overwhelmed due to the number of topics and redundant reading passages.” (Student 5)

On the other hand, hardly anyone found the number of materials for use outside the classroom sufficient. Here are some sample excerpts from the related data:

“If we count the other courses at the university as "outside the classroom", I believe the material included sufficient content as I sometimes benefitted from what I've learned in your course. Otherwise, my answer is no.” (Student 2)

“I do not think that the material was sufficient for use outside the classroom. Maybe certain modifications could be made so that students will apply the recently-gained knowledge to certain domains outside the classroom in the future.” (Student 3)

“Well, there were some real-life tasks which could be benefitted from, maybe. Yet, I cannot say that I used the material for non-academic purposes apart from studying or doing homework related to the content. Therefore, I do not think that the material was suitable for use outside the classroom, especially to learn English.” (Student 7)

As seen above, the material was found to be sufficient in quantity for use in the classroom settings. However, it was reported to be inadequate to be used outside the classroom and for non-academic purposes.

4.1.4. The Organization of the CBI-oriented Course Material: The fourth factor of the Materials Evaluation Questionnaire deals with how the syllabus used in the material is organized, the flow and the layout of units, the transition between different sections within a unit, and how intense the material is. This factor has 5 items in total. The mean scores obtained for each item in this factor are presented in Table 6 below.

Table 6

Mean Scores Obtained on the Organization of the CBI-oriented Course Material

Items	M	SD	N
1. Overall syllabus organization	3.88	0.33	40
2. Flow of units	3.65	0.48	40
3. Layout of units	3.68	0.47	40
4. Transition between the parts of a unit	3.67	0.48	40
5. Intensity of the textbook	3.72	0.45	40

Note. Insufficient=1, Partially Insufficient=1-2, Partially Sufficient=2-3, Sufficient=3-4

All of the items in this factor were evaluated as sufficient by the students. The statistical analysis reveals that the Cronbach's Alpha coefficient calculated is 0.90. The mean score obtained in all of the items in this factor is 3.72, which points out a high satisfaction rate observed in the students. The qualitative data, on the other hand, reveal what the students thought about the organization of the units, the transition within a unit and between the units, the intensity of the course material, and the flow. Nearly all of the students reported positive evaluations. Here are some sample data:

"The flow of the units seemed to be consistent and each unit was related to one another." (Student 1)

"There was consistency between the units that followed each other and the content became more complex towards the end of the book. Therefore, I can say that the flow of the units was consistent." (Student 3)

"There were closely related units in the course material and the transitions between the units were appropriate. I never noticed any inconsistency while we were covering a particular unit after another one." (Student 4)

In terms of the transition within a unit, a student reported:

"It was quite surprising to see the picture of Johnny Depp as Captain Jack Sparrow in a course book about computer technology and software engineering. However, when I realized that I was expected to find some similarities between the pirates of the past and today's cyber pirates, I thought this was a very successful transition between different sections of the course units." (Student 10).

In terms of the intensity, a student provided negative reports, though:

"Sir, I insist that the content of the material was very intense, at least for me. I do not know why I was so overwhelmed, - maybe partly because of the requirements of my other courses. But that was not just because of them. For example, in one week, we were supposed to learn the history of electricity, then the emerging engineering fields, then the establishment of the related departments in academic institutions, and the relation between electrical engineering and computer science. That was just in one unit!" (Student 5)

However, some other students did not find the material so intense as the one above. Here are two other sample excerpts:

“There could be more watching exercises in the unit, actually. The intensity of the material was sufficient for me. However, I would not have said “no” if we had watched more videos, as I become a better learner if I am shown something.” (Student 2)

“The content presented in the material was quite informative and I believe that the intensity of the units was appealing to our level. I always like learning new things, which I am satisfied with when we are talking about the units in your course. I even wish there had been more units.” (Student 8).

Only one student reported negative evaluation regarding the intensity of the course material. Others were quite satisfied with the organization, the flow, the intensity of the content and the transition between the parts of a unit and the transition between different units.

4.1.5. Language Teaching Approach and Method: The fifth factor of the Materials Evaluation Questionnaire is about the approach and the method employed in the course material, whether there is a holistic approach to the language taught, whether the course material can support the students in terms of attaining a rich linguistic and socio-cultural perspective, whether it can appeal to the students utilizing different learning strategies, whether the course material employs a skill-based approach and enhances sub-skills of the major 4 skills, what kind of approach is used towards teaching the language forms, and whether the course material relates other subjects of the students while teaching the target language. This factor has 9 items in total. The mean scores obtained for each item in this factor are presented in Table 7 below.

Table 7

Mean Scores Obtained on Language Teaching Approach and Method

Items	M	SD	N
1. Language teaching approach	3.65	0.48	40
2. Language teaching method	3.45	0.55	40
3. A holistic approach to language	3.58	0.50	40
4. Ability to support a rich linguistic and socio-cultural perspective	3.45	0.50	40
5. Embracing the difference in individual learning strategies	3.43	0.50	40
6. Ability to include skills-based approach	3.48	0.50	40
7. Ability to include sub-skills	3.45	0.50	40
8. Approach to language forms	3.53	0.50	40
9. Ability to teach foreign language while relating to other subjects taught at school	3.20	0.64	40

Note. Insufficient=1, Partially Insufficient=1-2, Partially Sufficient=2-3, Sufficient=3-4

All of the items in this factor were evaluated as sufficient by the students. The statistical analysis reveals that the Cronbach's Alpha coefficient calculated is 0.84. The mean score obtained in all of the items in this factor is 3.47, which indicates a high satisfaction rate observed in the students. The qualitative data, on the other hand, inform the reader about what students thought regarding the relation that the course material shows to other subjects taught while teaching English, which was evaluated as sufficient but rated with the least mean score as seen in the table above.

7 students reported positive evaluations on the issue of the relation between the content of the course material and other subjects taught at the university while learning English. Here are some sample excerpts:

"The academic context provided by the course material of this course was relevant to the other courses I was taking in the term. Hence, I could say I could improve my English thanks to the relevant content." (Student 6)

"As the content presented in the material was related to my other courses, I argue that this material helped me more than any other mainstream English lesson would do in terms of learning English." (Student 8)

"Yes, I can say the content was closely related to my department. Although there were not similarities with a rate of 100% between your course and other courses I was taking, there were certain units that resembled some issues we learned in the other lessons. For this reason, I believe that the material related to my other courses while we were studying it to learn English." (Student 9)

However, there were three students who disagreed with the comments shared above. Here are the data collected from them:

"The terminology that I learned at this course helped me to improve my English. However, I think the issues and topics discussed in this course were not so related to my other courses in the same term. Although the content of this course was about computer science, software, engineering and technology and showed parallelism to a certain extent to my other courses, it was not directly related to them at all." (Student 1)

"Sir, the content of the course material is related to our department and the courses we took, but frankly, I don't know if it was very relevant to them. I'm studying software engineering, but in your course, we also discussed topics that were not directly related to my

field, such as computer hardware and the history of computer technology. I can say that the course material helped us learn English by creating content related to computer and software technology, but I think there was a weak connection between the content of the material and the content of the other courses I took.” (Student 3)

“The content of the material was prepared in the context of software, hardware, and technology. Yet, I cannot say that it was related to the other courses I was taking last semester, actually. My department is software engineering and we normally take core courses regarding the software field of computer science. Your course touched upon some basic concepts related to this, just from time to time. Therefore, I do not think that they were so related.” (Student 5)

To summarize the findings concerning this subsection, it can be concluded that the approach and the method employed were sufficient for the students. They also thought that there was a holistic approach to the language teaching in the course material. Students also evaluated that the course material appealed to the learners employing different learning strategies, and it was evaluated that the material used a skills-based approach. Lastly, most of the students reported that the course material could relate to the other subjects taught at the university while teaching English through the questionnaire and during the interview sessions, compared to the 3 students disagreeing with them.

4.1.6. Syllabus-related Factors: The sixth factor of the Materials Evaluation Questionnaire is about the syllabus-related factors. It deals with how the course materials evaluated are compatible with academic vision, academic program mission, whether they meet language program goals, whether they can meet student needs, whether they are compatible with teaching a foreign language for academic purposes, and whether they meet the institutional expectations and needs. This factor has 6 items in total.

The students of the foundation university where this research took place were assumed to be highly aware of the academic vision, of the academic program mission, of the goals of the language program they were enrolled in, of the institutional expectations and needs. The reason for this was that the university and the Department of Foreign Languages provided the students with sufficient knowledge during the orientation periods in which they were informed about the CBI program implemented, the syllabi employed in the affiliated programs, the expectations of the institution and the program, and the requirements they needed to fulfill in order to succeed in their academic lives. Also, the instructor talked about

these academic program vision, mission and expectations during the course. In addition, each student at this university is required to take a compulsory “Manifestation” course that aims to equip the students with the necessary vision and wisdom regarding the goals set in each department. Therefore, the researcher did not wish to remove this factor from the questionnaire as the students were regarded as being capable of evaluating the items in this factor easily and without any biases. The mean scores obtained for each item in the factor are given in Table 8 below.

Table 8

Mean Scores Obtained on the Syllabus-related Factors

Items	M	SD	N
1. Compatibility with academic vision	3.73	0.45	40
2. Compatibility with academic program mission	3.48	0.50	40
3. Meeting language program goals	3.38	0.49	40
4. Ability to meet student needs	3.45	0.50	40
5. Compatibility with teaching a foreign language for academic purposes	3.47	0.50	40
6. Meeting institutional expectations and needs	3.53	0.50	40

Note. Insufficient=1, Partially Insufficient=1-2, Partially Sufficient=2-3, Sufficient=3-4

All of the items in this factor were evaluated as sufficient by the students. The statistical analysis reveals that the Cronbach’s Alpha coefficient calculated for this factor is 0.84. The mean score obtained in all of the items in this factor is 3.50, which indicates a high satisfaction rate reported from the students. The qualitative data obtained shows the needs and the purposes of the students to learn English, and whether the CBI-oriented course material met these needs and the purposes. According to all of the students, learning English is indispensable in order to adapt to the globalized world and for their academic and professional aims. In addition, the material was found to be sufficient by 3 students to meet their reported aims. Here are the sample excerpts from the qualitative data regarding this issue:

“English is a universal language. In order for me to adapt to the globalized world, I need to learn English for my goals related to my career. The content of the course, the grammar and vocabulary exercises in the course material helped me to meet my aims regarding learning English.” (Student 1)

“Everyone should learn English for their personal growth. I need English for my academic aims. I feel lucky to have taken your course. Normally we learn the content of our

department in Turkish. Your course enabled us to learn some related issues in English, which I desperately need to know, and I confidently say that it worked” (Student 2)

“I study software engineering and English is very important for my career. There are lots of academic sources written in English in my field and I need to learn English properly to make use of these sources. In addition, learning English will allow me to go abroad. I always wanted to improve my English skills and I believe this course helped me to start to fulfill my needs in that sense.” (Student 6)

However, there were 7 students who reported that the material was weak in terms of enhancing their speaking skills, which is also discussed thoroughly in the content factor that follows. Here are some preliminary sample data:

“English is extensively used in academic sources related to software engineering and computer technology. The sources written in Turkish are very limited, though. I am learning English for the sake of my academic and professional progress. Except for improving my speaking skills, the material and the course helped me improve my English while enhancing my content-related knowledge, which was more than language education.” (Student 3)

“In order to be proficient in my academic field, I have to learn English to find a job, or to pursue an academic career in the future. Therefore, learning English is vital for me. My needs and expectations were partly met, actually. Academically speaking, I could feel that my listening, reading and writing skills were improved, but I cannot say the same for my speaking skills.” (Student 7)

“Irrespective of your department, you need to learn English properly to adapt to today's world. If we specifically talk about computer technology and software engineering, you have no other choice but to learn English. Your course gave me some insights into the basic knowledge in English, which was really fine. Reading texts and watching activities especially helped me to improve my reading and listening comprehension. However, I do not think I was able to improve my speaking skills in English.” (Student 9)

As understood, the great majority of the students thought that the CBI-oriented course material was compatible with academic vision, with academic program mission, met language program goals and the needs of the students. It was also evaluated that the course material was compatible with teaching English for academic purposes. However, it was not found to be so

effective for enhancing English speaking skills of the students, which is to be demonstrated in detail in the next subsection that follows.

4.1.7. Content-related Factors: The seventh factor of the Materials Evaluation Questionnaire is too long to summarize here. It has 54 items in total and deals with the multi-dimensional aspects of the course materials evaluated. The reader is advised not to think of just the sense of the “content” in the context of CBI. Here, the word “content” refers to what the course materials evaluated provide the learner group with, including foreign language skill enhancement, the organization and the variety of the texts, audio materials, grammar and vocabulary presentation, etc. The mean scores obtained for each item in this factor are given in Table 9 below.

Table 9

Mean Scores Obtained on the Content-related Factors

Items	M	SD	N
1. Ability to inform students and instructors by revealing the course book content	3.70	0.46	40
2. Course book ability to help students prepare for upcoming lessons	3.48	0.50	40
3. Offering adequate, comprehensible input	3.58	0.50	40
4. Accordance with lesson objectives	3.55	0.50	40
5. Accordance with lesson duration	3.53	0.50	40
6. Connection between aims and topics covered	3.43	0.50	40
7. Attractiveness of the material	3.55	0.50	40
8. Functionality of the material	3.43	0.50	40
9. Topic-based content	3.73	0.45	40
10. Topic variety	3.63	0.49	40
11. Sufficiency of number of texts	3.65	0.48	40
12. Text variety	3.73	0.45	40
13. Presentation of references and websites about the topic	3.55	0.55	40
14. Presentation of language	3.50	0.50	40
15. Grammar activities	3.45	0.50	40
16. Appropriateness of grammar and vocabulary considering student proficiency level	3.60	0.49	40
17. Including communication skills	3.40	0.54	40
18. Ability to offer all language skills equally	2.85	0.53	40
19. Offering writing skills	3.28	0.45	40
20. Offering speaking skills	1.83	0.59	40
21. Offering reading skills	3.55	0.50	40
22. Offering listening skills	3.53	0.50	40
23. Application of listening, reading, writing, speaking activities in daily life	3.10	0.44	40
24. Importance given to reading and writing follow-up	3.33	0.47	40
25. Guidance to extensive reading	3.35	0.57	40
26. Importance given to vocabulary teaching	3.35	0.48	40
27. Offering students with meaningful language activities	3.30	0.51	40

28. Use of authentic material	3.43	0.50	40
29. Appropriateness of authentic text considering student proficiency level	3.38	0.49	40
30. Ability to teach symbols, signs and abbreviations related to professional field	3.65	0.48	40
31. Offering the terminology of different professions	3.40	0.49	40
32. Providing understandable input by creating content-based tasks	3.48	0.50	40
33. Relevance of topics covered to real life	3.45	0.50	40
34. Meeting foreign language needs in daily life	3.35	0.53	40
35. Offering activities which will improve critical thinking skills	3.48	0.55	40
36. Encouraging student participation cognitively and affectively	3.55	0.50	40
37. Natural use of language	3.30	0.60	40
38. Number of structure-based exercises	3.33	0.52	40
39. Ability to present daily speech patterns in a meaningful way	3.18	0.44	40
40. Offering entertaining and attractive activities	3.43	0.50	40
41. Number of exercises and activities	3.40	0.49	40
42. Ability to give clear instructions	3.53	0.55	40
43. Offering assessment and evaluation tools	2.15	0.36	40
44. Tests and their appropriateness	3.08	0.34	40
45. Revision Units	1.20	0.40	40
46. Covering all lesson details during class time	3.43	0.50	40
47. Course book ability to direct students on where to go, what to do, like a map	3.30	0.51	40
48. Amount of difficulties faced when working with the course book	2.30	0.68	40
49. Offering physical activities in the classroom	3.23	0.47	40
50. Appropriateness of activities considering classroom size	3.20	0.46	40
51. Ability to support individual participation	3.30	0.51	40
52. Offering group and peer work activities	3.28	0.45	40
53. Materials being prepared for a specific group	3.38	0.49	40
54. Ability to motivate students for out-of-class learning	2.73	0.59	40

Note. Insufficient=1, Partially Insufficient=1-2, Partially Sufficient=2-3, Sufficient=3-4

Out of the 54 items, 5 items were not evaluated as sufficient by the students. Item 18 “Ability to offer all language skills equally” got a mean score of 2.85. Item 20 “Offering speaking skills” got a score of 1.83. Item 43 “Offering assessment and evaluation tools” got a score of 2.15. Item 45 “Revision Units” got a score of 1.20, which is the lowest mean score in this factor. Finally, the last item, item 54 “Ability to motivate students for out-of-class learning” got a mean score of 2.73. The other items got a mean score above 3.00 and therefore were evaluated as sufficient. For this factor, the Cronbach’s Alpha coefficient calculated is 0.96. The mean score obtained in all of the items in this factor is 3.29, which indicates overall satisfaction from the students.

The qualitative data obtained show how the CBI-oriented course material was evaluated in terms of the variety of the academic content provided for the students, whether the grammar and vocabulary presentations in the material were sufficient, and the effects of the course material on their language skills. The last issue here was demonstrated in detail

after the students reported that their speaking skills were not promoted by the course material during the interview sessions.

In terms of the content of the course material, 8 students reported that they were satisfied with the variety of the information provided for them. Here are some sample excerpts from the qualitative data:

“The course material consisted of different but related content ranging from the engineering field, computer software technology to more advanced topics such as computer networking, cybersecurity and robotics. I am satisfied with the variety of the content of the material.” (Student 1)

“The course material offered a wide variety of different topics and issues related to software technology. There is nothing I can criticize.” (Student 3)

“I am satisfied with the variety of the content in the material. I always learned new things in each lesson.” (Student 7)

However, one student found the quantity of the content much more than necessary:

“The content was too diverse and included excessive information, which was demanding.” (Student 5)

In terms of the grammar presentation, 7 of the students were satisfied with the grammatical explanations and the related activities. Some data revealed:

“The grammar explanations and the exercises helped me to remember the grammatical structures that I had already forgotten.” (Student 1)

“There were lots of fill-in-the blank exercises in the grammar part, which was fine. Grammatical rules can be easily forgotten. Thanks to the grammar sections, I could revise the rules and remember what I had learned earlier. I always wanted to learn new grammatical rules and remember the ones I had already forgotten. Therefore, I'm satisfied with the grammar presentation in the material.” (Student 7)

One student even wished to have seen more grammatical exercises:

“Grammar exercises supported by brief explanations on a particular grammatical point were helpful for me. However, I don't think that the number of exercises was sufficient. There could have been more grammar activities.” (Student 3)

On the other hand, three students found the grammar presentation way more structure- and rule-based than necessary:

“We have been learning English for more than a decade. We are always taught grammar rules. I do not think that learning grammatical rules help us. Otherwise, we would be fluent enough to express ourselves. However, we are talking in Turkish in this interview session. Why? - That's because of my insufficient capabilities in speaking English. The course material presented the grammatical topic as the other mainstream course books. I would prefer to have seen more tasks requiring us to communicate while learning the grammatical topic.” (Student 4)

“I always forget grammar rules I learned earlier, sir. Yes, it was nice to see the rules so that I could remember them again. However, while analyzing the grammatical structures of the topic of particular weeks, we were supposed to come up with the necessary grammatical rules and write them down in the blanks provided. I remember I thought it seemed as if we had been in a math course and written down some equations. I do not think that this kind of teaching could help us to learn English.” (Student 6)

“Actually, I am fed up with grammar rules, sir. I do not believe that even native speakers conform to them. The grammar section in the material was very traditionally designed and that was the part where I got bored most. On the other hand, one of my favorite sections was the “Everyday Conversation” part. We could at least learn the appropriate way of addressing someone by using certain useful expressions. I wish the grammar part had been more communication-oriented” (Student 9)

Despite the different comments uttered for the grammar presentation shown above, all of the students agreed that vocabulary presentation in the course material was effective. Here are some sample data:

“In the beginning, I had hard times to understand each unit due to my insufficient knowledge in vocabulary. After some time passed, I became more confident and motivated in your lessons as I was learning more and more words. Your explanations regarding each topic were also helpful and I started to relate new words with the examples you provided.” (Student 1)

“I benefited from the vocabulary exercises a lot. Especially the exercises in the last units in the course material introduced me to the new technical words the meaning of which I did not know earlier.” (Student 3)

“For me, the relevance that the course material showed to the content of my other lessons was always positive and I believe that I learned enough technical terminology and that this will help me to succeed in my other courses.” (Student 6)

“I learned different terminologies related to my field. I am sure the course had a positive impact on my knowledge in technical terms.” (Student 7)

“The vocabulary exercises were designed in a fun way. We were presented with lots of enjoyable activities such as word-search puzzles and unscrambling the unknown words.” (Student 9)

“The matching activities were very helpful to understand and interpret the formal definitions provided. I had never learned as many words as I did in the last semester in your course.” (Student 10)

All of the students evaluated the course material positively in terms of its effects on their listening and reading skills. Sample data excerpts point out:

“The most obvious emphasis was on listening and reading. In each unit we were presented with at least one video exercise and two different reading texts, which we needed to understand. These parts contributed to my listening and reading comprehension skills [...]” (Student 6)

“I believe the most enhanced skills were listening and reading for me. That was partly because of my inclination to refrain from speaking in the classroom and writing something. Actually, I do not like writing, sir. [...]” (Student 8)

“[...] I really benefited from the videos and the texts. I can surely say that now I understand better when I read and listen to something. I think the crucial point here was the interest aroused in me to attend to the watching and reading sections in the material. That was probably because of the interesting content presented in the videos and in the reading passages.” (Student 9)

Their writing skills improved to a certain extent. This was also stressed out by all of the students except for Student 8 reporting that she did not like writing at all. Firstly, the reports of Student 8 are shared. Then, some of the positive sample data follow:

“[...] Writing something in English seems to be utopic to me. I'm not talking about writing about introducing myself in English. I can do this, of course. But I do not think the course material helped me to overcome my fears about writing. Nothing came to my mind when we had to write a paragraph about the content presented.” (Student 8)

“[...] I think the course material promoted writing skills as well. Yes, writing sections did not take much of the lessons, but we were also assigned tasks and reflection assignments and we used the same material to do our homework [...]” (Student 5)

“[...] There were also writing sections in certain units in which we needed to come up with some definitions based on an explanation, or some reflections after watching a video. Therefore, I cannot say my writing skills did not improve. However, it is not fully-improved, either.” (Student 6)

“[...] Writing did not take much of the time we spent in the classroom. But I remember that we would often write some paragraphs on what we have learned in that particular lesson when there was enough time. We not only had to conform to the paragraph writing rules such as coming up with an appropriate topic sentence, supporting sentences and a concluding sentence, but also had a chance to evaluate ourselves and reflect what we had just covered.” (Student 10)

However, hardly anyone reported that the material enhanced their speaking skills. 1 student mentioned the personal differences that could be demotivating:

“[...] Sir, I do not know whether it was about me or about the material or your course, but I never attempted to ask a question or reply to your questions in English as I am very unconfident to speak in English. My speaking skills in English are really bad, and I do not feel that I improved my speaking after your course, either.” (Student 1)

Another one talked about the different dimensions of the course material. According to the data provided, the course material was actually sufficient to provide communication-based activities but did not help them to improve their speaking skills:

“[...] Actually, if we are talking about the effects of the activities in terms of enhancing communication, I believe that the material was quite sufficient. There was lots of interesting content and you always asked related questions about them. There were also some other activities where we were made to comment on and share our own views based on the topics. However, there was not a separate section for speaking in the material. We had separate watching, reading and sometimes writing sections, though. Therefore, I did not benefit a lot from the material to improve my speaking.” (Student 5)

2 students mentioned the online education policy implemented by the university and partly attributed the low interaction rate observed in the lessons to the remote learning:

“I do not think my speaking skills in English got promoted by the course material. I'm not sure if it was related to the units we used in this lesson, but when I think about the content in the units, there were relatively few discussion- and communication-based activities while there were many video watching and writing tasks and lots of reading passages. In addition, the fact that the courses were held online may have affected this situation even worse. Maybe we could have interacted more if we had been in the face-to-face classroom setting.” (Student 3)

“[...] Sir, actually the material could have worked for enhancing our speaking skills, too. But it did not. I believe that was because of online education. I remember that we skipped two or more different presentation activities in the module assignments in the material as it would be very inconvenient to deliver a presentation online, rather than in face-to-face classroom settings.” (Student 7)

Another one approached the issue with a different perspective, which did not mean that the course material improved his speaking skills, though:

“[...] Actually, I never expected that the course material and the course itself would make me a better speaker. I had read the requirements of the course at the beginning of the last semester and it seemed to me that this was more like a lecture rather than an English language course. The course and the material improved my overall English skills, but when the course finished, I was the same English language speaker as I had been 6-7 months ago.” (Student 4)

The content factor of the Materials Evaluation Questionnaire is the most comprehensive factor among the others and has 54 items in total. Just 5 items in the factor

were not evaluated as sufficient. The course material was found to be insufficient in offering all language skills equally, in offering speaking skills, which was also supported by the qualitative data written above, in offering assessment and evaluation tools, and in terms of the revision units. Lastly, the material was not found to motivate students for out-of-class learning.

The qualitative data, on the other hand, report that nearly all of the students were satisfied with the variety of the content and knowledge provided, although some students reported that the course material included some other issues that were not of their academic interests.

Most of them also found the grammar presentation sufficient and helpful, as opposed to some others who evaluated it as structure- and rule-based, which was totally correct. In terms of vocabulary, however, all of them were quite satisfied with the use of technical terminology, their presentation and the types of the activities developed for the vocabulary sections.

The qualitative data reveal that listening and reading skills were the most enhanced skills of the students. All the students also reported positive comments about their writing skills development. However, the course material could not consolidate and meet the needs and aims of the students regarding their speaking skills. Some students attributed this to the online education policy, which might really have had an effect on the issue.

4.1.8. Conclusions: The Materials Evaluation Questionnaire employed in this thesis study to collect quantitative data has 94 items in total. The Cronbach Alpha coefficients calculated for each factor in the questionnaire ranged from 0.74 to 0.96, which indicates that the items in each factor were reliable. In addition, the Cronbach Alpha coefficient calculated for all the items used in the whole questionnaire was 0.94, pointing out an excellent level of internal consistency.

In the first factor “the General Appearance of the Course Material”, the students evaluated the item “information on the back cover” partially insufficient. The mean score obtained for this item was 1.60. Other than this, the remaining 6 items were evaluated to be sufficient. The qualitative data also revealed that students were quite satisfied with the general appearance and the design of the course material.

In the second factor “Student-related Factors in the Course Material”, all of the 11 items were evaluated to be sufficient. According to the qualitative data, the great majority of the students were motivated to learn English and to learn the content at the same time because of the course material covered. At the same time, they reported that the course material enhanced their student autonomy. They also commented that the course material was moderately compatible with their English proficiency and some attributed the difficulties they experienced to the unknown technical vocabulary items and poor English education in their prior school years.

The third factor deals with the course duration and the course material. The factor has only 2 items. The students evaluated the number of materials for use outside the classroom throughout the course partially insufficient and this item got the mean score of 1.33. In addition, the qualitative data showed that the students thought there were not enough materials to be used outside the classroom. On the other hand, both quantitative and qualitative data demonstrated the course material had sufficient content and material to be covered in the classroom setting.

The fourth factor is about the organization of the course material. The factor has 5 items in total and all of the items were evaluated as sufficient by the students. The qualitative data also revealed that the students found the transitions, intensity and flow of the material quite sufficient. One of the students reported that the material was so intense that he was overwhelmed.

In the fifth factor “Language Teaching Approach and the Method”, the students found all the 9 items sufficient. According to the qualitative data obtained, the students did not see a direct relation between the content of the course material to that of the other courses they were taking in the same semester. They reported that the material was sufficient to help them to learn English. However, it had some unrelated content that they did not see in other courses, too. In addition, according to some students, a communication-based language teaching approach was not said to be employed in the course material.

The sixth factor “Syllabus-related Factors” has 6 items in total, all of which were evaluated to be sufficient by the students. Most of the students reported that they needed to learn English in order to adapt to the globalized world, or to fulfill their academic and professional aims. In addition, the course material was evaluated to meet the needs they mentioned by them thanks to the content presentation and English teaching at the same time.

Lastly, the seventh factor is “Content-related Factors” is the longest part of the questionnaire with its 54 items in total. 5 items were not evaluated to be sufficient by the students. These were item 18 “Ability to offer all language skills equally” with a mean score of 2.85, item 20 “Offering speaking skills” with a mean score of 1.83, item 43 “Offering assessment and evaluation tools” with a mean score of 2.15, item 45 “Revision Units” with a mean score of 1.20 and item 54 “Ability to motivate students for out-of-class learning” with a mean score of 2.73. On the other hand, the qualitative data revealed the students’ evaluations regarding the content variety, grammar and vocabulary presentation, and the effects of the course material on their language skills.

Most of the students reported their satisfaction with the content variety presented in the course material apart from one student informing that there was a lot of excessive information requiring demanding work to handle. Apart from this, the great majority of the students thought the content was diverse, comprehensive, and informative in terms of its contribution to their content knowledge related to their academic field.

The great message provided by the students regarding the grammar presentation in the course material was that the material did not provide the students with communication-based activities in the grammar sections in the units. Although they said that it was nice to review the grammar topics that they had already forgotten, some of them commented that they preferred to see more communication-oriented grammar activities so that they could learn how to interact more appropriately, which could enable them to conform to the grammar rules.

Students found the vocabulary presentation in the course material quite sufficient. They reported that the unknown technical words were the major challenges to understand the content of the course fully. The technical vocabulary items that they learned over time allowed them to get motivated and enjoy the gist of the content more.

Lastly, the effects of the course material on students’ language skills were also discussed. They said that they were quite satisfied with the reading and watching sections where they could have a chance to improve their reading and listening skills. Most of them also evaluated that their writing skills were promoted except 1 student reporting that she did not like writing something and she could not construct the concepts related to the content when she was supposed to write a paragraph in certain tasks. In addition, their speaking skills were not promoted. The great majority of the students did not think that the material helped

them to improve their speaking skills. According to the students, there were not enough tasks to enable them to speak and interact more in the classroom. Some of them thought that the online education policy might have had a negative impact on this issue. Others blamed the poor English education in their prior school lives. It was also mentioned that the potential effects of personal issues such as being shy and introverted could discourage them from speaking English in the lessons.

To sum up, students did not find the material sufficient in terms of certain issues. However, there were only 7 items not evaluated as sufficient out of 94 items in total. The course material was found to be sufficient in the 6 factors of the total 7 factors in the questionnaire. It was the third factor “Course Duration and the CBI Material” that was not evaluated as sufficient. Table 10 shows the item mean scores in each factor below.

Table 10

Comparison of the Mean Scores Obtained in Each Factor of the Materials Evaluation Questionnaire

Factor	Mean Score
The General Appearance of the CBI-oriented Course Material	3.42
Student-related Factors in the CBI material	3.57
Course Duration and the CBI Material	2.41
The Organization of the CBI Material	3.72
Language Teaching Approach and Method in the CBI Material	3.47
Syllabus-related Factors in the CBI Material	3.50
Content-related Factors in the CBI Material	3.29

Note. Insufficient=1, Partially Insufficient=1-2, Partially Sufficient=2-3, Sufficient=3-4

4.2. The Evaluations of the Instructor Regarding the CBI-oriented Course Material

The second research question explores the evaluations of the instructor regarding the CBI-oriented course material. In order to answer this research question, the data kept in the reflective journal by the researcher as the instructor of the course are demonstrated. The data have been categorized based on the factors of the Materials Evaluation Questionnaire. Table 10 shows the codes that emerged in parallel to the factors of the questionnaire.

Table 11

The Codes Related to the Qualitative Data on the Evaluations of the Instructor Regarding the CBI-oriented Course Material

The Factors of the Questionnaire	The Codes that Emerged in Parallel to the Factors of the Questionnaire
The General Appearance of the CBI-oriented Course Materials	The General Appearance & Design The layout Authentic content
Student-related Factors in the CBI-oriented Course Material	The Cognitive Growth Student Motivation & Interest Student Autonomy Language Proficiency
Course Duration and the CBI-oriented Course Material	The Quantity of the Material to be Used in the Classroom Settings The Quantity of the Material to be Used Outside the Classroom Settings
The Organization of the CBI-oriented Course Material	The Organization of the Units The Flow of the Units The Intensity of the Units
Language Teaching Approach and Method	The Effects of the Material on the Students' Communicative Competence The Attitudes of the Students towards Forming Interactions one another
Syllabus-related Factors	The Ability of the Syllabus to Meet the Academic and Linguistic Needs of the Students
Content-related Factors	The Attractiveness and the Functionality of the Content The Variety of Academic Content The Level of English Used in the Material The Effects of the Material on the Students' Language Skills

Based on the general appearance of the CBI-oriented course material, the instructor noted:

“There is an attractive microchip image on the cover page of the course material. That is the first thing that can draw the students’ attention. In addition, the students can see the name of the series, and the academic content name, which means that there is sufficient information provided on the cover page. However, that cannot be said for the back cover page as it illustrates only a relevant vector image but no other relevant information. The table of contents lists all the modules and the affiliated units below them. I believe the page layout, font, size and type, visual images such as pictures were designed and selected successfully, which can be helpful for the students to learn the content better in their learning process. In addition, I meticulously searched for authentic content while developing the material. Therefore, I can surely say that I am quite happy with the quantity and the quality of authentic texts. The feedback I am getting from the students also supports my assertion in this regard.”
(Instructor, Reflective Journal Data)

The instructor thought that student-related factors were mostly sufficient due to a variety of reasons. He noted:

“The material has the capacity to contribute to the students’ cognitive growth as it is a CBI-oriented course material making use of authentic content. As it is known, CBI enriches students academically and intellectually. The material is appropriate to students’ background as it was developed specifically in the context of computer and software technology. The material also provides knowledge related to engineering. I believe it is quite easy to use the material for the students as each section was designed carefully and has clear instructions. The content presented seems to motivate students as time passes because they are introduced to interesting and attractive content related to either their academic or personal interests. The material was designed for the pre-intermediate students who were in their first or second years at the university. Considering the learner group’s language proficiency, the language used in the material was quite appropriate. Therefore, I believe that students do not have difficulty in understanding the level of English. However, academic terminologies could be a problem for some of them. The material also assigns some research tasks as homework in order to enhance their responsibilities and autonomy and at the same time, they are sometimes asked to self-evaluate themselves and reflect on what they have learned in a specific unit.” (Instructor, Reflective Journal Data)

According to the instructor, there were sufficient number of tasks for classroom use during one semester:

“The 12 units are to be covered in the 14-week period during the whole semester, which means we have enough content material for each week.” (Instructor, Reflective Journal Data)

However, the instructor informed that the course material was not so suitable for use outside the classroom:

“The material can only be used to revise the content outside the classroom. In the material, there were certain project tasks most of which were devoted to delivering presentations or interviewing with the faculty members in their own department for various vocational or academic purposes. Unfortunately, most of these tasks had to be suspended due to the precautions taken against the Covid-19 outbreak. In addition, there is no supplementary material accompanying the course material outside the classroom settings such as software and internet support, test sheets, workbook, etc. Therefore, students cannot find enough opportunities to make use of the material and content presented in it. In contrast, the mainstream language materials or books enjoy software and internet infrastructure thanks to which students take part in various activities and tasks outside the classroom settings.” (Instructor, Reflective Journal Data)

Regarding the organization of the CBI-oriented course material, the instructor commented:

“The syllabus employed to plan to use the course material demonstrates that each unit starts with a “Warm-Up” activity that familiarizes the students with the topic to be presented. Then, the main content is mostly presented through the first “Reading” passage followed by a “Watching” section as a follow-up part. The second “Reading” section, on the other hand, gives further content knowledge. There might be some follow-up parts after the second “Reading” section, followed by “Vocabulary” and “Grammar” sections. The syllabus operates on the notion that the content is presented sufficiently to the students. At the same time, there is a consistent flow of units among each other as they have been categorized into certain broad concepts called modules and each module presents relevant content. One unit is normally covered in a block session each week, which can give an idea about the intensity of the content presented.” (Instructor, Reflective Journal Data)

According to the instructor, the language teaching approach had the potential to enable the students to use English as a means to learn the academic content. However, he did

not observe that students participated in each discussion section and formed interactions with one another using English.

“Due to the nature of the CBI approach adopted in the course material, students have found a chance to learn the academic content through using English as a vehicle. I believe this is making them happy and surprised at the same time. There are also discussion sections where they can normally interact with one another using English. Therefore, the course material itself can help them to develop their communicative competence. However, the students are mostly shy when they are supposed to speak in English. They do not form interactions with one another, either, mostly because of the online education as they do not see each other. Therefore, students cannot make use of the course material fully in terms of developing their communicative skills.” (Instructor, Reflective Journal Data)

The instructor thought that the syllabus employed to teach the course and to follow the course material met the academic and linguistic needs of the students.

“Each week, we are covering one unit and students are introduced to different topics related to the content while learning the topics in English. The syllabus is compatible with the English language program’s vision and mission as the program tries to provide an environment where students can learn and improve their English through absorbing content-related knowledge. In line with the syllabus, I observe that students are learning new content through texts and video materials and internalize the knowledge given. They are also expected to speak English meaningfully through exploiting the content.” (Instructor, Reflective Journal Data)

Lastly, the instructor evaluated the overall content of the course material as attractive, functional and helpful.

“The content of the course material provides the learners with some content-related knowledge, which is helpful for them to get to know some department-related issues in English. With the topic variety seen in the material, students are presented with different topics ranging from the history of computer and software technology to advanced topics such as robotics. Students can benefit from the content in different ways such as learning symbols and signs, or terminologies related to their academic interests. I also find the overall content attractive when the visuals used are taken into consideration. I believe the language level used in the course material appealed to the students’ proficiency level. With the content of the reading texts, the videos in the “Watching” parts, the “Writing” tasks and the discussion tasks enabling the students to improve their speaking skills, I believe the course material is

sufficient in terms of content and language teaching. However, some students seem to have moderate-level difficulty in some of the certain sections such as watching, and reading where they are expected to understand texts and videos presenting lots of technical terminologies. However, they do not show progress towards being motivated to speak in English.”
(Instructor, Reflective Journal Data)

To summarize the findings obtained from the instructor regarding the course material, it was noted that the material included useful and attractive design, layout and visuals that could support the learning process of the student. With the content provided, the course material might contribute to the students' academic, linguistic and intellectual needs.

Although there was enough material to be covered in the classroom settings, the course material could be used just for revision and self-study outside the classroom as it did not have any other supplementary materials accompanying it. Besides, there were consistent flow and transitions within one unit and among different units, resulting from the modular organization of the content in the material.

The approach utilized in the material might provide the students with the opportunity to use English as a means to learn the content presented. However, students showed reluctance to communicate and interact in English, the reason of which was attributed to the online education period by the instructor.

The syllabus was compatible with the English language program's vision and mission as the institution tried to teach contextualized English by making use of the sources in different academic areas, which the syllabus was organized into. Lastly, the instructor believed that the overall content of the course material could be helpful to the students in terms of content and language learning.

4.3. The Evaluations of the Students and the Instructor Regarding the In-Class Implementation of the CBI-oriented Course Material

The third and the fourth research questions investigate the evaluations of the students and the instructor of the course regarding the in-class implementation of the CBI-oriented course material. The findings obtained through the semi-structured interviews and the data kept by the researcher as the instructor of the course in the reflective journals have been used to answer this research question. The aforementioned findings demonstrate what the students and the instructor thought about the effects of the CBI-oriented course material on student motivation, its content knowledge teaching and its EFL teaching during the implementation of the course material in the lessons.

Table 12 shows the codes and the sub-codes that emerged during the analysis of the qualitative data concerning the evaluations of the students and of the instructor dealing with the in-class implementation of the course material.

Table 12

The Codes Related to the Qualitative Data on the Evaluations of the Students and the Instructor Regarding the In-Class Implementation of CBI-oriented Course Material

The Codes	The Sub-codes
	The Change in the Attitudes of the Students towards the Course Material
	The Dual Nature of the Course Material
Student Motivation	The Diverse Content in the Course Material
	The Visual Elements and the Tasks in the Course Material
	The Logic of CBI
	The Medium of Instruction being Turkish
	The Students' Difficulties in Speaking English
	The Effects of Distance Education
Teaching Content Knowledge	The Modular Organization of the Course Material
	The Content of Each Module
	Listening
	Reading
Teaching English	Writing
	Speaking
	Grammar
	Vocabulary

4.3.1. Student Motivation: This subsection demonstrates the qualitative reflective journal data and students' interview data concerning how motivated the students were in the course. According to the reflective journal data provided, students were withdrawn when they were first informed about the content of the course material:

"In the first lesson, I explained the requirements of the course and the content of the course material. They informed me that this was the first time they were presented with such a course. Some of the students later contacted me and asked me whether they could withdraw

from the course or not. Basically, they were afraid to get low grades as that was not going to be a mainstream English language course, and they did not think that their English level would be enough to follow the course material. Besides, their medium of instruction was in Turkish, which means that they had not been exposed to their academic content in English before. That could make them stressed out.” (Instructor, Reflective Journal Data)

Likewise, a student noted:

“I was a bit afraid when I saw the topics listed in the syllabus at the beginning of the term. We were going to cover this content in English, which I had never experienced before [...]” (Student 4)

However, following a couple of lessons in the first weeks, the instructor observed a moderate-level participation in the class:

“After a while, some students seemed to be more relaxed and started to ask some questions about the topics covered– in Turkish, however. They became curious about the topics such as history of the computer and software technology being presented at the beginning of the course material. In addition, learning the content in English seemed to be exciting for them, too.” (Instructor, Reflective Journal Data)

As said before, 9 students reported that they were very motivated. One student reported:

“The dual nature of the course material teaching both English and some related knowledge about my department seemed very practical and useful to me. When I talked about your course with my friends from other universities, I felt that they envied me, which I enjoyed a lot.” (Student 7)

The students’ interests and motivation levels were enhanced based on the diverse topics covered in the lessons. For example, the instructor noted:

“When a unit introduced a pioneer or an expert in the field of computer technology, and when they learned their life stories and some of the success strategies they followed, most of the students were observed to be more active and they started to share their own success strategies as if they had been the founder of the successful computer technology companies. I believe the key point here was to present them with useful information that they could enjoy and exploit for the sake of their own academic and professional growth. All of them seemed to

love their department and they admired the very successful programmers. I think the course material attracted their attention by providing them with detailed information about their role models and therefore motivated them more to attend” (Instructor, Reflective Journal Data)

On this issue, a student said:

“I was motivated in the course because we were covering some topics that attracted my attention. I like to learn something about people I love or admire. I admire Steve Jobs, who had problems with formal education as I do. It was really nice to see him in one of the units and learn interesting information about his life.” (Student 1)

After another lesson, the instructor revealed:

“This time, we touched upon the cyber pirates and the cyber-attacks in the unit. There was more excitement among the students than I had expected to see. The students started to relate themselves with the cyber pirates and criticized some of the descriptions of the cyber threats in the unit. They came up with different plans to hack a computer system using ransomware, malware and phishing, which were also in the content of the course material. Actually, I was a bit shocked to see their enjoyment while talking about gaining access to another’s device. When I shared my surprise with them, they said that they had to think as a cyber pirate would in order to take measures against them.” (Instructor, Reflective Journal Data)

Also discussed in the first section of this chapter, not only the content, but also the visual elements and the tasks in the course material enhanced their motivation and participation. The instructor also thought in this way:

“The Internet of Things (IoT) was not an unfamiliar topic to most of them because they were also covering similar technological concepts in their department. It is a technology that allows lots of devices to communicate and is extensively used in smart homes. In one of the units where the content was IoT, the students were supposed to match the illustrations of Harry Potter’s magical capabilities to the opportunities provided by the IoT technology. Most of the students reported that they were the fans of the Harry Potter series and it seemed that the task and the visuals attracted their attention and enhanced their motivation as well.” (Instructor, Reflective Journal Data)

A student also added that visuals used made the content easier to learn, too:

“The visuals helped me to increase my content knowledge and facilitated the learning process. Therefore, learning the content became easier.” (Student 3)

The instructor believed that it was the theoretical logic of CBI and the practical implementation of the course material that motivated the students most:

“Although this frightened them at the beginning of the course, after some time passed, it seemed that the most motivating factor for the students to follow the course while using the course material was the logic behind the CBI and the implementation of the CBI-oriented course material. They reported that they had never been exposed to such kind of English instruction where they could learn English and learn the academic content at the same time, which was new and seemed to be a promising way of learning English for them.” (Instructor, Reflective Journal Data)

Similar findings were obtained from the student interviews. Here is one excerpt:

“Although it was demanding to follow the course, I maintained my motivation level because the material was unique in nature in terms of both providing English and academic content education [...]” (Student 8)

The medium of instruction was Turkish in the students’ department. On the other hand, the instructor noted that learning the relevant content in English through CBI-oriented course material might have excited and motivated them. However, according to him, this brought its own challenges, too.

“Though the medium of instruction is Turkish in their department, most students are seen to be keen on learning the content in English and doing their best to participate actively in the lessons after covering a couple of lessons. Learning the content in English is a new opportunity for them. On the other hand, learning academic content in Turkish in their department might also be confusing, which may lead to a demotivating factor for them at the same time. They learned the related academic terminologies and issues in Turkish, and I think it has become a lot more difficult for them to relate these Turkish technical vocabulary items to their English counterparts, rather than just learning the English words from scratch. There may not always be one-to-one direct meaning between the words of different languages” (Instructor, Reflective Journal Data)

The instructor observed that students were not happy with the materials’ effectiveness on their speaking skills, which was of course a demotivating factor for them.

“There were some instances in some lessons where I was sure that the students fully understood the content and the instructions of the discussion tasks. However, they did not say anything and stayed silent. After I insisted that I needed to hear their replies, they told me that they could understand the content and my explanations, but could not speak English properly. Some even said that they were afraid to speak. Others advised me to modify the units so that there would be “Speaking” sections in each of the units. They do not think that the current organization of the material helps them with speaking English.” (Instructor, Reflective Journal Data)

On this issue, a student commented:

“In terms of speaking, the material did not help me, actually. I do not say the same for my improved vocabulary, grammar, and reading skills, though. I believe there was no emphasis on speaking as much as on the others in the course material. I did not see a specific “Speaking” part in the material.” (Student 2)

In addition, the instructor noted down the possible reasons why students had difficulties in speaking English:

“I think that the reason why students are having hard times to express themselves and to speak confidently could be related to the former English education, which could be of poor quality. In addition, they may not be improving their speaking skills in their department where the medium of instruction is Turkish. In addition, they think that the material does not promote their speaking skills, which could demotivate them a lot.” (Instructor, Reflective Journal Data)

Similarly, a student expressed:

“For speaking, all I can say is that my speaking skills are generally quite low. I do not blame the material or the course for this. I have been taking English lessons for more than 10 years. Now, who should we blame? You and your material, or my former teachers?” (Student 6)

The instructor also believed that the students could not fully make use of the course material to improve their speaking skills due to the online education policy implemented by the Rectorate:

“Due to the online education period, students could not fully benefit from each communication-based task. We simply skip the delivering presentations tasks, for example. Besides, since they were not in face-to-face classroom settings, they could not have enough chances to interact with one another. Therefore, most of them could not fight against their fears of speaking, which was one of the apparent demotivating aspects experienced.”
(Instructor, Reflective Journal Data)

Regarding this, a student reported:

“[...] The fact that the courses were held online may have affected this situation even worse. Maybe we could interact more if we were in the classroom setting.” (Student 3)

Both the instructor and the students thought that the course material enhanced the student motivation and participation through its useful and interesting content. The topics and issues also changed most of the students' earlier reactions regarding the course and the material in the first few weeks. In addition to the content, the interesting visuals were also evaluated to enhance students' motivation. However, according to the instructor, the most motivating factor for the students was the theoretical logic of CBI and the practical implementation of the course material, which was also interesting and exciting as this was their first time to learn content-related knowledge and English at the same time.

The instructor believed that the medium of instruction being Turkish in the students' department could have unmotivated the students as they needed to relate their knowledge in Turkish to that in English, which could yield inconveniences. Apart from this, according to the instructor's observations and the reports of some students, another demotivating factor for the students was that they thought the course material did not help them to enhance their speaking skills.

The instructor thought that the former poor English education students were exposed to and the medium of instruction of their department being Turkish might not allow them to improve their speaking skills. On the other hand, both the instructor and some students thought the online education policy implemented affected the course material's possible effectiveness on improving speaking skills of the students, which was very demotivating for the students in this sense.

4.3.2. Teaching Content Knowledge: This subsection shows the qualitative reflective journal data and students' interview data regarding the course material's content knowledge teaching.

According to the instructor, the units discuss certain basic issues related to the engineering field in general, computer hardware, software technology, the history of computer technology, and its possible future, the pioneers and experts in the field, their contributions to computer technology and their success stories and recommendations, and some advanced areas such as computer networking, cybersecurity and robotics.

The instructor believed that it was a good idea to categorize the topics of the units into certain broad headings:

“The course material has 12 units in total which was categorized into 4 broad headings, which are engineering and computers, the history and the future of computer technology, pioneers in the field and some advanced areas in computer technology. During the preparation process of the course material, categorization of the topics seemed a necessity, so that the students could associate the topics and the issues within each heading called modules.” (Instructor, Reflective Journal Data)

A student commented:

“The material had consistent units shown in relevant modules [...]” (Student 2)

In the first few weeks, the first module was presented to the students and the students started to learn the basics related to engineering and computers:

“The first module firstly touched upon the engineering field in general which provided the students with some basic knowledge about different branches of engineering and basic job requirements that are normally imposed in different engineering areas. The students also learned the different responsibilities of the engineers working in different sectors, which aimed to provide them with sufficient knowledge about their own and other engineers' future work lives. Then, the module gave more specific knowledge about computers, the hardware and the software such as the central processing unit, the widespread software applications used, and the operating systems.” (Instructor, Reflective Journal Data)

The instructor believed that although it was a good idea to start with covering the basics related to computers and the software, some additional knowledge such as different

branches of engineering and hardware could make the software engineering students feel bored:

“I do not claim that the knowledge related to different engineering responsibilities and some additional knowledge related to the hardware components of a computer were unnecessary. As the developer of the material, I still insist that a software engineering student should learn and know the basics related to computers and its history. However, while covering the hardware components of an ordinary computer in one of the units, one student asked me whether they would be responsible for these parts in the midterm and the final exam. My reply was “Yes, of course.” He became surprised and said that it would be great if they were expected to know the parts dealing with software technology only as their department was software engineering.” (Instructor, Reflective Journal Data)

Related to this, a student commented:

“It was quite understandable to start with general information and move towards learning more specific content. However, some topics and issues were not so related to my department, sir. For example, I do not think I needed to learn the hardware components.” (Student 4)

The second module is about the history and the future of computer technology. The instructor thought that teaching the past, the present and the future of the content area would give the students some vision.

“The students got to know the different generations of computers starting from the 1940s to the present time, all of which utilized different technological components such as vacuum tube technology, the microprocesses, and artificial intelligence. It seemed quite informative for them to see the whole technological developments that had occurred. By this way, they could understand better how room-size computers could become desktops and laptops, and also how they will become intelligent agents such as robots.” (Instructor, Reflective Journal Data)

Regarding this, a student commented on his interest in learning the history of technology, without talking about any aptitude for its future use, though.

“[...] For example, I am highly interested in the history of computers and technology. Because I want to understand what happened in the past and how they used very big computers in the Second World War.” (Student 6)

On the other hand, another student found presenting the computer hardware and the history of computer technology irrelevant:

“[...] In your course, we also discussed topics that were not directly related to my field, such as computer hardware and the history of computer technology.” (Student 3)

The third module introduced some renowned experts in the field of computer technology. Although the module did not provide technical knowledge, the instructor thought that it was a good idea to introduce some famous characters to them as they could be role models for the students.

“The unit covering the life of Bill Gates included some information regarding his success strategies that he normally implemented for business and life in general. I am quite happy to witness that some students added their own strategies to the list in the unit.” (Instructor, Reflective Journal Data)

“It was also nice to inform the students that Bill Gates and his wife Melinda Gates established a foundation called “Bill & Melinda Gates Foundation”, which provided social and financial help to those people in developing countries.” (Instructor, Reflective Journal Data).

One student said:

“In one of the tasks, we were assigned to send an email to Bill & Melinda Gates Foundation in order to ask our personal questions to them. My question was about how we could teach kids coding and programming more efficiently.” (Student 8)

In the fourth module, which is the last module in the course material, the topics computer networking, cybersecurity and robotics were introduced. The instructor believed that students needed to learn the content of such kinds of advanced topics in order to get excited and to visualize themselves working in these fields.

“After the third module which yields some information about the life stories of famous technology experts, students needed to learn something more content-specific, something that they could encounter in their academic and professional lives. The fourth module firstly touched upon different computer networks which enabled technological devices to interact with one another using different software infrastructures. Then, the module gave specific examples related to the malicious software and how to avoid them in the unit

“Cybersecurity”. Lastly, the students learned the concept of intelligence and how that concept can be used with technological agents in the unit “Robotics”. I believe that all these concepts and issues discussed in English were very useful for the students in order to get to know the advanced topics in the field.” (Instructor, Reflective Journal Data)

A student expressed:

“[...] I liked the last module most as this was the part that showed the advanced topics in computer and software technology. I will be delighted to work in the field of Artificial Intelligence. Therefore, the robot "Sophia" presented in the unit "Robotics" excited me a lot.” (Student 10)

As can be understood, the modular content of the course material delves into basics and the advanced topics in the field of computer and software technology. While covering the course material, the students might have been a bit bored with certain topics that they thought unnecessary to learn in the first module although the instructor did find these topics necessary for the students to learn. The second module, on the other hand, provided the students with the past, the present and the future of the content area, so that they could see the development that occurred more clearly. By informing them about certain characteristics and the story lives of some famous experts in the field, the third module presented the students with certain content that could inspire them with the role models introduced. Lastly, in the fourth module, the content presented was expected to motivate the students with the issues discussed, as these issues were highly sophisticated.

4.3.3. Teaching English: This subsection shows the qualitative reflective journal data and students’ interview data regarding the course material’s EFL teaching.

In terms of teaching listening, videos with authentic and contextualized content are utilized in the course material. The videos are presented under the “Watching” sections in the units and are always followed by related tasks. The scope of the tasks is generally structured into listening for general information to enable the learners to grasp the main idea of the auditory and the visual content and listening for specific information to have them pay attention to specific points in the affiliated videos. The instructor noted:

“It was quite beneficial for the students to do watching tasks. The students were asked either to provide specific information such as the dates of certain technologies used in different generations of computers in the fill-in-the-blank activities, or to circle the main idea

of the content presented in the videos in multiple-choice questions such as the gist describing the aim of the message given in the video. In the activities, the students were mostly provided with relevant visuals so that they could be sure about what was expected from them.”

(Instructor, Reflective Journal Data)

Regarding the visuals used in the “Watching” sections, one student commented:

“The visuals were very helpful to understand the topic, the instructions and the tasks. Especially, the visuals used in the "Watching" tasks were taken from the videos so that we could work on the specific points asked in the questions.” (Student 4)

In addition, students found the listening activities quite sufficient and satisfactory. Here is a sample excerpt:

“In my opinion, the videos were very helpful for me to improve my listening skills. We covered lots of topics through the videos, which also provided visual content. For example, the video on what happened to the character after he was attacked by the cyber pirates was funny and informative about the possible incidents. We matched the pictures taken from the videos to the related explanations in the relevant task that followed.” (Student 1)

In the “Reading” sections, much of the content is presented using authentic texts with different sources. Therefore, it was quite important for the students to understand them. To improve their reading skills, most of the affiliated tasks were structured into questioning both the general and specific information as in the listening tasks. The instructor informed:

“The reading sections tried to raise students’ attention with the help of pre-reading tasks mostly provided in the “Warm-up” parts asking them some preliminary questions regarding the topic to be covered. Firstly, students were asked to skim the text so that they could get the gist of the content. In the first reading task, students were asked about the general questions such as the main idea of the text. These tasks were generally in the type of multiple-choice or open-ended questions. After the general information was discussed, the students were asked again to scan the text to find the specific information questioned in the second reading task. For example, the first reading task asked the students to match the headings with the relevant paragraphs about different computer networks. In the second reading task, however, students were asked about the specific types of the computer networks based on the given situations such as the size of the locations. Mostly, we read the texts very carefully to talk about and to discuss the content.” (Instructor, Reflective Journal Data)

Students also reported their evaluations regarding the reading texts. Here is a sample excerpt:

“The reading parts were the sections that included most of the content. In addition, they were the parts that I studied the most for the exams. I did not have too much difficulty in answering the reading tasks as we learned where to look at the texts to find the answers over time.” (Student 10)

There are no “Writing” sections in each unit in the course material. However, students were presented with the knowledge on the organization of a paragraph such as how to write the topic sentence, the supporting sentences and the concluding sentence. In certain units, students were expected to write paragraphs on the topics covered. For example, the instructor noted:

“After we covered the success strategies Bill Gates used in his professional life, students were asked to write a paragraph describing Bill Gates’ success strategies in their own words. They had to start with a topic sentence. Then, for each success strategy, they needed to come up with a supporting sentence and an example. Lastly, they had to write a concluding sentence that would end the paragraph. With these tasks, I wanted to make sure that students could internalize the content knowledge and paraphrase it with their own words and express it in an academic way. However, this material did not provide any further information about how to write an essay. When their level of English is considered, this is not a problem, I think. They needed to learn how to write a paragraph academically in the first place, rather than starting with working on an essay.” (Instructor, Reflective Journal Data)

Similarly, a student noted:

“Sir, after your course, I learned how to write a paragraph properly. Now, I always start with the topic sentence to introduce the topic, then write the supporting sentences to exemplify the issue, and write the concluding sentence to wrap up the paragraph.” (Student 7)

There is not any separate “Speaking” section in the course material. Students also reported that the course material did not help them to improve their speaking skills. On the other hand, the instructor expressed that in certain tasks, the students were expected to deliver presentations on the topics covered, which unfortunately had to be skipped because of the online education policy, as mentioned before. In addition, there were brainstorming tasks that needed to be completed by interacting using English. Regarding this, the instructor noted:

“In the material, there are sections in each unit titled “Warm-up”, “Reading”, “Watching”, “Grammar”, “Vocabulary” and in some units titled “Real-life Task”, “Writing” and “Everyday Conversation”. However, there is not a separate “Speaking” section, which might lead the students to think that the material does not help them to improve their speaking skills. Actually, the material has certain task types assigning students some homework such as delivering a presentation in the next lesson, group-work discussion activities or brainstorming parts where students are normally supposed to reflect on their old and new knowledge. However, we skipped the presentation tasks due to the online education policy. Also, they may not have benefitted from the discussion tasks as they did not engage in interactions with one another sufficiently probably because they did not see one another. Besides, when the students participated in these interactive tasks, they mostly preferred to use Turkish. I believe that this could be related to their own personal characteristics and insufficient prior English education. However, I believe they would have enjoyed interacting with one another if they had been in face-to-face classroom settings. Actually, I do not think that the material normally lacks communication-based scope and tasks.” (Instructor, Reflective Journal Data)

As mentioned before, the student interview data provided evaluations of the students in terms of speaking in this regard. Here are some more sample excerpts:

“I did not find the course material useful to improve my speaking skills. There were some discussion tasks in the material, yes. But I cannot speak English. Therefore, I could not participate in these discussion parts actively.” (Student 8)

“[...] I could not improve my speaking skills after your lessons, unfortunately. That might be partly related to online teaching as we were not in a real classroom and could not communicate with one another.” (Student 9)

“This was the first time I learned department-related knowledge in English. Therefore, I had difficulty expressing what I was learning in English again. The material might have helped my other friends in terms of speaking. But it did not help me, actually.” (Student 10)

In terms of teaching grammar, the instructor admitted that the course material did not mediate meaning-based language teaching:

“I have to admit that the course material employs form-focused instruction in terms of grammar teaching. While developing the units in the material, I firstly provided the related grammar rules and then some grammatical explanations for each grammar point followed by examples. Then the students were presented with the grammar tasks most of which were of fill-in-the blank type. Sometimes the students were expected to write their own sentences using the rules provided. The grammar sections in the course material did not promote forming interactions among the students, which could be one of the drawbacks of the course material.” (Instructor, Reflective Journal Data)

There were 3 other negative comments from the students about form-focused grammar instruction which were already shared before. On the other hand, a student talked about the form-focused grammar teaching employed, which she found enjoyable, though:

“I really liked the grammar sections as they were like a math problem. We applied the rules given in the tasks. On paper, I am better in English, compared to my communication skills.” (Student 2)

For vocabulary teaching, the instructor noted:

“While designing the course material, creating a word-rich environment was taken into consideration. The material provided the students with technical or content-related terminology that they needed to pay careful attention to. In each cover page of the units, certain words related to that specific unit were listed as “Key Concepts”. In this way, I tried to draw students’ attention. Some of the vocabulary items were introduced in the glossary parts placed next to the content presented such as those in the reading texts. Others were introduced after the content was covered, mostly placed below the related sections. Most of the time, the students needed to match the vocabulary items to their definitions or circle the options that showed the synonyms or related explanations of the items to be learned. On the other hand, there were separate “Vocabulary” sections at the end of each unit. In this part, students were asked to solve word-search puzzles, to provide the missing letters in each vocabulary item matched to their definitions, or to unscramble the words that were written incorrectly on purpose. I believe students were having the chance to learn lots of words related to the content presented.” (Instructor, Reflective Journal Data)

As mentioned before, students were quite positive about vocabulary teaching of the course material. Here is one more sample excerpt from the students’ interview data:

“Vocabulary tasks were the most enjoyable parts for me. My favorite was “unscrambling” the words. I know that I learned lots of words in the “Vocabulary” sections and in other parts in the whole course material.” (Student 8)

The findings obtained through the semi-structured interviews and reflective journal show the evaluations of the students and the instructor regarding the course material’s EFL teaching. It can be said that authentic and contextualized content was presented to the students in the listening and reading sections which addressed general and specific information questions to the students.

The writing tasks generally required reflecting on what had been covered by making use of the academic paragraph organization rules. The focus was to enrich students’ writing skills through paragraph tasks. On the other hand, they were not presented with essay types and tasks, which was consistent based on students’ level of English.

As seen above, the students did not encounter any separate “Speaking” sections in the course material, which could lead them to suppose that the course material did not give enough emphasis on speaking. However, there were lots of brainstorming and discussion parts that required interaction. Therefore, according to the instructor, the course material offered the students the opportunities to improve their communicative competencies although most of the students did not participate in these brainstorming and discussion tasks probably as they could not see one another face-to-face. In addition, there were delivering presentation tasks that, unfortunately, had to be skipped because of the online education policy. Therefore, the instructor thought that the students could not make use of the course material to improve their speaking skills, an assertion supported by student interview data, too.

The instructor noted that the course material uses form-focused instruction in terms of grammar teaching. In other words, the students were provided with grammar rules, certain grammar explanations and rule-based examples and tasks. These tasks mostly asked students to apply the grammatical rules which had been just introduced in the blanks provided. However, the grammar sections do not put enough importance on communicative grammar instruction. For vocabulary teaching, on the other hand, the course material lists key concepts on the cover page of each unit to get the students accustomed to the mostly-used vocabulary items. Some of the words are presented in the glossary boxes placed next to the content presented. In addition, certain vocabulary tasks were given after some content is presented as a follow-up activity. The course material also presents a separate “Vocabulary” section at the

end of each unit, where students solved word-search puzzles, unscrambled the vocabulary items questioned, and provided the missing letters of the words shown. Therefore, the instructor believed that students had lots of opportunities to learn content-specific academic words in the course material.

4.4. The Effects of the CBI-oriented Course Material on Students' English Language Skills

The fifth research question explores the effects of the CBI-oriented course material on the students' English language skills. In addition to the qualitative data obtained from the students and the instructor on this issue as shown in the previous sections, the quantitative data were utilized to see whether the course material affected the English language skills of the students. These data were obtained through the pre- and post-Placement Tests administered at the beginning and at the end of the semester. The results of the paired samples t-test of the pre- and post-placement scores have been tabulated below.

Table 13

The Results of the Paired Samples t-tests of the Pre- and Post-Placement Scores of the Students

	Test	M	SD	t	df	p *
Language ^a	pre-test	23.08	4.75	-18.57	39	<.001
	post-test	52.95	10.50			
Writing ^b	pre-test	11.83	4.13	-17.47	39	<.001
	post-test	22.13	3.78			
Total ^c	pre-test	34.91	7.83	-20.08	39	<.001
	post-test	75.08	13.68			

*p < 0.05 (two-tailed); ^a out of 70; ^b out of 30; ^c out of 100

As understood from the table seen above, there is a significant difference between the pre- and post-Placement Tests. The reader can analyze the change in the score performance in the "Language" part and in the "Writing" part. The "Total" part exhibits the whole change seen between the pre- and the post-tests. It can be suggested based on these data that there is a significant difference between the scores of the students in the tests administered ($t=-20.078$, $p<.001$, $p<0.05$).

As the students scored much higher in the post-test ($M=75.08$) compared to the pre-test ($M=34.91$), one can conclude that the CBI-oriented course material and its implementation in the classroom settings have a significant positive impact on the students' English language skills. However, it must be mentioned that the Placement Test included

grammar, vocabulary, reading and writing parts. In other words, the test did not assess the students' listening and speaking performance. Therefore, the contributions of the course material to the students' listening and speaking skills can only be evaluated based on the quantitative data obtained through the questionnaire, and the qualitative data obtained through the semi-structured interviews and the reflective journals kept by the researcher.

The quantitative data from the questionnaire show that students thought the course material offered sufficient listening but insufficient speaking skills. Likewise, according to the qualitative data, most of the students were satisfied with the effects of the course material on their listening skills. However, they thought the course material and the course itself did not help them to improve their speaking skills. These qualitative data have already been demonstrated in this chapter.

4.5. The Effects of the CBI-oriented Course Material on Students' Content Knowledge

The sixth research question, namely the last research question, investigates the effects of the CBI-oriented course material on students' content knowledge. In addition to the qualitative data obtained from the students and the instructor on this issue as shown in the previous sections, the scores of the students in the content sections in the midterm and final exams were utilized, which means that the type of the data used to answer this research question was quantitative.

The content knowledge was assessed in the "Content" sections in the midterm and the final exams. In other words, students were asked questions related to what they had learned about their academic areas in the units. The maximum points a student could get was 35 from the "Content" section per the exam administered. In these sections, there were matching, multiple choice, true-false and open-ended questions related to the content.

The mean scores of the points students got from the content sections in both of the exams and their equivalent percentages out of the total 35 points have been tabulated below.

Table 14

The Scores of the Students Obtained in the Content Sections in the Midterm and Final Exams

Content Score	M	Percentage	SD	N
Midterm *	20.40	58.29%	6.68	40
Final *	30.33	86.66%	8.15	40
Average *	25.37	72.49%	7.02	2

*out of 35 points

According to the data shown in Table 10, the rate of the students' success in the content section in the midterm exam is 58.29% with a mean score of 20.40. In the final exam, it is 86.66% with a mean score of 30.33. The average point of the mean scores obtained in the content section in both the midterm and the final exam is 25.37, which equals 72.49% of the total score 35. Based on the data provided, one can assert that students were successful and learned much of the content after the implementation of the CBI-oriented course material in the lesson.

Apart from the quantitative data seen above, in order to evaluate the effects of the course material on content learning and teaching, one can also analyze the qualitative data yielding satisfaction reports from the students and the instructor. These data inform the reader that students found the variety of content sufficient and most of them acknowledged that they had learned academic content related to their department. These data have already been demonstrated in this chapter.

4.6. Summary and Conclusions

In this thesis study which aimed to provide the evaluations of the software engineering students and the instructor regarding the effectiveness of the CBI-oriented course material and its in-class implementation in various aspects, different data collection tools were employed.

The quantitative data were gathered through the Materials Evaluation Questionnaire (Işık & Altıncı, 2010) to explore the evaluations of the students on the course material in question. What's more, in order to triangulate the data obtained, the researcher also benefited from the qualitative data. The students were interviewed so that their evaluations about the material and its in-class implementation were discovered. Reflective journals kept by the researcher as the instructor of the course were also used to provide additional information regarding his evaluations on the course material and its in-class implementation.

Along with the relevant qualitative data to address the effects of the course material on students' English language skills and content knowledge, quantitative data were also used. The mean scores obtained in the pre- and post-Placement Tests administered at the beginning and at the end of the semester were compared using the paired samples t-test to show the material's effects on the students' English language skills. On the other hand, the mean scores obtained in the "Content" sections in the midterm and the final exams were used to show the material's effects on the students' content knowledge.

According to the data obtained through the questionnaire, the students found the general appearance of the course material – apart from the information provided on the back cover page - and the student-related factors in the course material sufficient. In terms of the course duration, they thought that there was enough content to be covered in the classroom settings, but not enough content in the course material for use outside the classroom. They also found the general organization of the material, the language teaching approach employed in the material and the syllabus-related factors sufficient. In terms of the content-related factors, however, they thought the course material could not offer all language skills equally, and did not help them to improve their speaking skills. Besides, according to the students, the course material did not offer them sufficient assessment and evaluation tools, and they did not find the revision units sufficient, as well. Lastly, they thought that the course material partially motivated them for out-of-class learning. The other items in the “Content” factor including items about content learning and offering English language skills were evaluated positively. The qualitative data obtained from the semi-structured interviews and reflective journals showed similar findings in terms of the students’ and the instructor’s evaluations regarding the course material and its in-class implementation.

According to the quantitative data obtained through the pre- and post-Placement Test, the course material had a great impact on the students’ grammar and vocabulary learning, and their reading and writing skills. However, the test did not assess their listening and speaking skills, the former of which were reported to be improved, but the latter of which were not according to the qualitative data that the researcher got from the interviews, and according to his observations reflected in the journals.

For the effects of the course material and its in-class implementation on the students’ content learning, the quantitative data obtained by the students in the “Content” sections in both midterm and the final exams showed a success. Similar findings were also reported in the qualitative data, too.

In conclusion, the material and its in-class implementation were generally evaluated as sufficient by the students and the instructor. The course material and the course itself had positive impacts on the students’ content learning and English language skills. However, according to the quantitative data obtained through the questionnaire and to the qualitative data obtained through the semi-structured interviews and the reflective journals kept by the researcher as the instructor of the course, their speaking skills were not reported to be

enhanced after the course material was used in the course. Nearly all of the students complained that the course material did not help them to improve their speaking skills. Some of them also mentioned the negative effects of the mandatory online education on forming interactions using English in the lessons. Others, on the other hand, blamed their prior English education which they regarded as insufficient for the problems they faced in terms of speaking English during the lessons.

CHAPTER 5

DISCUSSION

This chapter discusses the major findings obtained for each research question addressed in this thesis study. In the chapter, the findings are discussed with the support of the research in the related literature.

5.1. Discussion on the Evaluations of the Students and the Instructor Regarding the CBI-oriented Course Material

The first research question investigates the evaluations of the students regarding the effectiveness of the CBI-oriented course material and the second one explores the instructor's evaluations regarding the same issue. The first and the second research questions are given below:

RQ1: What are the evaluations of the software engineering students regarding the CBI-oriented course material?

RQ2: What are the evaluations of the instructor regarding the CBI-oriented course material?

In order to collect data from the students to find answers to the first question, Materials Evaluation Questionnaire (Işık & Altıncı, 2010) and semi-structured interviews were employed. In addition, for the second research question, the researcher as the instructor of the course provided his own evaluations and observations through the reflective journals kept by him. This section demonstrates the discussion of these findings with the support of the relevant research.

The first factor of the Materials Evaluation Questionnaire has 7 items and explores the evaluations of the participants regarding the general appearance of the course materials evaluated. More specifically, this factor investigates how the participants evaluate the information provided on the front cover, on the back cover, how the table of contents are listed and designed, how the page layout is prepared and used, the font, size and the type used, the pictures, graphs, and the tables, and the quantity and quality of the authentic texts in the course materials. In addition, the reflective journals and the semi-structured interview data also reported the evaluations of the instructor and the students regarding the general

appearance of the course material such as its physical features, its design, the font size, the quality of the authentic texts and the layout used in the material.

According to the quantitative and qualitative data obtained, the students were quite satisfied with the general appearance of the course material. In addition, they reported that the visuals, the font size, the layout and the design of the units helped them to make use of the course material more, and therefore to learn the content in a better way. Students also found the quantity and quality of the authentic texts sufficient. The only aspect that was evaluated negatively regarding the general appearance was the information provided on the back cover, which does not include any further information, but demonstrates only a computer-generated image depicting four workers working on a circuit and on other related hardware components. Other than this, each item explained above was found to be sufficient.

The instructor also found the general appearance and the physical features of the course material sufficient. According to him, the course material has an attractive design, and offered authentic content which was prepared meticulously by him. Therefore, he was quite happy with the quantity and quality of the authentic texts.

Parallel to these findings, it should be noted that the quality and the attractiveness of the general appearance of any course material is crucial to determine the first impression of the students as they form their first impressions based on the physical features of the materials rather than the content in the first place (Sarem et al., 2013). In addition, according to Tomlinson (1998), with the help of carefully considered design and appealing visuals, it is possible to capture students' attention and their interests in foreign language classrooms. Therefore, the general physical appearance of language materials is of great importance to attract the students. Considering the results obtained on the evaluations of the students on the back cover of the material, certain revisions such as utilizing a better image and adding some further information about the course material on the back cover could be planned.

Little and Singleton (1988) note that the authentic text is a non-pedagogical text that was prepared or written with a special purpose to address the needs of the readers in terms of mediating meaning and extracting contextualized concepts, thereby allowing foreign language learners to enhance their communicative and cultural competences. According to Richards and Rodgers (2001), CBI materials allow the learners to interact with authentic and contextualized content so that they can improve their linguistic and academic skills. Therefore, supported by these views, it can be stated that the CBI-oriented course material

evaluated in this study provided the learner with an opportunity to use English purposefully, conforming to the challenging expectations in their academic areas.

The second factor of the questionnaire deals with the student-related factors and includes 11 items. The factor questions the ability of the materials to foster student-centered teaching, to contribute to students' cognitive growth, to present appropriate content to students' background knowledge, to enable the students to use the material easily, to motivate the students, to appeal the students with different interests, teach the target language by taking the proficiency level of the students into account, to lead the learners to study the target language, to encourage them to do research, to give them learning responsibility, and to allow them to evaluate themselves. On the other hand, the interview questions explored the evaluations of the students regarding the material's ability to motivate the students, to enhance their autonomy, and the appropriateness of the English level in the material to the proficiency level of the students.

According to the quantitative data obtained from the students, all of the items in this factor were evaluated positively. In addition, the instructor found the student-related factors in the material sufficient, too. During the interview sessions, the great majority of the students reported that the material motivated them due to a variety of reasons such as the logic behind the content of the material and the visuals used in the material. The instructor also mentioned the same observation, which can be supported by the reports of Dupuy (2000), and Sylvén and Tompson (2015) who point out that the content presented in CBI classrooms enhance the level of motivation along with providing the students with an effective learning atmosphere. Besides, Dalton-Puffer et al. (2009) report that the variety of content presented in carefully-designed CBI materials and programs increase student motivation a lot.

In addition, it is seen that the students were also satisfied with the cognitive growth they experienced while using the course material, which the instructor agreed with. In line with this finding, Bulon (2020) claims that students tend to enjoy the cognitive load of the CBI programs when they discover that their future aims might be met thanks to the academic and linguistic gains they are provided with. Therefore, it can be stated that learning a foreign language in the context of any content related to the learners' academic interests enriches students intellectually and academically, thereby contributing to their cognitive growth by stimulating their specialized knowledge in the content area and allowing them to improve their foreign language skills at the same time (Kennedy, 2006).

The quantitative data showed that the course material was found to be sufficient enough to foster student-centered teaching, which is a term that is widely used to describe those approaches shifting the focus from the instructor to the pupils in the teaching and learning process (Jones, 2007). Here, it should be pointed out that the CBI-oriented course material evaluated in this study allowed the students to be active and to give them more responsibility and to make them more autonomous, which was another issue to be investigated in the questionnaire and the interview sessions.

All of the students and the instructor expressed that the CBI-oriented course material enhanced students' autonomy, and the content of the material and the requirements of the course actually required them to be more active in order to be successful in making use of the material and the course itself. Regarding this issue, it is already known that CBI students improve their critical thinking skills and act more autonomously while learning the content presented, which increases their motivation at the same time (Morioka, 2007).

Some of the students attributed this role of the material to the discussion and brainstorming activities, while others believed that they had to be more autonomous and had to be self-regulated to learn the academic content knowledge and to learn English at the same time. Therefore, it could be noted that students were highly engaged in the lessons since their autonomy was enhanced by the course material, supported by Carrell and Carson (1997) who note that CBI lessons provide engaging and sophisticated content to the learners, who become more autonomous and motivated over time. In addition, most of them reported that the projects assigned to them in some tasks also helped them to be more engaged and autonomous as they had to do additional research and discuss the issues among one another. Therefore, it could be stated that the students took charge of their own learning to a certain extent, which is in line with the views of Holec (1981) who regards learner autonomy as a capacity to direct one's own learning process in an independent way.

Lastly, in the second factor of the questionnaire, the compatibility of the English level to the proficiency level of the students was evaluated. Both the quantitative and qualitative data obtained through the questionnaire, the interviews, and the instructor's reflective journal showed that the great majority of the students did not have difficulty understanding the content of the material. Some of the participants also informed the researcher that the level of English used in the material was a bit above their own proficiency level, though. However, according to the data obtained from the students and the instructor, no serious language gap

was reported or observed. This finding is especially important as CBI materials must appeal to students' linguistic levels as they are expected to accomplish content mastery through understanding the topics covered (Lo, 2015).

On the other hand, most of the students reported the challenges they faced due to the technical terminology they did not know the meaning of. The same was reflected in the instructor's journal. According to Mahraj (2018), teaching technical vocabulary is highly important in EST courses and they could be taught in a better way by recognizing the needs of the students and their background knowledge in the target language. However, since the instructor developed the materials before the participant students took the course, the instructor had the only chance to observe them and to estimate the level of their background knowledge during the course. Therefore, the instructor had to give much more emphasis on teaching the technical vocabulary items such as giving additional examples using the target vocabulary items, and encouraging the students to revise the items as much as possible.

The third factor in the questionnaire has only 2 items and investigates the evaluations of the participants regarding the suitability of the material for use in the classroom settings during the course duration, and its suitability for use outside of the classroom.

The data obtained from the students and the instructor revealed that both the students and the instructor found the suitability of the material for use in classroom settings during course duration sufficient. The suitability of any language learning material for use in classroom settings to the course duration is highly important, an assertion supported by Işık (1995) who comes up with a guide that can be utilized in material development stages and states that careful attention should be given to determine the quality and quantity of the content presented in the language materials for use in classroom settings. This means that the content is to be covered sufficiently in a limited period of time by making sure that students absorb the material sufficiently in the lessons. In the CBI-oriented ESP course, the necessary attention was paid to the learning progress of the students during the lessons.

On the other hand, neither the questionnaire nor the interview data – except for only a little - shows that students were satisfied with the quantity of materials for use outside the classroom throughout the course. In his journals, the instructor also noted that this is one of the drawbacks of the course material as it did not offer enough content to direct the students to out-of-class experiences and practices which were reported to provide students with lots of advantages in terms of their linguistic development (Sundqvist, 2011).

Actually, this seemed to be surprising considering that the material offered authentic texts, assigned some projects requiring additional research, and enhanced student autonomy as stated above. Although the material offered content that was evaluated to be interesting by the students and the instructor according to the data collected, the course material did not have any additional accompanying materials such as a workbook, a software program or an LMS system specifically developed for the context the content of the course material was based on. Therefore, developing supplementary materials could be considered as they are known to facilitate out-of-class learning. For example, in a study conducted by Lai et al. (2015) to determine the advantages of out-of-class practices, it is pointed out that one participant student expressed the importance of supplementary educational CDs s/he was provided with to review the vocabulary items in the textbook and to practice his/her listening skills outside the classroom.

The fourth factor of the questionnaire has 5 items in total and questions the evaluations of the participants regarding the organization of the course material evaluated. Specifically, the factor collected data about overall syllabus organization, flow and layout of units, transition between the parts of a unit and intensity of the material.

The quantitative data from the students showed that all of the items in this factor were found to be sufficient. The qualitative data obtained from the students and the instructor also revealed similar findings. The material was reported to employ a carefully-designed syllabus, to show consistency and transitions between different sections within a unit, between different units, and between different modules. Regarding this, it is noted that in order for a language program or a course to be effective, carefully-developed syllabi come to the fore (Croxtton, 2014; Hawkins et al., 2013; Masters & Oberprieler, 2004). Similarly, Işık (2018) states that effective foreign language materials should give utmost importance on the transitions and consistency while presenting its content. Moreover, in a study conducted by Kara (2019), one of the participants was reported to mention the need of adding appropriate transitions in the coursebook evaluated in order to increase its efficiency as that material was problematic in terms of the activities it offered. In addition, both the majority of the students and the instructor provided positive comments regarding the intensity of the course material. It is seen that students enjoyed the lessons as they were not presented with too much intense content. Paying attention to the intensity of the content in ELT materials is highly important as students might be bored and overwhelmed with and unmotivated by those offering too much intense content (Kruk & Zawodniak, 2018).

The fifth factor of the questionnaire has nine items and evaluates the course materials in terms of the language teaching approach employed. More specifically, in this study, the factor investigated students' evaluations regarding the language teaching approach and the methodology employed, its support for rich linguistic and socio-cultural perspective, its approach to language forms and its ability to teach English while relating to their other courses. The quantitative data obtained from the students demonstrated that all of the items were found to be sufficient by them. The CBI-oriented course material used an approach by which students can improve their English through the academic content presented. In other words, they had an opportunity to use the language in a meaningful and purposeful way. In line with this, CBI students were generally observed to be quite satisfied with the approach and the methodology employed in their programs as the integration of the language and content together with meaningful and purposeful activities were reported to attract students' attentions and make them more satisfied compared to their counterparts offered mainstream foreign language education (Işık, 2022). Also, content-language integration providing meaning-based language activities could be supported by the views of Krashen (1985) who asserts that comprehensible input given to the learners in the form of content mediates meaningful use of language in foreign language classrooms.

The instructor noted that the course material had a potential to increase the students' communicative competences through the discussion sections and the brainstorming tasks asking them to form interactions with one another. As stated above, some students attributed the positive effects of the course material on their autonomy to the discussion parts where they felt more responsibility to attend the lessons and to discuss the topics, and express themselves in a more academic manner. However, it was observed by the instructor that students seemed to be withdrawn and shy when it came to speaking English. Therefore, according to the instructor, the students could not make use of the material fully to improve their communicative competences.

Some students blamed their prior English education for their poor speaking skills. Actually, as mentioned before, Coskun (2016) lists several reasons giving rise to the problems Turkish high school students experience in terms of speaking English. For example, form-based grammar instruction, the syntactic and lexical differences the English and Turkish languages exhibit, having no experience in a foreign country, no sufficient focus in interactional activities in English lessons, lack of speaking opportunities outside of the lessons, and English teachers using Turkish during the courses were those identified.

In addition, most of them refrained from forming interactions as well. The instructor thought that this was mostly due to the mandatory online education. In the literature, similar assumptions were also mentioned. For example, students were reported to feel isolated (Serçemeli & Kurnaz, 2020), and go through some problems related to forming interactions (Taşçı, 2021), be devoid of adequate learning experience (Muthuprasad et al., 2021), and experience insufficiency in using educational materials (Taşçı, 2021) in online education.

According to the interview data, most of the students thought that the content presented in the course material correlated with the content presented in the other courses they were taking. However, the course material was not found to be sufficiently related to the content presented in the software engineering department, in which the participant students were studying. The course material was prepared for both computer and software engineering students, and therefore, offered relevant content encompassing some of the topics of both of the departments. In other words, the participant students were sometimes addressed the technical terminologies or topics affiliated with the context of the computer engineering area, too. As seen here, this might be a problem for some of the learners as CBI materials should be diligently gauged by taking attention to the majors of the learner group in order to increase student satisfaction, motivation and success (Işık, 2022). Therefore, revisions such as developing specific and separate CBI materials for each of the software and computer engineering departments should also be considered.

The sixth factor of the questionnaire has 6 items in total and assesses the course materials in terms of the compatibility with academic vision, program mission, language program goals, whether they meet the student needs, compatibility with teaching English for academic purposes and meeting institutional expectations and needs.

The quantitative data obtained through the questionnaire showed that all of the items were found to be sufficient. The qualitative data obtained from the instructor's reflective journals also demonstrated that in the CBI-oriented ESP course, students were supposed to absorb new content-related knowledge, especially given through authentic reading texts and video materials while having a chance to learn and improve their English in each week, which was in accordance with the language program's vision and mission. As said earlier, the students were informed about the vision and mission of the language program. In addition, their high motivation levels might have made them aware of the learning progress they had achieved and the institution's expectations from them more, which was in line with the views

of Tomlinson (1998) who notes that effective foreign language materials are known to make the students aware of their own progress and growth, and also to enhance general awareness including the expectations. In addition, according to Stoller and Grabe (1997), motivated students have a strong understanding related to the goals set about language learning.

The qualitative data obtained through students' interviews showed that their primary reason for learning English was to adapt to the globalized world, and to fulfill their academic and professional aims. In the reflective journal, the instructor also noted that students were expected to speak English, as well. However, according to the students' interview data, their needs concerning speaking English were not met by the course material as it was evaluated to be weak in this regard. Although the literature provides sufficient research on the positive effects of CBI on students' language skills along with their cognitive and academic skills (Lo, 2015; Mehisto et al., 2012; Morton, 2018; Siekmann et al., 2017), there are also some other studies reporting that immersion and CBI programs mostly enhance the receptive skills more, compared to the productive skills (Cummins & Swain, 1986; Moriyoshi, 2010; Ready & Wesche, 1992; Swain, 1993). The reason why the course material was regarded as weak in enhancing students' speaking skills might be linked to several reasons. No matter what these reasons were, the effects of the course material on the students' speaking skills are to be discussed in the next sections that follow.

The seventh and the last factor in the questionnaire has 54 items and is the most comprehensive factor dealing with the content encompassing foreign language skill enhancement, the organization and the variety of the texts, audio materials, grammar and vocabulary presentation, etc.

The quantitative data obtained through the Materials Evaluation questionnaire showed that there were 5 items evaluated not to be sufficient. Specifically, the material was found not to be able to offer all language skills equally, not to offer speaking skills sufficiently, not to provide the students with sufficient assessment and evaluation tools, not to offer them sufficient revision units, and not to be able to motivate the students for out-of-class learning.

The majority of the students and the instructor were quite satisfied with the variety of the interesting and attractive content presented, a finding supported by the related literature on the correlation between carefully-designed CBI materials and increased student satisfaction (Ballinger, 2013).

Some students were found to have moderate-level difficulty in understanding the content presented in the reading and the watching parts due to the technical terminology they encountered. However, both the students and the instructor noted that students had a chance to accomplish content mastery and the enhancement of their English language skills including learning lots of technical vocabulary to a certain extent through the integration of both content and language. Regarding the content and language mastery in CBI programs, most of the relevant research reports similar findings (Alonso et al., 2008; Arnó-Macià & Mancho-Barés, 2015; Czura et al., 2009; Infante et al., 2009).

In addition, the instructor also put an emphasis on some of the tasks and the content used in the material that had a potential to enhance students' language skills including speaking, which is one of the important features of CBI materials in terms of developing students' communicative competence through purposeful tasks and engaging content (Işık, 2022). However, the great majority of the students reported that they could not improve their speaking skills during the course. The same was reflected in the journal by the instructor, as well.

There might be several reasons for the problems associated with the failure of the material to enhance the speaking skills of the students. For example, although the great majority of the students were quite satisfied with the structure-based grammar presentation including the explanations and the exercises as understood from the students' interview data, it was seen that the course material employed form-focused grammar instruction, specifically "focus-on-forms (FonFs)" in the grammar sections. "FonFs" is defined as the isolated type of form-focused instruction (Spada & Lightbown, 2008), which ignores meaning-based and contextualized language teaching through which students could internalize the grammatical language forms implicitly (Long, 1998). Actually, this is another drawback of the course material as the material aimed at offering a context in which students could learn English through using it meaningfully and purposefully in the first place. Therefore, certain modifications should be made to integrate form-focused grammar instruction into the communicative approach the material aimed to employ. More detailed discussion regarding the possible integration of the form-focused grammar instruction into the communicative content-based approach is to be provided in the next section of this chapter.

Another reason associated with the failure of the material to enhance the students' speaking skills might stem from the Emergency Distance Education (EDE) implemented as an

immediate precaution taken against the unexpected spread of the Covid-19 in order to continue learning and teaching practices all around the globe, and not possibly enabling the learners to form interactions among one another (Nuraini, 2016; Edlund, 2020). In addition, students did not enjoy enough speaking proficiency to attend the discussion activities from the very beginning of the course, which could be due to their prior English education generally evaluated to be poor in public primary and secondary schools in Turkish contexts (Tuzcu Eken, 2021). Also, the medium of instruction being their native language at their own academic department could greatly reduce their chances to improve their English skills (Civan & Coşkun, 2016). Personal issues such as feeling anxiety while trying to speak English (Er, 2015), and the lack of sufficient content in the CBI-oriented course material that may fail meeting the goals of the students – here in this context, to enhance their speaking skills – and the goals of the relevant programs (Coyle et al., 2010; Zhyrun, 2016) can be other contributing factors to the problem. These possible reasons are to be discussed more thoroughly in the next section of this chapter.

As understood from the data regarding the failure of the course material to enhance the students' speaking skills and the form-focused instruction employed in the grammar sections in the course material, the material cannot be said to offer all language skills equally as the English skills of the students other than speaking were evaluated to be enhanced.

The material was not found to be sufficient in terms of the assessment and evaluation tools and the revision units. Although some of the writing tasks ask learners to reflect on what they have learned on certain topics and evaluate their own progress, the material has no other separate pack providing assessment and evaluation tools. Moreover, at the end of each module, there are certain single “Real-Life Task” sections encompassing the topics of each module. However, these tasks are not in the type of mainstream revision units enabling the students to remember the most crucial parts covered earlier. Therefore, it is not surprising that students found the revision units insufficient. Considering this, Işık (2018) claims that supplementary materials such as workbooks, assessment and evaluation tools and revision packs are widely used to accompany the mainstream language course materials on the market so that students are provided with additional texts and tasks that they can work on to enrich their language skills both in and out of the classroom.

In parallel with this, the lack of supplementary materials seems to have affected students' motivations towards out-of-class learning, as well. Although the authentic texts used

in the material might have enabled the students to use English in a meaningful way while presenting them with interesting content, the students seemed not to take any further interest in learning the details of the content outside the classroom. In addition, the course material was reported to enable the students to be more autonomous as active learners. However, it did not have any effect on them to throw their attention in having an interest in out-of-class learning, too. In addition to the lack of the accompanying and additional materials, some other factors could shape their evaluations regarding out-of-class learning, too. For example, student behaviors such as following out-of-class activities could vary from culture to another culture. Regarding this, Richards (2009) notes that students in the northern European countries, such as those in Scandinavia, were found to be more motivated to follow out-of-class learning practices than their counterparts in the Mediterranean region.

As seen from the discussion part above, the material was not evaluated to be sufficient in terms of the information provided on the back cover, its suitability for use outside the classroom, its failure to motivate students for out-of-class learning, providing supplementary materials such as workbook, assessment and evaluation tools, and sufficient revision units. In addition, their speaking skills were not enhanced by the course material. In other words, the material failed at offering all language skills equally and offering speaking skills sufficiently, which is to be discussed more thoroughly in the following section of this chapter.

5.2. Discussion on the In-Class Implementation of the CBI-oriented Course Material, its Effects on the Students' Language Skills and Content Knowledge

The third and the fourth research questions investigate the evaluations of the students and of the instructor regarding the in-class implementation of the CBI-oriented course material. The third and the fourth research questions are provided below:

RQ3: What are the evaluations of the software engineering students regarding the in-class implementation of the CBI-oriented course material?

RQ4: What are the evaluations of the instructor regarding the in-class implementation of the CBI-oriented course material?

The qualitative data obtained through the students' interviews and the instructor's reflective journals were used to answer these research questions. The data obtained are discussed in terms of the effects of the in-class implementation of the course material on the

students' motivation; in terms of its teaching English and teaching content knowledge, which were the themes that emerged during content analysis.

In addition, the fifth and the sixth research questions were addressed to give a clearer picture of the effects of the course material on students' English language skills and their content knowledge, which were also partly demonstrated by the findings pertaining to the in-class implementation of the material as mentioned above. These research questions are given below:

RQ5: What are the effects of the CBI-oriented course material on the software engineering students' English language skills?

RQ6: What are the effects of the CBI-oriented course material on the software engineering students' content knowledge?

Pre- and post-Placement tests and the students' scores obtained in the content sections in the midterm and the final exams were utilized to answer the fifth and the sixth research questions. All the data collected on the in-class implementation of the CBI-oriented course material, its effects on the students' language skills and content knowledge are discussed in line with the related literature below.

Firstly, with regard to the in-class implementation of the course material, the instructor evaluated its possible effects on students' motivation. According to the instructor's observations and the students' own reports, students were mostly withdrawn and shy in the first couple of weeks after the lessons started. However, as some time passed, they became more engaged in the lessons, the reasons of which were mostly attributed to the interesting and attractive content, and to the well-designed visuals used in the course material by the students and the instructor. The same is mentioned by Ebata (2009) who notes that students change their attitudes towards the demanding content of the CBI programs over time and they become more motivated towards the end of the learning processes. Actually, irrespective of the attractiveness and the design of the visuals, visual aids used in ELT materials are favored and increase student motivation as learners find a chance to understand the targeted concepts much more easily (Novawan, 2010). However, according to the instructor and some students' reports, it was the logic behind the CBI and the course material that motivated them most. The related literature is full of similar accounts regarding the effects of CBI on student motivation. For example, both Blanton (1992) and Crandall (1987) state that CBI's motivating factors for students provide fruitful results for the ELT professionals to take into account. Language

teaching through employing content in the form of an academic subject matter imply motivational bases on the part of the learner group (Snow et al., 1989), as students may use the knowledge presented in CBI lessons for their future aims (Genç, 2011). In addition, when the students are offered an approach such as CBI through which language learning may become more meaningful, this might also reduce anxiety, with an additional increase in motivation (Flowerdew, 1993; Kasper, 1995). As stated above, students' anxiety levels were reduced gradually after a couple of lessons when they started to enjoy the content of the course material.

No matter how motivated the students were due to the integration of the content and language and the visual aids used in the material, there was a major demotivating factor for the students. As stated before, the course material was evaluated to be weak in terms of enhancing students' speaking skills in English. Considering the effects of the course material on their speaking skills and their English skills in general, the reader may find some discussion below for the findings that can be used as answers to the third, the fourth and the fifth research questions. The third and the fourth questions evaluate the issue within the context of the students' motivation during the in-class implementation of the course material. The fifth one, however, investigates it based on the effects of the course material on the students' English language skills.

Fulcher (2003) defines speaking as "the verbal use of language to communicate with others" (p.23). Speaking competence is one of the productive skills in any language that needs to be improved to enable the speakers to fulfill their language-related and future aims such as attending in discussions, finding a better job or pursuing an academic career (Muljani & Suwartono, 2019). Rao (2019) views speaking as the most important skill compared to the other three. Although there are numerous accounts concerning the positive impacts of CBI on the communicative competence of the students and therefore on their speaking skills (Ball et al., 2015; Buton et al., 2015; Hui, 2011; Işık 2022; Mayo & Ibarrola, 2015; Stoller, 2004), the literature also demonstrates that speaking skill is the least enhanced skill after the implementation of CBI (Vanichvasin, 2019). In addition, as discussed before, it is asserted that CBI has more promising effects on the improvement of the receptive skills such as listening and reading, compared to the productive skills like speaking and writing (Cummins & Swain, 1986; Moriyoshi, 2010; Ready & Wesche, 1992; Swain, 1993). For the failure of the CBI-oriented course material to enhance the speaking skills of the students, there could be various factors that are discussed below.

One of the factors yielding poor English competence could be related to the grammar teaching approach employed in the CBI-oriented course material. Based on the reports of the instructor and some of the students, it can be understood that the grammar topics were introduced through form-focused instruction (FFI), more specifically through explicit focus-on-forms (FonFs). According to Collins (2012), FFI is a term underlying “any pedagogical practice undertaken by second language (L2) teachers with the goal of drawing their students’ attention to language form” (p. 2187). In addition, Spada and Lightbown (2008) made a categorization between “integrated” and “isolated” forms of FFI. “FonFs” is a categorization specified by Long (1998) to denote the isolated type of FFI through which grammatical forms are presented by some deductive ways being used by the instructor, and students are expected to investigate the grammatical inputs in an inductive manner to formulate the relevant and targeted grammar rules (DeKeyser, 2003). Although Ellis (1990) and Long (1998) report that students learn the grammar rules better through “FonFs”, it may be easily understood that “form” is prioritized and “meaning” is given a subordinate role in such a grammar instruction like this.

The literature also provides the interested reader with knowledge related to the possible integration of “FonFs” into the communicative approaches so that the communicative skills – both accuracy and fluency – of the students might be enhanced, as well. It is claimed that students can easily attend to targeted forms in context; and through meaning-based tasks, the grammatical accuracy of learners in discrete grammar structures might be enhanced, too (Doughty & Williams, 1998; Fotos & Ellis, 1991). To illustrate, it is a lot easier for the students to attend to the language forms when these forms are presented through contextualized grammar activities (Nassaji, 2000). In addition, Lee and VanPetten (2003) claim that “structured input” activities help students a lot to learn the targeted language forms easily while allowing them to extract the form and meaning during the instruction with the help of contextualized and meaning-based activities. Therefore, in line with the suggestions taken from the literature and shown above, necessary revisions could be planned to include meaning-based and contextualized grammar tasks in the CBI-oriented course material to enhance the students’ grammatical accuracy and fluency at the same time.

Another possible reason for the CBI-oriented course material to fail at enhancing students’ speaking skills might be related to some other external factor, like the mandatory online education implemented at the time of the study. As can be seen from the findings obtained from both the instructor and the students, it was clearly expressed that certain

discussion and delivering presentation tasks had to be suspended. As a result, the instructor also believed that the online courses did not promote the students' interactive skills, too. Concerning these issues, relevant research shows that it is the speaking skills of the students that has been affected the most negatively during the EDE (Öztürk Karataş & Tuncer 2020). Students are also found to be unmotivated to attend speaking and discussion activities in EDE and they are also reported to prefer face-to-face lessons for the sake of their speaking skill development (Durna, 2022). In addition, Payne (2020) notes that it is quite challenging and demanding to do interactive L2 tasks in online courses. Most students offered online education report that they have hard times maintaining their discipline and responsibilities concerning the active participation requirements of the courses taken by them (Hurd, 2000). Therefore, it could be suggested that online education had negative effects on the students and especially on their speaking skill development, leading them to benefit from the course material insufficiently.

The instructor and some students also mentioned the possible effects of the students' prior English education that were evaluated to be poor quality on their speaking skills, which was again an external factor and in turn might have led the students not to be able to make use of the CBI-oriented course material sufficiently, as well. In Türkiye, especially at public primary and secondary schools, it is known that the great majority of students cannot reach a sufficient level of speaking proficiency (Aydemir, 2007; Çelebi, 2006; Işık, 2008; Kırkgöz, 2008). The most referred reasons for this problem are teacher-centered approach implemented by the teachers in the classroom (Gençoğlu, 2011; Güney, 2010; Özsevik, 2010) which the researcher did not carry out in the classroom; form-focused grammar teaching (Dinçer & Yeşilyurt, 2013), which however, the CBI-oriented course material also employed. Furthermore, Saraç (2007) notes that most EFL coursebooks do not pay great attention to improving the speaking skills of the students. Although the CBI-oriented course material cannot be claimed to neglect the speaking skills of the students when the discussion and brainstorming parts and meaning-based presentation sections in the course material are taken into account, it is true that the course material does not have any separate "Speaking" section. As stated before, the course material was also found to be insufficient to direct the students to out-of-class learning. According to Toköz-Göktepe (2014), out-of-class learning focusing on interactive language activities help a lot to improve the speaking skills of the learners. Therefore, with the review of literature shown above, it would not be wrong to suggest that course material needs to be revised so that separate "Speaking" sections with meaning-based

grammar and more interactive language activities are developed. The material should be also accompanied by supplementary materials to provide the students with interactive tasks in and out-of-the classroom.

As mentioned by the instructor, the last external factor that might have hindered students from exploiting the course material sufficiently in terms of improving their speaking skills was that the medium of instruction in their department was Turkish. In order for a student to benefit from the course material and the course itself where CBI was employed through authentic and demanding content, students' language proficiency levels should have been above the average level. Because, many studies report that students who are comfortable with the language used in the lessons get more satisfactory results and learn the content much better, compared to those who are not (Abdirahman et al., 2013; Arsad et al., 2014; Fakeye & Kumar, 2014; Ogunsiji, 2009). In parallel to this, it is known that students with low proficiency levels in the instruction language go through difficulty in exploiting the content presented in the lessons (Maleki & Zangani 2007). These assumptions support the findings obtained from students' interviews and the instructor's reflective journals regarding the difficulties students faced when they were expected to participate in the lessons using English.

Despite the inadequate technological equipment and connection problems that were referred to as the drawbacks of online education mostly affecting teaching and learning listening skills (Abel, 2020; Eren et al., 2017; Torquero, 2021), neither the students nor the instructor reported negative incidences about this. During the course, no major technical problems were experienced. In addition, students were highly motivated to follow the "Watching" parts and to understand the content presented. The videos were played at least twice so that the students could understand the gist of the content. With repeated exposure to the visual and auditory content, students started to perform better at watching tasks underlying their listening skills. Here, it can be surely said that their listening skills got improved and the students were seen to be quite satisfied with their improvements. With the interesting visual support and relevant activities designed to include most of the visuals shown in the videos, students could improve their listening skills, a finding which is in line with the views of Mohan (1986) who asserts that visual support and interesting content might enhance students' receptive skills easily.

Vocabulary knowledge has an undeniable role to improve all the main 4 language skills (Sariani et al., 2022). In the CBI-oriented ESP course, students were provided with

relevant terminological vocabulary items, which they reported was very motivating and informative. Similar results are also mentioned by the relevant research on the positive effects of CBI on vocabulary teaching (Brown & Bradford, 2017; Butler, 2005; Shibata, 2019).

Students' reading skills were observed and reported to be enhanced by the course material and its direct in-class implementation. The authentic reading texts, and the discussion on them – even though students participated in these discussions using Turkish – and the comprehension questions following the reading sections required the students to systematically analyze the content and to extract the meaning presented. Together with the vocabulary knowledge accumulated over time, students improved their reading skills, too. As Kanik (2002) suggests, the benefits of domain-specific CBI syllabi that can be used in ESP courses outnumber those offered by mainstream syllabi utilized in EFL lessons. This is highly important as improving reading skills might be a bit more significant than the other skills for students who want to pursue academic careers and learn the target language academically at tertiary level (Levine et al., 2000).

Similarly, through reflection tasks, student writing skills were also seen to be promoted. The students reported that they were assigned some writing tasks during and after the lessons to reflect on what they had learned, or to summarize the content presented. In addition, they had to use the paragraph organization taught in the lessons. Through the authentic content and their accumulated technical vocabulary inventory, students found a chance to produce meaningful utterances on paper. Actually, the related literature informs that writing, together with speaking as they are the productive skills, poses challenges on the students and educators during the learning process because it takes much more time to improve the productive skills, which require cognitive and intellectual development at the same time (Mantilla & Andrade-Molina, 2022). However, it is known that through authentic and engaging content, CBI fosters cognitive, intellectual and academic development (Kennedy, 2006). Therefore, it can be surely asserted that the findings related to writing skill development in this study are in line with the relevant research demonstrating the positive effects of CBI on language skills of learners (Lo, 2015; Mehisto et al., 2012; Morton, 2018; Siekmann et al., 2017).

Apart from the students' and the instructors' comments constituting the qualitative data regarding the effects of CBI-oriented course material on the students' language skills, this thesis study used the mean scores obtained from the pre- and post-Placement Tests

administered at the beginning and at the end of the semester to see whether the course material and its direct in-class implementation had any effect on the language skills of the students. Although the Placement test did not assess the speaking and listening skills of the students – the study could only mention the qualitative data obtained from the students and the instructor regarding the effects of the course material on the students' speaking and listening skills – it evaluated the students' grammar, vocabulary, reading and writing skills. According to the quantitative data obtained, there was a significant difference between the scores of pre- and post- tests, meaning before and after the implementation of the course material. This finding suggests the positive effects of CBI on the students' language skills, again. The findings obtained could also be supported by some studies like Uğurer, (2018) and Işık (2022) pointing out significant differences in language test scores before and after the implementation of CBI-oriented course materials, as well.

The sixth research question, which is the last research question in the study, explores the effects of the course material on the students' content knowledge. To answer this question, qualitative data obtained through the students' interviews and the instructor's reflective journals were utilized. In addition, the mean scores obtained by the students in the content sections of the midterm and the final exams constituting the quantitative data were demonstrated to see how successful the students were in learning the content presented.

According to the accounts of the students and the instructor, students were highly happy with the progress they had shown towards learning the content. The content variety, the authentic texts and audio materials, the visuals used all contributed to their content learning. The content being related to their academic interests facilitated them to learn the content more and in a better way, as well. Similarly, the quantitative data revealed that the students performed very well in the content sections of both the midterm and the final exams. Concerning the content mastery, the findings of this study are supported by the accounts of Allen (2004), Alonso et al. (2008), and Junyue and Yang (2011), who claim that CBI students are endowed with broadening their knowledge related to content thanks to the meaningful and purposeful language instruction utilizing a subject matter as its context. However, some students mentioned that there was some content that was not directly related to their own academic fields; namely, software engineering. As stated before, the course material can be used for the students of computer and software engineering students. However, certain modifications should be made to develop much more specific content that is unique and separate for each academic field. In line with this, Corzo and Lopera (2016) underlie the

importance of the direct interconnection between the content presented in CBI materials and the content of the academic areas forming the context, which substantially shape student motivation and satisfaction.

The discussion part mentioned the needs of making certain revisions and modifications to minimize the weaknesses of the course material evaluated in this thesis study. Additional information needs to be included on the back cover page to give more details about the preparation and implementation of the course material. The material should also offer some supplementary materials such as assessment tools, revision packs, workbooks etc. to provide the learners with authentic and engaging tasks outside the classroom, and also to motivate them for out-of-class learning. The material did not enhance the communicative competence of the students due to a variety of possible reasons such as employing “FonFs” approach in grammar teaching, online education, students’ prior English education viewed as poor, their medium of instruction being Turkish, and the lack of sufficient content to facilitate speaking skills in the course material as discussed above. Certain modifications such as integration of “FonFs” into the communicative aspect of the material through contextualized structured input activities and adding more communication-based tasks in the new “Speaking” sections should be considered. This thesis discusses the possible reasons yielding a failure to improve the speaking skills of the students because speaking is considered by many to be the most important skills of all the 4 main skills. As a communicative approach, the CBI program and the material used could have improved the speaking skills of the students at least to a certain extent if the necessary modifications had been already made.

In conclusion, apart from the speaking skills, students’ language skills and their content knowledge were seen to be enhanced by the course material and its in-class implementation. This finding is the most general message one can get from this study. There are quite a few studies demonstrating very similar assertions. For example, the integration of content and target language promote better language and content mastery (Burger, 1989; Burger & Chrétien, 2001; Cummins & Swain, 1986; Genesee, 1987; Rogers, 2006; Snow & Brinton, 1988b; Swain & Lapkin, 1982). The findings are also supported by Krashen (1985) and Crandall and Tucker (1990) who claim that more successful L2 acquisition may take place through meaningful and purposeful language use as in the case of CBI. In addition, according to Snow et al. (1989), CBI also helps the learners with their academic studies at school other than language classes, thanks to the purposeful and meaningful use of the language being taught.

CHAPTER 6

CONCLUSION

The conclusion chapter is the last chapter in this thesis study. It includes the summary of the study, the pedagogical implications of the study and some suggestions for further research.

6.1. Summary of the Study

The current thesis study aimed at exploring the effectiveness of the CBI-oriented course material through 6 research questions addressed. As it is known, appropriate and carefully-designed CBI materials provide a context in which both teaching language and content in the form of a subject matter are interwoven (Dupuy, 2000). However, as in the case of all ELT materials, CBI materials should also be evaluated, modified and adapted depending on the needs analysis that may be carried out on students, instructors, and on the language program stakeholders (Mehisto, 2012). Therefore, the present study can be used to discover the strong and the weak parts of the material and, thus, to perform the necessary revisions where necessary.

Specifically, the study evaluated the evaluations of the students and the instructor regarding the CBI-oriented course material and its in-class implementation. In addition, it also investigated the effects of the course material on students' English language skills and on their content knowledge.

The research design employed in this study was mixed-method research design. In other words, both quantitative and qualitative data collection tools were used. In order to collect data concerning the evaluations of the students regarding the CBI-oriented course material, Materials Evaluation Questionnaire (Işık and Altıışıldört, 2010) was used. In addition, the researcher developed 16 semi-structured interview questions to investigate the students' evaluations regarding the course material and its in-class implementation more thoroughly. 40 students filled out the questionnaire entered on Google Forms and 10 students participated in online interview sessions held in Zoom Application.

The researcher as the instructor of the course also provided his evaluations kept in the reflective journals concerning the CBI-oriented course material and its in-class implementation.

To determine the effects of the course material on students' English language skills, a placement test was administered at the beginning and at the end of the semester. The mean scores obtained by the students in the pre- and post-placement tests were listed and compared to show whether there was any significant difference before and after the implementation of the CBI-oriented course material.

Lastly, to see the effects of the course material on students' content knowledge, the mean scores obtained by the students in the content sections in both of the midterm and the final exams were demonstrated. Students' interview data and instructor's reflective journals were also used to support the quantitative findings obtained for the effects of the course material on students' English language skills and their content knowledge.

This mixed-method research employed explanatory sequential design. Therefore, firstly, quantitative data were collected. Then, to support the findings of the quantitative data, qualitative data were also obtained. The participants of the study were 40 software engineering students enrolled in a CBI-oriented ESP course. They used the material in this course. The researcher was also the instructor of the course. Therefore, the study aimed at collecting data from these participants sharing some predetermined criteria and characteristics, which were concerned with taking the CBI-oriented ESP course offered by the researcher utilizing the CBI-oriented course material. Thus, it can be understood that the study employed criterion sampling technique in which predetermined criteria are highly significant to determine the sample that can provide appropriate data for the purposes of any research conducted (Patton, 2001).

In the data analysis procedure, quantitative data obtained from Materials Evaluation Questionnaire (Işık & Altınışdört), the scores obtained from the pre- and post- placement tests and those obtained from the content sections in the midterm and the final exams were statistically analyzed using SPSS Version 28.0. To be more specific, questionnaire data were entered into the SPSS program and the mean scores obtained for each item were listed. Similarly, the mean scores calculated from the results of the students obtained in the pre- and post-placement tests were compared using paired-samples t-test. Lastly, the mean scores were calculated from the results of the scores obtained by the students in the content section in both of the midterm and the final exams.

Qualitative data, on the other hand, were analyzed using content analysis. Students' interview data and instructor's reflective journal data providing findings related to the

students' and the instructor's evaluations regarding the course material were categorized in a way that was parallel to the factors of the Materials Evaluation Questionnaire (Işık & Altıışdört, 2010). On the other hand, both the interview and the journal data providing findings related to the in-class implementation of the course material were categorized based on the effects of the course material on student motivation, on the students' English language skills and on their content knowledge.

Concerning the evaluations made regarding the course material, the quantitative questionnaire data revealed that students were not satisfied with the information provided on the back cover, the quantity of the materials for use outside the classroom, the ability of the course material to offer all language skills equally, to offer speaking skills, the assessment and evaluation tools and revision units, and lastly, to motivate the students for out-of-class learning. Similar findings were also obtained from the qualitative interview data and the instructor's reflective journal data.

Concerning the evaluations made regarding the in-class implementation of the course material, both the students' interview data and the instructor's reflective journal data revealed that students were mostly satisfied with their content learning due to various reasons such as authentic texts and video materials, attractive design, the variety of content presented etc., which was in line with the findings of relevant research conducted (Allen, 2004; Alonso et al., 2008; Corzo & Lopera, 2016; Papai, 2000). The same findings were also supported by the scores obtained by the students in the content sections in both of the midterm and the final exams.

With regard to the in-class implementation of the course material, students' motivation levels were found to be high as they were presented with an approach integrating language and content teaching, enabling them to use English meaningfully and purposefully through mediating meaning in the form of content presented as supported by the relevant research (Dupuy, 2000; Sylvén & Tompson, 2015). However, nearly all the students reported that they could not improve their speaking skills, which was a very important demotivating factor related to the implementation of the CBI-oriented course material.

Students' language skills were found to be generally enhanced except for their speaking skills after the implementation of the CBI-oriented course material. In the discussion section, several possible reasons that might result in low-speaking performances were referred to. For example, it was evaluated that the grammar teaching was conducted through "FonFs",

underlying discrete grammatical structures and giving meaning a subordinate role (Long, 1998). This might have affected students' communicative competences negatively. Another reason concerning the weaknesses of the course material leading to insufficient speaking development might be linked to the inadequate content dedicated specifically to speaking activities. As stated earlier, the material did not have any separate “Speaking” sections. Another reason categorized to be an external factor could be the mandatory online education through which the lessons were delivered and which did not possibly enable the students to form interactions and to improve their speaking skills (Edlund, 2020; Nuraini, 2016). The other external factors could be concerned with the students’ prior English education evaluated to be poor quality and leading them to be more stressed out in discussion sections (Tuzcu Eken, 2021) and the medium of instruction being Turkish in their own academic departments, greatly reducing students’ chances to improve their foreign language skills (Civan & Coşkun, 2016).

As seen here, the course material was found to be effective teaching content and English skills hand in hand, except for speaking skills. Therefore, the course material needs to be revised so that it offers more meaning-based grammar activities and more speaking activities aiming at enabling the students to use English in a meaningful way. The course material should be also accompanied by supplementary materials such as assessment tools and revision units and should motivate students for out-of-class learning through extra content that could be developed.

6.2. Pedagogical Implications

This current thesis study provides the interested reader with significant implications. The research implemented on CBI and specifically on CBI materials is very rare especially in Türkiye. Therefore, this study is expected to fill the gap in the literature on the implementation of CBI and specifically developing and evaluating in-house CBI materials at tertiary level education in Turkish contexts.

The study also informs the reader that developing ELT materials and especially CBI-oriented course materials utilizing a subject matter as its contexts is highly tiring, demanding, time consuming as material developers are expected to be endowed with necessary knowledge in the content and language areas to be presented (Kong, 2015; Llinares et al., 2012; Morton, 2018; Nikula, 2015; Zhyrun, 2016). In addition, material development carries its own substantial risks because certain CBI program goals could easily be failed due to several

factors such as the developers' inadequate experience and knowledge (Banegas, 2012; Nikula, 2015). Therefore, it is implied here that there should be dedicated cooperation and knowledge sharing between the stakeholders involved in the development of CBI-oriented course materials.

Apart from its challenges, developing CBI-oriented course materials is also enjoyable and provides a substantial amount of knowledge on the content area during the preparation process. Therefore, the study implies that CBI not only helps learners to expand their horizons, but also helps the educators such as the material developers and the instructors, too.

Another implication is to be offered to the institutions and to the language programs. Based on the review of literature demonstrated in this thesis study, CBI is a very promising approach to be used in classroom settings as it is not only used to teach English, but also used to enable the students to use English effectively to exploit the academic content better. Therefore, academic institutions and language programs are highly suggested to design and implement CBI curricula. Another implication might be addressed to the renowned publishing houses. Since CBI is an approach whose effectiveness has already been documented and proved, they should definitely consider developing and publishing CBI-oriented course materials also making use of supplementary materials such as workbooks, worksheets, extra reading packs, assessment packs, and software support such as LMS dedicated to these materials.

One last implication is given for the language programs and academic institutions having already been employing CBI. Based on the data provided, it is seen that a certain level of proficiency in the instruction language might be required to attend the CBI lessons. Therefore, it is recommended by the researcher that academic institutions should provide their students having low-level language proficiency with academic language skill courses before and during the implementation of CBI programs.

6.3. Suggestions for Further Research

Each learner group in different contexts might have different needs in terms of language learning. The results of the study cannot be generalized as it is a case study. However, further research should be conducted with more participants at other settings employing CBI to get more reliable results.

In order to explore the effectiveness of CBI-oriented programs and CBI-oriented course materials more thoroughly, further experimental and longitudinal research might be needed. In this study, however, there was not any control group, and that's why, the CBI group's content learning results could not be compared. Therefore, the effects of the CBI-oriented course material on students' content learning could not be investigated in detail.

To determine the effects of the course material on the students' English language skills, this study used a placement test which did not assess the students' listening and speaking skills. Further research should definitely administer a language test consisting of the assessment of each language skill to evaluate students' language development before and after the implementation of CBI and CBI-oriented course materials.

Finally, apart from the evaluations of the students, the current study only explored the evaluations of the EFL instructor who gave the CBI-oriented ESP course. Further research might also include the faculty members specialized in the affiliated academic content fields to investigate their evaluations regarding the progress their students show thanks to CBI in their own academic content courses.

References

- AbdelWahab, M. M. (2013). Developing an English language textbook evaluative checklist. *IOSR Journal of Research & Method in Education*, 1(3), 55-70.
- Abdirahman, M., Abubakar, A. H., & Abukar, M. S. (2013). English language proficiency and academic achievement for undergraduate students in Somalia. *Educational Research International Journal*, 2(2), 59-66.
- Abel Jr, A. (2020). The phenomenon of learning at a distance through emergency remote teaching amidst the pandemic crisis. *Asian Journal of Distance Education*, 15(1), 127-143.
- Airey, J. (2012). "I don't teach language": The linguistic attitudes of physics lecturers in Sweden. *AILA Review*, 25, 64-79.
- Akhtar, I. M. (2016). Research design. In P. Sharma (Ed.), *Research in social sciences: Interdisciplinary perspectives* (pp. 68-84). Social Research Foundation Publishing.
- Allen, M. (2004). Reading achievement of students in French immersion programs. *Education Quarterly Review*, 9, 5-30.
- Allen, C. (2015). Marriages of convenience? Teachers and coursebooks in the digital age. *ELT Journal*, 69(3), 249-263.
- Alonso, E., Grisaleña, J., & Campo, A. (2008). Plurilingual education in secondary schools: Analysis of results. *International CBI Research Journal*, 1, 36-49.
- Alptekin, C., Erçetin, G., & Bayyurt, Y. (2007). The effectiveness of a theme-based syllabus for young L2 learners. *Journal of Multilingual and Multicultural Development*, 28(1), 1-17.
- Alsulami, S.Q. (2017). Partial Immersion Program for Saudi Bilinguals. *ELT Journal*, 10(2), 150-155.
- Anderson, J.R. (1981). *Cognitive skills and their acquisition*. Lawrence Erlbaum Associates Publishing.
- Anderson, J.R. (1983). *The architecture of cognition*. Harvard University Press.
- Anderson, J.R. (1985). *Cognitive psychology and its implications*. (2nd ed.). W.H. Freeman Company Publishers.
- Angell, J., DuBravac, S. & Gonglewski, M. (2008). Thinking globally, acting locally: Selecting textbooks for college-level language programs. *Foreign Language Annals* 41(3), 562-573.
- Arias, A. & Izquierdo, J. (2015). Language Attention in Content-based Instruction: The case of language instructors teaching content in a foreign language in Mexican higher education. *Journal of Immersion and Content-based Language Education*, 3, 194-217.
- Arnó-Macià, E. & Mancho-Barés, G. (2015). The role of content and language in content and language integrated learning (CLIL) at university: Challenges and implications for ESP. *English for Specific Purposes*, 37, 63-73.

- Arsad, P. M., Bauniyamin, N., & Manan, J. A. B. (2014). Students' English language proficiency and its impact on the overall students' academic performance: An analysis and prediction using neural network model. *WSEAS Transactions on Advances in Engineering Education*, 11, 44–53.
- Arslan, R. Ş., & Saka, C. K. (2010). Teaching English to science students via theme-based model of content-based instruction. *Journal of Turkish Science Education*, 7(4), 26-36.
- Aydemir, Ö. (2007). *İlköğretim II. kademe öğrencilerinin İngilizce dersinde kullandıkları başarı başarısızlık yüklemeleri ve öğrenme stratejileri*. [Yayımlanmamış Yüksek Lisans Tezi]. Trakya Üniversitesi, Edirne.
- Aytuğ, S. (2007). *An EFL textbook evaluation study in Anatolian high schools: 'New bridge to success for 9th grade new beginners'*. [Doctoral Thesis]. Bilkent University, Ankara.
- Azarnoosh, M. (2014). Evaluating a reading textbook: Select Reading. *International Journal of Language Learning and Applied Linguistics World (IJLLALW)*, 6(3), 365–374.
- Baecher, L., Farnsworth, T., & Ediger, A. (2014). The challenges of planning language objectives in content-based ESL instruction. *Journal of Language Teaching Research*, 18(1), 118-136.
- Baker, C. (2011). *Foundations of bilingual education and bilingualism*. Multilingual Matters Publishing.
- Ball, P., Kelly, K., & Clegg, J. (2015). *Putting CBI into practice*. Oxford University Press.
- Ballinger, S. (2013). Towards a cross-linguistic pedagogy. *Journal of Immersion and Content-Based Language Education*, 1, 131–148.
- Banegas, D. (2012). Integrating content and language in English language teaching in secondary education: Models, benefits, and challenges. *Studies in Second Language Learning and Teaching Journal*, 2(1), 111-136.
- Banegas, D. L. (2013). The integration of content and language as a driving force in the EFL lesson. In E. Ushioda (Ed.), *International perspectives on motivation: Language Learning and Professional Challenges* (pp. 82-97). The Palgrave Macmillan Publishing.
- Barón, M. J. B. (2013). Building ESP content-based materials to promote strategic reading. *Profile Issues in Teachers' Professional Development*, 15(1), 139-169.
- Bayyurt, Y., & Yalçın, S. (2014). Content based instruction. In S. Çelik (Ed.), *Approaches and principles in English as a foreign language (EFL) education*, (pp. 200-223). Eğitim Kitap.
- Bermúdez, G. J. F. (2014). An exercise in course-book evaluation: Strengths, weaknesses and recommendations regarding new English file: Elementary. *Latin American Journal of Content and Language Integrated Learning*, 7(1), 98–111.
- Blanton, L. L. (1992). A holistic approach to college ESL: Integrating language and content. *ELT Journal*, 46(3), 285-293.

- Bozdoğan, D. & Karlıdağ, B. (2013). A case of CLIL practice in the Turkish context: Lending an ear to students. *The Asian EFL Journal Quarterly*, 15, 89-110.
- Brinton, D. M. (2012). Content-based instruction in English for specific purposes. In C. Chapelle (ed.), *The encyclopedia of applied linguistics* (pp. 897-906). Wiley-Blackwell Publishing.
- Brinton, D. M., Snow, M. A., & Wesche, M. B. (1989). *Content-based second language instruction*. Heinle & Heinle Publishers.
- Brooks, M. (2014). Content-based curricular development: Guidelines for designing effective content-based instructed courses. *CELE Journal*, 22, 16-34.
- Brown, J.D. (1995). *The elements of language curriculum. A systematic approach to program development*. Heinle & Heinle Publishers.
- Brown, H.D. (2001). *Teaching by principles: An interactive approach to language pedagogy*. Addison Wesley Longman Publishing.
- Brown, J.D. (2004). Research methods for applied linguistics: Scope, characteristics, and standards. In A. Davis & C. Elder (eds.), *The handbook of applied linguistics* (pp. 476-500). Blackwell Publishing.
- Brown, H., & Bradford, A. (2017). EMI, CLIL, & CBI: Differing approaches and goals. In P. Clements, A. Krause, & H. Brown (Eds.), *Transformation in language education* (pp. 328-334). JALT Publishing.
- Bruton, A. (2013). CBI: Some of the reasons why... and why not. *System*, 41(3), 587-597.
- Bruton, A. (2015). CBI: Detail matters in the whole picture. More than a reply to J. Hüttner and U. Smit (2014). *System*, 53, 119-128.
- Bulon, A. (2020). Comparing the 'phrasicon' of teenagers in immersive and non-immersive settings: Does input quantity impact range and accuracy? *Journal of Immersion and Content-Based Language Education*, 8(1), 107-136.
- Burger, S. (1989). Content-based ESL in a sheltered psychology course: Input, output and outcomes. *TESL Canada Journal*, 6, 45-57.
- Burger, S. & Chrétien, M. (2001). The development of oral production in content-based second language courses at the University of Ottawa. *The Canadian Modern Language Review*, 58, 84-102.
- Busse, V. (2011). Language Use and Language Learning in CLIL Classrooms. *System*, 39(4), 559-561.
- Butler, Y. G. (2005). Content-based instruction in EFL contexts: Considerations for effective implementation. *Journal of Applied Learning and Teaching*, 27(2), 227-242.
- Buton, W. A., & Bugis, R. (2015). Improving students' speaking skill through content-based instruction (CBI). *Jurnal Jupiter*, 15(1), 67-78.

- Byrd P. (2001). Textbooks: Evaluation for selection and analysis for implementation. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (pp. 415-427). Heinle & Heinle Publishers.
- Cammarata, L. & Haley, C. (2018). Integrated content, language, and literacy instruction in a Canadian French immersion context: A professional development journey. *International Journal of Bilingual Education and Bilingualism*, 21(3), 332-348.
- Campbell, C., & Rozsnyai, C. (2002). *Quality Assurance and the Development of Course Programmes*. UNESCO Publications.
- Cantoni-Harvey, G. (1987). *Content-area language instruction*. Addison-Wesley Publishing.
- Carrell, P.L., & Carson, J.G. (1997). Extensive and intensive reading in an EAP setting. *English for Specific Purposes*, 16(1), 47-60.
- Celce-Murcia, M. (1991). Language and communication: A time for equilibrium and integration. In J. E. Alaitis (Ed.), *Proceedings of Georgetown University Round Table on Language and Linguistics* (pp. 223–237). Georgetown University Press.
- Cenoz, J. (2015). Content-based instruction and content and language integrated learning: The same or different? *Journal of Language, Culture and Curriculum*, 28(1), 8-24.
- Chambers, F. (1997). Seeking consensus in coursebook evaluation. *ELT Journal*, 51(1), 29-35.
- Chamot, A. U. (2009). *The CALLA handbook: Implementing the cognitive academic language learning approach*. Allyn & Bacon Publishing.
- Chamot, A. U., & O'Malley, J. M. (1986). *A cognitive academic learning approach: An ESL content-based curriculum*. National Clearinghouse for Bilingual Education Publishing.
- Chamot, A. U., & O'Malley, J. M. (1987). The cognitive academic language learning approach: A bridge to the mainstream. *TESOL Quarterly*, 21(2), 227-249.
- Chamot, A. U., & O'Malley, J. M. (1994). *The CALLA handbook: Implementing the cognitive academic language learning approach*. Addison-Wesley Publishing.
- Chamot, A. U., Barnhardt, S., Beard, P., & Robbins, J. (1999). *The learning strategies handbook*. Pearson Publishing.
- Civan, A., & Coşkun, A. (2016). The effect of the medium of instruction language on the academic success of university students. *Journal of Educational Sciences: Theory & Practice*, 16, 1981–2004.
- Cohen, L., Manion, L., & Morrison, K. (2017). *Research methods in education*. Routledge Publishing.
- Collier, V. P. (1989). How long? A synthesis of research on academic achievement in a second language. *TESOL Quarterly*, 23(3), 509-531.
- Collins, L. (2012). Form-focused instruction. In C. Chapelle (Ed.), *The encyclopedia of applied linguistics* (pp. 2187-2190). Wiley-Blackwell Publishing.

- Corzo, J. Q. & Lopera, C. J. L. (2016). Content-based lesson plans inside the English rural classrooms. *Journal of International Education Studies*, 9(11), 130-141.
- Coskun, A. (2016). Causes of the "I can understand English, but I can't speak" syndrome in Turkey. *Journal on English Language Teaching*, 6(3), 1-12.
- Costa, F. (2012). Focus on form in ICLHE lectures in Italy: Evidence from English-medium sciences lectures by native speakers of Italian. *AILA Review*, 25(1), 30-47.
- Coyle, D. (1999). Theory and planning for effective classrooms: Supporting students in content and language integrated contexts. In J. Masih (Ed.), *Learning through a foreign language: Models, methods and outcomes* (pp. 46-62). CILT Publishing.
- Coyle, D. (2007). Content and language integrated learning: Towards a connected research agenda for CLIL pedagogies. *International Journal of Bilingual Education and Bilingualism*, 10(5), 543-562.
- Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and language integrated learning*. Cambridge University Press.
- Crandall, J. (1999). Content-based instruction. In B. Spolsky (Ed.), *Concise encyclopedia of educational linguistics* (pp. 604-610). Elsevier Publishing.
- Crandall, J., & Tucker, G. R. (1990). Content-based language instruction in second and foreign languages. In S. Anivan (Ed.), *Language teaching methodology for the nineties* (pp. 83-96). SEAMEO Regional Language Centre Publishing.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson Publishing.
- Creswell, J. W. & Creswell, J. (2003). *Research design* (pp. 155-179). Sage Publishing.
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage Publishing.
- Croxton, R. A. (2014). The role of interactivity in student satisfaction and persistence in online learning. *Journal of Online Learning and Teaching*, 10(2), 314-325.
- Crystal, D. (2003). *English as a global language*. (2nd ed.). Cambridge University Press.
- Cummins, J. (1979). *Cognitive/Academic language proficiency, linguistic interdependence, the optimum age question and some other matters*. (Working Paper No. 19). <https://files.eric.ed.gov/fulltext/ED184334.pdf>
- Cummins, J., & Swain, M. (1986). *Bilingualism in education*. Longman Publishing.
- Cunningsworth, A. (1984). *Evaluating and selecting EFL teaching materials*. Heinemann Educational Books.
- Cunningsworth, A. (1995). *Choosing your coursebook*. Macmillan Publishers.
- Curtain, H. A., & Pesola, C. A. (1994). *Languages and children: Making the match* (2nd ed.). Longman Publishing.

- Czura, A., Papaja, K., & Urbaniak, M. (2009). Bilingual education and the emergence of CBI in Poland. In D. Marsh, P. Mehisto, D. Wolff, R. Aliaga, T. Asikainen, M. J. Frigols-Martin, S. Hughes, and G. Langé (Eds.), *CBI practice: Perspectives from the field* (pp. 172-178). University of Jyväskylä Press.
- Çakıt, I. (2006). *Evaluation of the EFL textbook "New Bridge to Success 3" from the perspectives of students and teachers* [Unpublished Master's Thesis]. Middle East Technical University, Ankara.
- Çelebi, M. D. (2006). Türkiye'de anadili eğitimi ve yabancı dil öğretimi. *Erciyes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 2(21), 285-307.
- Dalton-Puffer, C. (2007). *Discourse in content and language integrated learning (CLIL) classrooms*. John Benjamins Publishing.
- Dalton-Puffer, C., Hüttner, J., Schindelegger, V., & Smit, U. (2009). Technology-geeks speak out: What students think about vocational CBI. *International CBI Research Journal*, 1, 18-25.
- Dalton-Puffer, C., Nikula, T., & Smit, U. (Eds.). (2010). *Language use and language learning in CLIL classrooms* (Vol. 7). John Benjamins Publishing.
- Davies, S. (2003). Content-based instruction in EFL contexts. *The Internet TESL Journal*, 9(2), 9-17.
- Davila, H. A. H. & Vela, M. L. C. (2011). A case study on content-based instruction for primary school children. *How Journal: A Colombian Journal for Teachers of English*, 18, 112-134.
- DeKeyser, R. M. (2003). Implicit and explicit learning. In C. Doughty & M. H. Long (Eds.), *The handbook of second language acquisition* (pp. 313-340). Blackwell Publishing.
- de la Cruz, A. A., & Vázquez, E. M. (2018). Content-based instruction (CBI): Towards the integration of both content and language in content courses/Instrucción basada en contenido (IBC): Hacia la integración del contenido y el idioma en cursos de contenido. *Revista Iberoamericana de Producción Académica y Gestión Educativa*, 5(10), 1-18.
- De Smet, A., Mettwie, L., Galand, B., Hiligsmann, P., & Van Mensel, L. (2018). Classroom anxiety and enjoyment in CLIL and non-CLIL: Does the target language matter?. *Studies in Second Language Learning and Teaching*, 8(1), 47-71.
<https://doi.org/10.14746/ssllt.2018.8.1.3>
- de Zarobe, Y. R. (2008). CLIL and foreign language learning: A longitudinal study in the Basque country. *International CLIL Research Journal*, 1(1), 60-73.
- de Zarobe, Y. R., & Catalan, R. M. A. J. N. (2009). *Content and language integrated learning: Evidence from research in Europe*. Multilingual Matters Publishing.
- Dinçer, A., & Yesilyurt S. (2013). Pre-service English teachers' beliefs on speaking skills based on motivational orientations. *ELT Journal*, 6(7), 88-95.

- Doğançay-Aktuna, S. (1998). The spread of English in Turkey and its current sociolinguistic profile. *Journal of Multilingual and Multicultural Development*, 19(1), 24-39.
- Doiz, A., Lasagabaster, D., & Sierra, J. M. (2013). *English-medium instruction at universities: Global challenges*. Multilingual Matters Publishing.
- Doughty, C., & Williams, J. (1998). *Focus on form in classroom second language acquisition*. Cambridge University Press.
- Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford University Press.
- Duenas, M. (2004). The whats, whys, hows and whos of content-based instruction in second/foreign language education. *International Journal of English Studies*, 4(1), 73-96.
- Duff, P. (2001). Language, literacy, content, and (pop) culture: Challenges for ESL students in mainstream courses. *The Canadian Modern Language Review*, 58, 103-132.
- Dupuy, B.C. (2000). Content-based instruction: Can it help ease the transition from beginning to advanced foreign language classes? *Foreign Language Annals*, 33(2), 205-223.
- Durna, F. K. (2022). *The perspectives of EFL instructors and students on distance education: Implications for English language teacher education* [Unpublished Master's thesis]. Bursa Uludağ University, Bursa.
- Ebata, M. (2009). Content-based instruction. In Y.L. Patel & M.A. Vyas (Eds.), *Teaching English as a second language: A new pedagogy for a new century* (pp. 129–135). PHI Publishing.
- Echevarria, J., Vogt, M.E., & Short, D. (2017). *Making content comprehensible for English learners: The SIOP model*. Pearson Publishing.
- Edlund, F. (2021). *The importance of speaking and interacting in online teaching for upper secondary school* [Unpublished Master's Thesis]. Malmö University.
- Education First. (2015). *EF EPI English proficiency index*. <http://www.ef.com.tr/epi/regions/europe/>
- Ellis, R. (1990). *Instructed second language acquisition*. Basil Blackwell Publishing.
- Ellis, N. C., & Laporte, N. (1997). Contexts of acquisition: Effects of formal instruction and naturalistic exposure on second language acquisition. In A. M. B. de Groot & J. F. Kroll (Eds.), *Tutorials in bilingualism: Psycholinguistic perspectives* (pp. 53-83). Lawrence Erlbaum Publishing.
- Er, İ. (2011). *Türkiye'deki bir üniversitede çalışan yabancı dil öğretmenlerinin içerik temelli öğretim hakkındaki görüşleri ve uygulamaları üzerine bir çalışma*. [Yayımlanmamış Yüksek Lisans Tezi]. Bilkent Üniversitesi, Ankara.
- Er, S. (2015). Foreign language learning anxiety of Turkish children at different ages. *International Online Journal of Education and Teaching*, 2(2), 68-78.

- Eren, Ö., Öztürk, T., Turan, C., & Bada, E. (2017). Postgraduate courses on a virtual classroom platform. *Turkish Online Journal of Educational Technology*, 2017(November Special Issue IETC), 585-590.
- Eskey, D. E. (1997). Syllabus design in content-based instruction. In M. A. Snow & D. A. Brinton (Eds.), *The content-based classroom: Perspectives on integrating language and content* (pp. 132-141). Longman Publishing.
- Fakeye, O., & Ogunsiji, Y. (2009). English language proficiency as a predictor of academic achievement among EFL students in Nigeria. *Euro Journals of Scientific Research*, 37(3), 490-495.
- Flowerdew, J. (1993). Content-based language instruction in a tertiary setting. *English for Specific Purposes*, 12(2), 121-138.
- Fotos, S., & Ellis, R. (1991). Communicating about grammar: A task-based approach. *TESOL Quarterly*, 25(4), 605-628.
- Fulcher, G. (2003). *Testing second language speaking*. Pearson Education Limited Publishing.
- Garrett, N. (1991). Technology in the service of language learning: Trends and issues. *Modern Language Journal*, 75(1), 74-101.
- Garton, S. & Graves, K. (2014). Identifying a research agenda for language teaching materials. *The Modern Language Journal*, 98(2), 654-657.
- Genç, Z. S. (2011). EFL in higher education: Designing a flexible content-based curriculum at university level. *The Asian EFL Journal Quarterly*, 13(1), 85-113.
- Genç, Z.S. (2021). Content-Based Language Teaching. In H. Mohebbi & C. Coombe (Eds.), *Research Questions in Language Education and Applied Linguistics: A reference guide* (pp. 29-33). Springer Publishing.
- Gençoğlu, G. (2011). *Improving adult EFL learners' speaking skills through strategies-based instruction* [Unpublished Master's Thesis]. Çukurova University, Adana.
- Genesee, F. (1987). *Learning through two languages: Studies of immersion and bilingual education*. Newbury House Publishers.
- Genesee, F., & Lindholm-Leary, K. (2013). Two case studies of content-based language education. *Journal of Immersion and Content-Based Language Education*, 1(1), 3-33.
- Gill, P., Stewart, K. & Treasure, E. (2008). Methods of data collection in qualitative research: Interviews and focus groups. *British Dental Journal*, 204, 291-295.
<https://doi.org/10.1038/bdj.2008.192>
- Goris, J. (2019). *Content and language integrated learning in English as a foreign language*. [Doctoral dissertation, Radboud University Nijmegen].
- Göker, S. D. (2016). Use of reflective journals in development of teachers' leadership and teaching skills. *Universal Journal of Educational Research*, 4(12A), 63-70. DOI: 10.13189/ujer.2016.041309.

- Grabe, W., & Stoller, F. L. (1997). Content-based instruction: Research foundations. In M.A. Snow & D. M. Brinton (Eds.), *The content-based classroom: Perspectives on integrating language and content* (pp. 5-21). Longman Publishing.
- Graham, K.M., Choi, Y., Davoodi, A., Razmeh, S. & Dixon, L.Q. (2018). Language and content outcomes of CLIL and EMI: A systematic review. *LACLIL*, 11(1), 19-37.
- Güney, İ. (2010). *An investigation into the causes of speaking problems experienced by learners of English at tertiary level* [Unpublished Master's Thesis]. Çanakkale Onsekiz Mart University, Çanakkale.
- Halliday, M. A. (1993). Towards a language-based theory of learning. *Linguistics and Education Journal*, 5(2), 93-116.
- Hart, I. (2003). The outsider's gaze: A learner-centred approach to language-teaching materials. *Educational Media International Journal*, 40(3-4), 287-292.
- Harwood, N. (2010). *Materials in ELT: Theory and practice*. Cambridge University Press.
- Harvey, L. (2002). Evaluation for what?. *Teaching in Higher Education Journal*, 7(3), 245-263.
- Hawkins, A., Graham, C. R., Sudweeks, R. R., & Barbour, M. K. (2013). Academic performance, course completion rates, and student perception of the quality and frequency of interaction in a virtual high school. *Journal of Distance Education*, 34(1), 64-83.
- Heo, Y. (2006). Content-based instruction. *Hawaii Pacific University TESOL Working Paper Series*, 4(2), 25-31.
- Heras, A., & Lasagabaster, D. (2015). The impact of CLIL on affective factors and vocabulary learning. *Journal of Language Teaching Research*, 19(1), 70-88.
- Herron, J. D. (1996). *The chemistry classroom: Formulas for successful teaching*. American Chemical Society Publishing.
- Hickman, J. (1992). Whole language and literature in a French immersion elementary school. In E. B. Bernhardt (Ed.), *Life in language immersion classrooms* (pp. 84- 96). Multilingual Matters Publishing.
- Hoare, P. (2010). Content-based language teaching in China: Contextual influences on implementation. *Journal of Multilingual and Multicultural development*, 31(1), 69-86.
- Hoare, P., & Kong, S. (2008). Late immersion in Hong Kong: Still stressed but making progress?. In T. W. Fortune, & D. J. Tedick (Eds.), *Pathways to multilingualism: Emerging perspectives on immersion education* (pp. 242-263). Multilingual Matters Publishing.
- Holec, H. (1981). *Autonomy and foreign language learning*. Pergamon Publishing.
- Honeychurch, J. (1990). Language, cognition, and learning: Expressive writing in the classroom. *Journal of Curriculum and Supervision*, 5(4), 328-337.

- Hui, L. (2011). *Improving students' English-speaking skills through content-based instruction (A classroom action research in the second-grade students of business English department of CsV&TC, China in the academic year of 2010/2011)*. [Doctoral dissertation]. Sebelas Maret University, Indonesia.
- Hurd, S. (2000). Distance language learners and learner support: Beliefs, difficulties and use of strategies. *Links and Letters Journal*, 7, 61-80.
- Hutchinson, T., & Waters, A. (1987). *English for specific purposes: A learning-centred approach*. Cambridge University Press.
- Hyland, K. (1998). *Hedging in scientific research articles*. John Benjamins Publishing.
- Hynninen, N. (2012). ICL at the micro level L2 speakers taking on the role of language experts. *AILA Review*, 25(1), 13-29.
- Infante, D., Benvenuto, G., & Lastrucci, E. (2009). The effects of CBI from the perspective of experienced teachers. In D. Marsh, P. Mehisto, D. Wolff, R. Aliaga, T. Asikainen, M. J. Frigols-Martín, S. Hughes, and G. Langé (Eds.), *CBI practice: Perspectives from the field* (pp. 156-163). Finland: University of Jyväskylä Press.
- Işık, A. (1995). *The role of input in second language acquisition: More comprehensible input supported by grammar instruction or more grammar instruction?* [Unpublished Master's Thesis]. Boğaziçi University, Istanbul.
- Işık, A. (2008). Yabancı dil eğitimimizdeki yanlışlıklar nereden kaynaklanıyor?. *Journal of Language and Linguistic Studies*, 4(2), 15-26.
- Işık, A. (2018). ELT materials evaluation: A system and criteria. *Journal of Theory and Practice in Language Studies*, 8(7), 797-812.
- Işık, A. (2022). In-house CBI materials and English language education. *Porta Lingarum*, 38, 137-158. <https://doi.org/10.30827/portalin.vi38.22204>
- Işık, A., & Altmışdört, G. (2010). Yabancı dil öğretiminde malzeme değerlendirme. *Uludağ Üniversitesi Eğitim Fakültesi Dergisi*, 23(1), 221-238.
- Iyobe, B., & Lia, J. (2013). CLIL to what degree: A trial in English-medium education at a Japanese university-Is it CLIL or not. *The Asian EFL Journal Quarterly*, 15(4), 372-381.
- İlhan, E., & Kayabaşı, Y. (2014). Yükseköğretim düzeyindeki özel amaçlı İngilizce derslerinde içerik tabanlı yabancı dil öğretim yaklaşımının öğrencilerin akademik başarılarına etkisi. *The Journal of Turkish Educational Sciences*, 12(1), 35-55.
- Janzen, J. (2002) Strategic reading on a sustained content theme. In J. Murphy & P. Byrd (Eds.), *Understanding courses we teach: Local perspectives on English language teaching* (pp. 369-389). University of Michigan Press.
- Johns, A. M. (1991). English for specific purposes (ESP): Its history and contributions. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (pp. 67-77). Newbury House Publishing.

- Johns, A. M. (1992). What is the relationship between content-based instruction and English for specific purposes? *The CATESOL Journal*, 5(1), 71-75.
- Johns, A. M. (1997). English for specific purposes and content-based instruction: What is the relationship? In M. A. Snow & D. M. Brinton (Eds.), *The content-based classroom: Perspectives on integrating language and content* (pp. 363–67). Addison-Wesley Longman Publishing.
- Jones, L. (2007). *The student-centered classroom*. Cambridge University Press
- Johns, A. M., & Price-Machado, D. (2001). English for specific purposes (ESP): Tailoring courses to students' needs-and to the outside world. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (pp. 43-54). Heinle & Heinle Publishers.
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, A. L. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1(2), 112-133.
- Jordan, R. R. (1997). EAP syllabus and course design. In R. R. Jordan (Ed.), *English for academic purposes: A guide and resource book for teachers* (pp. 56–84). Cambridge University Press.
- Junyue, C., & Yang, X. (2011). A study of the effects of the content-based instruction for English majors in the Chinese context. *Chinese Journal of Applied Linguistics*, 34(3), 25-38.
- Kara, S. (2019). Pre-service teachers' coursebook evaluation and adaptation: An evaluation of 9th grade English coursebook. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, 20(2), 564-577.
- Kasper, L. F. (1995). Theory and practice in content-based ESL reading instruction. *English for Specific Purposes*, 14(3), 223-230.
- Kawulich, B. B. (2004). Data analysis techniques in qualitative research. *Journal of research in education*, 14(1), 96-113.
- Kennedy, J. (2006). Swarm intelligence. In A. Y. Zomaya (Ed.), *Handbook of nature-inspired and innovative computing* (pp. 187-219). Springer Publishing.
- Kırkgöz, Y. (2008). Globalization and English language policy in Turkey. *Journal of Educational Policy*, 23(5), 663-684.
- Kırkgöz, Y. (2009). Evaluating the English textbooks for young learners of English at Turkish primary education. *Journal of Procedia-Social and Behavioral Sciences*, 1(1), 79-83.
- Kışlal, İ. & Ünal Gezer, M. (2021). Turkish primary-level EFL teachers' views on the scope and effectiveness of content-based English instruction. *e- Kafkas Journal of Educational Research*, 8, 612- 626. doi: 10.30900/kafkasegt.1019971.
- Kızıltan, N., & Ersanlı, C. Y. (2007). The contributions of theme-based CBI to Turkish young learners' language development in English. *Journal of Language and Linguistic Studies*, 3(1), 133-148.

- Klimova, B. F. (2012). CLIL and the teaching of foreign languages. *Procedia-Social and Behavioral Sciences*, 47, 572-576.
- Knell, E., Siegel, L., Haiyan, Q., Lin A., Miao, P., Wei, Z., & Yanping, C. (2007). Early English immersion and literacy in Xi'an, China. *The Modern Language Journal*, 91(3), 395-417.
- Kong, E. (2009). Content-Based Instruction: What can we learn from content-trained teachers' and language-trained teachers' pedagogies?. *The Canadian Modern Language Review*, 66(2), 233- 267.
- Kong, S. (2015). Designing content-language integrated learning materials for late immersion students. *TESOL Journal*, 6(2), 302-331.
- Korkmaz, H. (2016). *Evaluation of reading materials in the speakout coursebook: From the data on perceptions and experiences of 114 EFL instructors* [Unpublished Master's Thesis]. Bahçeşehir University, İstanbul.
- Krashen, S. (1981). *Second language acquisition and second language learning*. Pergamon Publishing.
- Krashen, S. (1982). *Principles and practice in second language acquisition*. Pergamon Publishing.
- Krashen, S. (1985). *The input hypothesis: Issues and implications*. Longman Publishing.
- Kruk, M., & Zawodniak, J. (2018). Boredom in practical English language classes: Insights from interview data. In L. Szymański, J. Zawodniak, A. Łobodziec, & M. Smoluk (Eds.), *Interdisciplinary views on the English language, literature and culture* (pp. 177-191). Zielona Góra: Uniwersytet Zielonogórski.
- Kumar, P. (2014). Effect of proficiency in English language on academic performance of post graduate management students of Marathwada Region (Maharashtra), India. *Journal of Business and Management*, 16(5), 10-16.
- Küçük A, N. (2011). The application of communicative language teaching (CLT) in Turkish primary and secondary schools. *Humanizing Language Teaching*, 13(6).
<http://old.hltmag.co.uk/dec11/sart05.htm>
- Kvale, S. (2007). *Doing interviews*. SAGE Publishing.
- Lai, C., Zhu, W., & Gong, G. (2015). Understanding the quality of out-of-class English learning. *TESOL Quarterly*, 49(2), 278-308.
- Lai, Y. & Aksornjarung, P. (2018). Thai EFL learners' attitudes and motivation towards learning English through content-based instruction. *Malaysian Online Journal of Educational Sciences*, 6(1), 43-65.
- Lasagabaster, D., & Sierra, J. M. (2010). Immersion and CLIL in English: More differences than similarities. *ELT journal*, 64(4), 367-375.

- Lawrence, W.P.W (2011). *Textbook evaluation: A framework for evaluating the fitness of the Hong Kong new secondary school (NSS) curriculum* [Unpublished Master's Thesis]. City University of Hong Kong.
- Lazaruk, W. (2007). Linguistic, academic, and cognitive benefits of French immersion. *The Canadian Modern Language Review*, 63(5), 605-627.
- LeCompte, M. D., & Schensul, J. J. (1999). *Analyzing & interpreting ethnographic data*. AltaMira Publishing.
- Lee, J., & VanPatten, B. (2003). *Making communicative language teaching happen*. McGraw Hill Publishing.
- Levine, A., Ferenz, O. & Reves, T. (2000). EFL academic reading and modern technology: How can we turn our students into independent critical readers?. *TESL-EJ*, 4(4). <http://tesl-ej.org/wordpress/issues/volume4/ej16/ej16a1/>
- Lightbown, P. M., & Spada, N. (1994). An innovative program for primary ESL students in Quebec. *TESOL Quarterly*, 28(3), 563-579.
- Little, D. G. & Singleton, D.M. (1988). *Authentic materials and the role of fixed support in language teaching: Towards a manual for language learners*. (Working paper No. 20). Trinity Center for Language and Communication Studies.
- Littlejohn, A. (2011). The analysis of language teaching materials: Inside the Trojan Horse. In B. Tomlinson (Ed.), *Materials development in language teaching* (pp. 179-211). Cambridge University Press.
- Litz, D. R. A. (2005). Textbook evaluation and ELT management: A South Korean case study. *The Asian EFL Journal Quarterly*, 48(1), 1-53.
- Llinares, A., Morton, T., & Whittaker, R. (2012). *The roles of language in CBI*. Cambridge University Press.
- Lo, Y.Y. (2015). A glimpse into the effectiveness of L2-content cross-curricular collaboration in content-based instruction programmes. *International Journal of Bilingual Education and Bilingualism*, 18(4), 443-462.
- Long, M. (1998). Focus on form in task-based language teaching. *University of Hawai'i Working Papers in ESL*, 16(2), 35-49.
- López-Medina, B. (2016). Developing a CLIL textbook evaluation checklist. *Latin American Journal of Content & Language Integrated Learning*, 9(1), 159-173.
- Lorenzo, F. (2007). An analytical framework of language integration in L2 content-based courses: The European dimension. *Journal of Language and Education*, 21(6), 502-514.
- Lorenzo, F., Casal, S., & Moore, P. (2010). The effects of content and language integrated learning in European education: Key findings from the Andalusian sections evaluation project. *Journal of Applied Linguistics*, 31(3), 418-442.

- Lyster, R. (2007). *Learning and teaching languages through content: A Counterbalanced approach*. John Benjamins Publishing.
- Ma, F. (2015). A review of research methods in EFL education. *Theory and Practice in Language Studies*, 5(3), 566-571.
- Madrid Fernández, D. (2006). Bilingual and plurilingual education in the European and Andalusian context. *International Journal of Learning*, 12(4), 177-185.
- Mahraj, M. (2018). Teaching technical vocabulary through word formation rules. *International Arab Journal of English for Specific Purposes*, 1(1), 37-44.
- Maleki, A., & Zangani, E. (2007). A survey on the relationship between English language proficiency and the academic achievement of Iranian EFL students. *The Asian EFL Journal Quarterly*, 9(1), 86-96.
- Mantilla, M., & Andrade-Molina, C. (2020). Content-based instruction strategies to improve English major students' L2 writing skills command: Productive skills development. *Ecos de la Academia*, 6(11), 33-49.
- Marsh, D. (ed.). (2002). *CLIL/EMILE - The European dimension: Actions, trends and foresight potential public services*. University of Jyväskylä Press.
- Marsh, D., Mehisto, P., Wolff, D., & Frigols Martín, M. J. (2010). *The European framework for CLIL teacher education*. European Center of Modern Languages of the Council of Europe.
- Master, P. (1997/8). Content-based instruction vs. ESP. *TESOL Matters*, 7(6), 1-5.
- Masters, K., & Oberprieler, G. (2004). Encouraging equitable online participation through curriculum articulation. *Computers & Education*, 42(4), 319-332.
- Mayo, M.D.P.G., & Ibarrola, A.L. (2015). Do children negotiate for meaning in task-based interaction? Evidence from CLIL and EFL settings. *System*, 54, 40-54.
- McDonough J., & Shaw C. (2003). *Materials and methods in ELT: A teacher's guide*. Blackwell Publishing.
- McGrath, I. (2002). *Materials evaluation and design for language teaching*. Edinburgh University Press.
- Mehisto, P. (2008). CBI counterweights: Recognizing and decreasing disjuncture in CBI. *International CBI Research Journal*, 1(1), 93-119.
- Mehisto, P. (2012). Criteria for producing CBI learning material. *Encuentro: Revista de Investigación e Innovación en la Clase de Idiomas*, 21, 15-33.
- Mehisto, P., Marsh, D., & Frigols, M. J. (2008). *Uncovering CLIL: Content and language integrated learning in bilingual and multilingual education*. Macmillan Education Publishing.

- Mehisto, P., Wolff, D., Martin, M. J.F., & Marsh, D. (2012). European framework for CBI teacher education. *Encuentro: Revista de Investigación e Innovación en la Clase de Idiomas*, 21, 146-183.
- Met, M. (1991). Learning language through content: Learning content through language. *Foreign Language Annals*, 24(4), 281-295.
- Modern Language Association (MLA) Ad Hoc Committee on Foreign Language. (2007). Foreign languages and higher education: New structures for a changed world. *Profession*, 12, 234-245.
- Mohan, B. (1986). *Language and content*. Addison-Wesley Publishing.
- Morioka, A. (2007). *Teaching Japanese with content-based instruction*. ProQuest Publishing.
- Moriyoshi, N. (2010). *Content-based instruction (CBI) in Japanese college classrooms: Focusing on language, content, or both?* [Doctoral dissertation]. McGill University.
- Morton, T. (2013). Critically evaluating materials for CLIL: Practitioners' practices and perspectives. In J. Gray (Ed.), *Critical perspectives on language teaching materials* (pp. 111-136). The Palgrave Macmillan Publishing.
- Morton, T. (2018). Reconceptualizing and describing teachers' knowledge of language for content and language integrated learning (CLIL). *International Journal of Bilingual Education and Bilingualism*, 21(3), 275-286.
- Muljani, M., & Suwartono, T. (2020). The speaking competence of EFL students at an Indonesian suburb vocational school. *ELLITE: Journal of English Language, Literature, and Teaching*, 5(2), 77-86.
- Murata, K., & Harada, T. (2008). *Komyunikeeshon nooryoku saikoo* [Rethinking communicative competence]. Hitsuji Shobo Publication.
- Muthuprasad, T., Aiswarya, S., Aditya, K. S., & Jha, G. K. (2021). Students' perception and preference for online education in India during COVID-19 pandemic. *Social Sciences & Humanities Open*, 3(1), 1-11. <https://doi.org/10.1016/j.ssaho.2020.100101>.
- Muzata, K. K. (2020). Complexities of sampling in special education research: a Zambian contextual analysis. *European Journal of Special Education Research*, 6(3), 96-109.
- Nassaji, H. (2000). Towards integrating form-focused instruction and communicative interaction in L2 classroom: Some pedagogical possibilities. *The Modern Language Journal*, 84(2), 241-250.
- Ngan, N. T. C. (2011). Content-based instruction in the teaching of English for accounting at Vietnamese college of finance and customs. *ELT Journal*, 4(3), 90-100.
- Nikula, T. (2010). Effects of CLIL on a teacher's classroom language use. In C. Dalton-Puffer, T. Nikula & U. Smit (Eds.), *Language use and language learning in CLIL classrooms* (pp. 105-124). John Benjamins Publishing.

- Nikula, T. (2015). Hands-on tasks in CBI science classrooms as sites for subject-specific language use and learning. *System*, 54, 14-27.
- Novawan, A. (2010). The use of visual aids in ELT materials. In H.P. Widodo, & L. Savova (Eds.), *The Lincom guide to materials design in ELT* (pp. 39-54). Lincom Europa.
- Nunan, D. (2004). *Syllabus design*. Oxford University Press.
- Nuraini, K. (2016). The barriers of teaching speaking English for EFL learners. *Journal of English Language, Literature and Teaching*, 1(1), 7-14.
- Oattes, H., Oostdam, R., de Graaff, R., & Wilschut, A. (2018). The challenge of balancing content and language: Perceptions of Dutch bilingual education history teachers. *Teaching and Teacher Education*, 70, 165-174.
- O'Malley, J. M., Chamot, A. U. (1990). *Learning strategies in second language acquisition*. Cambridge University Press.
- O'Neill, R. (1982). Why use textbooks?. *ELT journal*, 36(2), 104-111.
- O'Neill, R. (1993). Are textbooks symptoms of a disease? In D. Nunan (Ed.), *Practical English language teaching* (pp. 11-13). McGraw Hill Press.
- Özdemir, F. E. (2007). *An evaluation of time for English 4, the 4th grade English course book for public schools* [Unpublished Master's Thesis]. Middle East Technical University, Ankara.
- Özsevik, Z. (2010). *The use of communicative language teaching (CLT): Turkish EFL teachers' perceived difficulties in implementing CLT in Turkey* [Unpublished Master's Thesis]. University of Illinois, USA.
- Öztürk Karataş, T., & Tuncer, H. (2020). Sustaining language skills development of pre-service EFL teachers despite the Covid-19 interruption: A case of emergency distance education. *Sustainability*, 12(19), 81-88.
- Pakkan, G. (1997). *Language teaching materials: Evaluation and selection, adaptation and development*. Sürat Basım Yayın Reklamcılık.
- Pally, M. (1999). *Sustained content-based teaching for academic skills development in ESL/EFL*. Houghton Mifflin Harcourt Learning Technology Publishing.
- Papai, N.D. (2000). Literacy development through content-based instruction: A case study. *Working Papers in Educational Linguistics*, 16(2), 81-95.
- Patton, M. Q. (1987). *How to use qualitative methods in evaluation*. Sage Publishing.
- Patton, M. Q. (2001). *Qualitative research and evaluation and methods*. Sage Publishing.
- Payne, J. S. (2020). Developing L2 productive language skills online and the strategic use of instructional tools. *Foreign Language Annals*, 53(2), 243-249.

- Pena, C.A., & Pladevall-Ballester, E. (2020). Effects of focus on form on primary CLIL students' foreign language performance in task-based oral interaction. *Journal of Immersion and Content-Based Language Education*, 8(1), 53-79.
- Pérez-Cañado, M. L. (2012). CLIL research in Europe: Past, present, and future. *International Journal of Bilingual Education and Bilingualism*, 15(3), 315-341.
- Poggenpoel, M., & Myburgh, S. (2003). The researcher as research instrument in educational research: A possible threat to trustworthiness? *Journal of Education*, 124(2), 418-421.
- Poorhadi, M. (2017). Designing an ESP course for Iranian students of architecture: A skill-based approach. *Journal of Applied Linguistics and Language Research*, 4(5), 20-47.
- Rahimpour, M. (2011). Textbook selection and evaluation in EFL context. *ELT Journal*, 7(25), 120-130.
- Ramos, F. (2009). "Why do we do this?" reflections of a two-way immersion school principal on the roles of parents, teachers, and her own in the program. *Estudios de Lingüística*, 23(1), 225-240.
- Ranta, L. & Lyster, R. (2007). A Cognitive approach to improving immersion students' oral language abilities: The awareness-practice-feedback sequence. In R. DeKeyser (Ed.), *Practice in a second language: Perspectives from applied linguistics and cognitive psychology* (pp. 141-160). Cambridge University Press.
- Rao, P. S. (2019). The role of English as a global language. *Research Journal of English*, 4(1), 65-79.
- Ready, D., & Wesche, M. (1992). An evaluation of the university of Ottawa's sheltered program: Language teaching strategies that work. In R. J. Courchene (Ed.), *Comprehension-based second language teaching* (pp. 389-405). University of Ottawa Press.
- Reinders, H., & Lewis, M. (2006). An evaluative checklist for self-access materials. *ELT Journal*, 60(3), 272-278.
- Reynolds-Young, D., & Hood, S. (2014). Balancing content and language in the English language development classroom. *ORTESOL Journal*, 31(1), 33-43.
- Riazi, A. M., & Aryashokouh, A. (2007). Lexis in English textbook in Iran. *Pan-Pacific Association of Applied Linguistics*, 11(1), 17-34.
- Richards, J. C. (1998). *Beyond training: Perspectives on language teacher education*. Cambridge University Press.
- Richards, J. C. (2001). *The role of textbooks in a language program*. Cambridge University Press.
- Richards, J. C. (2006). Materials development and research - Making the connection. *RELC Journal*, 37(1), 5-26.

- Richards, J. C. (2009, April). *The changing face of TESOL* [Plenary Speech]. TESOL Convention and Exhibit Conference, Denver, Colorado, United States. <http://www.professorjackrichards.com/wp-content/uploads/changing-face-ofTESOL.pdf>
- Richards, J. C., & Rodgers, T. S. (2001). *Approaches and methods in language teaching*. Cambridge University Press.
- Rogers, D. M. (2006). Developing content and form: Encouraging evidence from Italian content-based instruction. *The Modern Language Journal*, 90(3), 373-386.
- Sandelowski, M. (2000). Combining qualitative and quantitative sampling, data collection, and analysis techniques in mixed-method studies. *Research in Nursing & Health*, 23(3), 246-255.
- Saraç, G. (2007). *The use of creative drama in developing the speaking skills of young learners*. [Unpublished MA Thesis]. Gazi University, Ankara.
- Sarem, S.N., Hamidi, H., & Mahmoudie, R. (2013). A critical look at textbook evaluation: A case study of evaluating an ESP course-book: English for international tourism. *International Journal of Applied and Basic Sciences*, 4(2), 372-380.
- Sariani, S., Rozi, F., & Yaningsih, Y. (2022). Content-based instruction (CBI) in writing e-brochure: Integrating vocabulary learning and technology-enhanced language teaching. *Advances in Social Science, Education and Humanities Research*, 647(1), 499-506.
- Satılmış, Y., Yakup, D., Selim, G., & Aybarsha, I. (2015). Teaching concepts of natural sciences to foreigners through content-based instruction: The adjunct model. *ELT Journal*, 8(3), 97-103.
- Sato, S., Hasegawa, A., Kumagai, Y., & Kamiyoshi, U. (2017). Content-based instruction (CBI) for the social future: A recommendation for critical content-based language instruction (CCBI). *L2 Journal*, 9(3), 50-69.
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods: Business students*. Pearson Education Limited.
- Schleppegrell, M., Achugar, M., & Orteiza, T. (2004). The grammar of history: Enhancing content-based instruction through a functional focus on language. *TESOL Quarterly*, 38(1), 67-93.
- Serçemeli, M., & Kurnaz, E. (2020). Covid-19 pandemi döneminde öğrencilerin uzaktan eğitim ve uzaktan muhasebe eğitimine yönelik bakış açıları üzerine bir araştırma. *Uluslararası Sosyal Bilimler Akademik Araştırmalar Dergisi*, 4(1), 40-53.
- Shave, J. (2010). A Teacher friendly process for evaluating and selecting ESL/EFL coursebooks. *The Internet TESL Journal*, 16(11), <http://iteslj.org/Articles/Shave-CourseBookEvaluation.html>
- Sheldon, L. E. (1988). Evaluating ELT textbooks and materials. *ELT Journal*, 42(4), 237-246.

- Short, D. J. (2017). How to integrate content and language learning effectively for English language learners. *Eurasia Journal of Mathematics, Science and Technology Education*, 13(7b), 4237-4260.
- Shibata, N. (2019). The effectiveness of content-based instruction on beginners' writing skills. In P. Clements, A. Krause, & P. Bennett (Eds.), *Diversity and inclusion* (pp. 352-359). JALT Publication.
- Siekman, S., Webster, J.P., Samson, S. A.A., & Moses, C.K. (2017). Teaching our way of life through our language: Materials development for indigenous immersion education. *Cogent Education*, 4(1).
<https://www.tandfonline.com/doi/full/10.1080/2331186X.2017.1362887>
- Siqi, C. (2017). Integration of three CBI models and WeChat mobile learning in business English teaching. *ELT Journal*, 10(9), 218-226.
- Smala, S. (2014). Sole fighter mentality: Stakeholder agency in CLIL programmes in Queensland. *The Language Learning Journal*, 42(2), 195-208.
- Snow, M. A. (2001). Content-based and immersion models for second and foreign language teaching. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (pp. 303-318). Heinle & Heinle.
- Snow, M. A., & Brinton, D. M. (1988a). The adjunct model of language instruction: An ideal EAP framework. In S. Benesch (Ed.), *Ending remediation: Linking ESL and content in higher education* (pp. 33-52). TESOL Incorporation Press.
- Snow, M. A., & Brinton, D. M. (1988b). Content-based language instruction: Investigating the effectiveness of the adjunct model. *TESOL Quarterly*, 22(4), 553-574.
<http://dx.doi.org/10.2307/3587256>
- Snow, M. A., Met, M., & Genesee, F. (1989). A conceptual framework for the integration of language and content in second/foreign language instruction. *TESOL Quarterly*, 23(2), 201-217.
- Snow, M. A., & Brinton, D. M. (2019). *Content-based instruction: What every ESL teacher needs to know*. University of Michigan Press.
- Song, B. (2006). Content-based ESL instruction: Long-term effects and outcomes. *English for Specific Purposes*, 25(4), 420-437.
- Södergård, M. (2008). Teacher strategies for second language production in immersion kindergarten in Finland. In T. Fortune & D. Tedick (Eds.), *Pathways to bilingualism and multilingualism: Evolving perspectives on immersion education* (pp. 152-173). Multilingual Matters.
- Spada, N., & Lightbown, P. M. (2008). Form-focused instruction: isolated or integrated? *TESOL Quarterly*, 42(2), 181-207.
- Stoller, F. L., & Grabe, W. (1997). A six-T's approach to content-based instruction. In M.A. Snow & D.M. Brinton (Eds.), *The content-based classroom: Perspectives on integrating language and content* (pp. 78-94). Longman Publishing.

- Stoller, F. L. (2004). Content-based instruction: Perspectives on curriculum planning. *Annual Review of Applied Linguistics*, 24(1), 261-283.
<https://doi.org/10.1017/S0267190504000108>
- Strevens, P. (1977). Special-purpose language learning. *Language Teaching and Linguistics Abstracts*, 10(3), 145–63.
- Stryker, S., & Leaver, B. (1997). *Content-based instruction in foreign language education*. Georgetown University Press.
- Sundqvist, P. (2011). A possible path to progress: Out-of-school English language learners in Sweden. In P. Benson & H. Reinders (Eds.), *Beyond the language classroom: The theory and practice of informal language learning and teaching* (pp. 106–118). Palgrave Macmillan.
- Swain, M. (1993). The output hypothesis: Just speaking and writing aren't enough. *The Canadian Modern Language Review*, 50(1), 158-164.
- Swain, M. (1995). Three functions of output in second language learning. In G. Cook & B. Seidlhofer (Eds.), *Principles and practice in applied linguistics* (pp. 125-144). Oxford University Press.
- Swain, M. (1996). Integrating language and content in immersion classrooms: Research perspectives. *The Canadian Modern Language Review*, 52(4), 529-548.
- Swain, M. (2001). Integrating language and content teaching through collaborative tasks. *The Canadian Modern Language Review*, 58(1), 44-63.
- Swain, M. & Lapkin, S. (1982). *Evaluating bilingual education: A Canadian case study*. Multilingual Matters.
- Swain, M. & Johnson, R.K. (1997). Immersion education: A category within bilingual education. In R. K. Johnson & M. Swain (Eds.) *Immersion education: International perspectives* (pp. 1-16). Cambridge University Press.
- Swain, M., & Lapkin, S. (2013). A Vygotskian sociocultural perspective on immersion education: The L1/L2 debate. *Journal of Immersion and Content-Based Language Education*, 1(1), 101-129.
- Swales, J. M. (2004). *Research Genres. Exploration and Applications*. Cambridge University Press.
- Sylvén, L.K., & Tompson, S. (2015). Language learning motivation and CBI: Is there a connection? *Journal of Immersion and Content-Based Language Education*, 3(1), 28-50.
- Tarone, E., & Swain, M. (1995). A sociolinguistic perspective on second language use in immersion classrooms. *The Modern Language Journal*, 79(2), 166-178.
- Taşçı, S. (2021) Evaluation of emergency distance language education: Perspectives of ELT students. *Nevşehir Hacı Bektaş Veli Üniversitesi SBE Dergisi*, 11(1), 286-300.

- Tavakol, M. & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55.
- Teherani, A., Martimianakis, T., Stenfors-Hayes, T., Wadhwa, A., & Varpio, L. (2015). Choosing a qualitative research approach. *Journal of Graduate Medical Education*, 7(4), 669-670.
- Tok, H. (2010). TEFL textbook evaluation: From teachers' perspectives. *Journal of Educational Research and Reviews*, 5(9), 508-517.
- Toköz-Göktepe, F. (2014). Speaking problems of 9th grade high school Turkish learners of L2 English and possible reasons for those problems: Exploring the teachers' and students' perspectives. *Procedia-Social and Behavioral Science*, 116(21), 1875–1879. <https://doi.org/10.1016/j.sbspro.2014.01.487>
- Tomlinson, B. (1998/2011). *Materials development in language teaching*. Cambridge University Press.
- Tomlinson, B. (2010). What do teachers think about EFL coursebooks? *Journal of Modern English Teacher*. 19(4), 5-9.
- Tomlinson, B. & Masuhara, H. (2017). *The complete guide to the theory and practice of materials development for language learning*. John Wiley & Sons.
- Toquero, C. M. (2021). Emergency remote education experiment amid COVID-19 pandemic. *International Journal of Educational Research and Innovation*, 15(1), 162-176.
- Trimble, L. (1985). *English for science and technology: A discourse approach*. Cambridge University Press.
- Tsai, Y. L., & Shang, H. F. (2010). The impact of content-based language instruction on EFL students' reading performance. *Asian Social Science*, 6(3), 77-85.
- Tseng, C. T. H. (2017). Teaching cross-cultural communication through content-based instruction: Curriculum design and learning outcome from EFL learners' perspectives. *ELT Journal*, 10(4), 22-34.
- Turner, M. (2013a). CLIL in Australia: The importance of context. *International Journal of Bilingual Education and Bilingualism*, 16(4), 395-410.
- Turner, M. (2013b). Content-based Japanese language teaching in Australian schools: Is CLIL a good fit?. *Japanese Studies*, 33(3), 315-330.
- Tuzcu Eken, D. (2021). English education in Turkey: Why are we 'very low level'?. *RumeliDE Dil ve Edebiyat Araştırmaları Dergisi*, 23(1), 804-822. DOI: 10.29000/rumelide.949700
- Uğurer, H. (2018). *Design and evaluation of a CBI-oriented textbook for Turkish students of architecture at tertiary level: A case study* [Unpublished Master's Thesis]. Bahçeşehir University, İstanbul.
- Ur, P. (1996). *A course in language teaching, practice and theory*. Cambridge University Press.


- Uslu, D. (2003). *EFL teachers' reading textbook evaluation criteria before and after training*. [Unpublished Master's Thesis]. Anadolu University, Eskişehir.
- Valeo, A. (2013). The integration of language and content: Form-focused instruction in content-based language program. *The Canadian Journal of Applied Linguistics*, 16(1), 25-50.
- Van Teijlingen, E. R., & Hundley, V. (2001). The importance of pilot studies. *Social Research Update*, 35. University of Surrey Press. <http://sru.soc.surrey.ac.uk/SRU35.html>.
- Vanichvasin, P. (2019). Effects of content-based instruction on English language performance of Thai undergraduate students in a non-English program. *ELT Journal*, 12(8), 20-29.
- Vlăsceanu, L., Grünberg, L., & Pârlea, D. (2004). *Quality assurance and accreditation: A glossary of basic terms and definitions*. Bucharest: Unesco-Cepes Publishing.
- Whittaker, R., Llinares, A., & McCabe, A. (2011). Written discourse development in CLIL at secondary school. *Language teaching research*, 15(3), 343-362.
- Wilkins, D. A. (1976). *Notional syllabuses*. Oxford, England: Oxford University Press.
- Wolff, D. (2007). CLIL: Bridging the gap between school and working life. In D. Marsh & D. Wolff (Eds.), *Diverse contexts—converging goals. CLIL in Europe* (pp. 15-25). Peter Lang.
- Wong-Fillmore, L. (1994). *English language development: How it happens when it does, and why it doesn't always* [Unpublished manuscript]. University of California Press.
- Yalçın, Ş. (2007). *Exploring the effects of content-based instruction on skill development, domain-specific knowledge and metacognition in the L2*. [Master's Thesis]. Boğaziçi University, Istanbul.
- Yang, W. (2016). ESP vs. CLIL: A coin of two sides or a continuum of two extremes. *ESP today*, 4(1), 43-68.
- Yugandhar, D. K. (2016). Content-theme-based instruction to increase the quality of EFL class. *International Journal on Studies in English Language and Literature (IJSELL)*, 8(4), 86-90.
- Zaparucha, A. (2009). A case for geography and English integrated studies. In K. Donert, Y. Ari, M. Attard, G. O'Reilly, D. Schmeinck (Eds.), *Proceedings of the HERODOT Conference* (pp. 93-98). The Herodot Thematic Network Publishing.
- Zhyrun, I. (2016). Culture through comparison: Creating audio-visual listening materials for a CBI course. *LACLIL*, 9(2), 345-373.
- Zohrabi, M., Sabouri, H., & Behroozian, R. (2012). An assessment of strengths and weaknesses of Iranian first year high school English coursebook using an evaluation checklist. *English Language and Literature Studies*, 2(2), 89-99.

Appendices

Appendix 1: The first two Pages of a Sample Unit

UNIT 6

THE LATEST & FUTURE COMPUTER TECHNOLOGY



In this unit, you will

- examine the latest and future technological advances,
- compare the effects of future technology on different areas of our lives.
- prepare a powerpoint presentation

KEY CONCEPTS

• flexibility	• force
• advances	• regulation
• leap motion	• mental
• sector	• transportation
• 3D	• dimension
• impact	• shape
• public	• device
• utilization	

In the previous units, we covered the history of computers, their developments and different computer generations from the 1940s until now. In this unit, we focus on the future. Computers and technology change rapidly, so what about the future? What awaits us in the years to come?

We live in apartments, visit doctors at hospitals, use gasoline, public transportation, and call the police when it is necessary in our cities. What kind of technological services or facilities will there be in the cities of the future?

WARM UP

A SMART CITY

TASK 1B

Work in pairs and look at the pictures below. This is a "smart city" of the future. Write down your guesses about some of the aspects of our lives in this city. You can use the Internet. You can see an example below, too. Have a look at the glossary as well.



Smart Buildings

In the future, people will live in smart buildings. These buildings will have smart facilities. When you enter your house, the door will say "Hey, welcome"



Smart Healthcare



Smart Energy



Smart Mobility



Smart Public Safety

Glossary
public safety: authority-related force on the public such as the police.
mobility: traffic regulations and public transportation.
energy: power derived from the utilization of physical or chemical resources
health: a person's mental or physical condition.
building: a structure with a roof and walls, such as a house or factory.

Appendix 2: Course Syllabus

COURSE PLAN	
Week/Date	Content
1st Week Oct 11 th - 15 th	UNIT 1 Engineering
2nd Week Oct 18 th - 22 nd	UNIT 2 Computers
3rd Week Oct 25 th – 29 th	NO CLASS: REPUBLIC DAY
4th Week Nov 1 st – 5 th	UNIT 3 Computer Engineers
5th Week Nov 8 th –13 th	UNIT 4 A Brief History of Computers
6th Week Nov 15 th – 19 th	UNIT 5 The History of Electricity & Engineering
7th Week Nov 22 nd – 26 th	UNIT 6 The Latest & Future Computer Technology
8th Week Nov 29 th – Dec 3 rd	MIDTERM EXAM WEEK
9th Week Dec 6 th – 10 th	UNIT 7 Jobs Eats an Apple
10th Week Dec 13 th – 17 th	UNIT 8 The Gates of Technology
11th Week Dec 20 th – 24 th	UNIT 9 The Father of the Information Flow
12th Week Dec 27 th – 31 st	UNIT 10 Computer Networking
13th Week Jan 3 rd – 7 th	UNIT 11 Cybersecurity
14th Week Jan 10 th – 14 th	UNIT 12 Robotics
Jan 17th –26th	FINAL EXAM PERIOD

Appendix 3: Materials Evaluation Questionnaire

Materials Evaluation Questionnaire

Dear Participants,

I am a graduate student in English Language Teaching Department at the Institute of Educational Sciences at Bursa Uludağ University.

The aim of this study is to evaluate the effectiveness of the "Content-Based Instruction" (CBI)-oriented course material prepared within the scope of the English as a foreign language education programme designed for computer science, computer and software engineering fields at a foundation university in Istanbul.

This questionnaire is one of the data collection tools to be employed in the study. It consists of 8 sections. Section 1 collects demographic data about the participants whereas the remaining sections aim at collecting the evaluations of the participants regarding the CBI-oriented course material.

It is advised that you fill out this form in a quiet place to refrain from distractions.

All the information you will have provided will be kept confidential and used for research purposes only.

I appreciate your contribution.

If you have any question, or if you wish further information regarding the study, please contact me through the e-mail address provided below.

Cem Şencan

ELT MA Programme

Institute of Educational Sciences

Bursa Uludağ University

e-mail: _____

*Required

I hereby confirm that the information provided by me on this form may be collected and used for the study mentioned above. *

Confirm

Section 1: Demographic Data

Age *

17-18

18-20

20-25

25-30

Over 30

Gender *

- Male
- Female
- Prefer not to say

Department *

- Computer Engineering
- Software Engineering
- Other: _____

Medium of instruction in your department *

- English
- Turkish

Year *

- 1st-year
- 2nd-year
- 3rd-year
- 4th-year

Section 2: The General Appearance of the CBI Material

Items	1 Insufficient	2 Partially Insufficient	3 Partially Sufficient	4 Sufficient
1. Information on the front cover				
2. Information on the back cover				
3. Table of contents				
4. Page layout				
5. Font, size and type				
6. Pictures, graphs and tables used				

7. The quantity and quality of authentic texts				
--	--	--	--	--

Section 3: Student-related Factors in the CBI Material

Items	1 Insufficient	2 Partially Insufficient	3 Partially Sufficient	4 Sufficient
1. Fostering student-centered teaching				
2. Contribution to students' cognitive growth				
3. Appropriateness of the content of materials to student background				
4. Ease of use of materials by students				
5. Short- and long-term effects of the material on student motivation				
6. Addressing students of different interests				
7. Compatibility of materials with the students' foreign language proficiency				
8. Guiding students on how to study the foreign language				
9. Encouraging students to do research				
10. Charging students with learning responsibility				
11. Self-evaluation opportunity for students				

Section 4: Course Duration and the CBI Material

Items	1 Insufficient	2 Partially Insufficient	3 Partially Sufficient	4 Sufficient
1. The quantity of material for classroom use throughout the course				
2. The number of materials for use outside the classroom throughout the course				

Section 5: The Organization of the CBI Material

Items	1 Insufficient	2 Partially Insufficient	3 Partially Sufficient	4 Sufficient
1. Overall syllabus organization				
2. Flow of units				
3. Layout of units				
4. Transition between the parts of a unit				
5. Intensity of the textbook				

Section 6: Language Teaching Approach and Method

Items	1 Insufficient	2 Partially Insufficient	3 Partially Sufficient	4 Sufficient
1. Language teaching approach				
2. Language teaching method				
3. A holistic approach to language				
4. Ability to support a rich linguistic and socio-cultural perspective				
5. Embracing the difference in individual learning strategies				
6. Ability to include skills-based approach				
7. Ability to include sub-skills				
8. Approach to language forms				
9. Ability to teach foreign language while relating to other subjects taught at school				

Section 7: Syllabus-related Factors and the CBI Material

Items	1 Insufficient	2 Partially Insufficient	3 Partially Sufficient	4 Sufficient

1. Compatibility with academic vision				
2. Compatibility with academic program mission				
3. Meeting language program goals				
4. Ability to meet student needs				
5. Compatibility with teaching a foreign language for academic purposes				
6. Meeting institutional expectations and needs				

Section 8: Content-related Factors and the CBI Material

Items	1 Insufficient	2 Partially Insufficient	3 Partially Sufficient	4 Sufficient
1. Ability to inform students and instructors by revealing the course book content				
2. Course book ability to help students prepare for upcoming lessons				
3. Offering adequate, comprehensible input				
4. Accordance with lesson objectives				
5. Accordance with lesson duration				
6. Connection between aims and topics covered				
7. Attractiveness of the material				
8. Functionality of the material				
9. Topic-based content				
10. Topic variety				
11. Sufficiency of number of texts				
12. Text variety				
13. Presentation of references and websites about the topic				
14. Presentation of language				
15. Grammar activities				

16. Appropriateness of grammar and vocabulary considering student proficiency level				
17. Including communication skills				
18. Ability to offer all language skills equally				
19. Offering writing skills				
20. Offering speaking skills				
21. Offering reading skills				
22. Offering listening skills				
23. Application of listening, reading, writing, speaking activities in daily life				
24. Importance given to reading and writing follow-up				
25. Guidance to extensive reading				
26. Importance given to vocabulary teaching				
27. Offering students with meaningful language activities				
28. Use of authentic material				
29. Appropriateness of authentic text considering student proficiency level				
30. Ability to teach symbols, signs and abbreviations related to professional field				
31. Offering the terminology of different professions				
32. Providing understandable input by creating content-based tasks				
33. Relevance of topics covered to real life				
34. Meeting foreign language needs in daily life				
35. Offering activities which will improve critical thinking skills				
36. Encouraging student participation cognitively and affectively				
37. Natural use of language				
38. Number of structure-based exercises				
39. Ability to present daily speech patterns in a				

meaningful way				
40. Offering entertaining and attractive activities				
41. Number of exercises and activities				
42. Ability to give clear instructions				
43. Offering assessment and evaluation tools				
44. Tests and their appropriateness				
45. Revision Units				
46. Covering all lesson details during class time				
47. Course book ability to direct students on where to go, what to do, like a map				
48. Amount of difficulties faced when working with the course book				
49. Offering physical activities in the classroom				
50. Appropriateness of activities considering classroom size				
51. Ability to support individual participation				
52. Offering group and peer work activities				
53. Materials being prepared for a specific group				
54. Ability to motivate students for out-of-class learning				

Appendix 4: The Placement Test

Placement Test

This test consists of grammar & vocabulary, reading and writing sections.

***Required**

Student ID *

Grammar &
Vocabulary

*Please choose the best option for each blank in the sentences below.

1. I want to make a cake for my friends, but I can't because there isn't ____ milk. (1 pt)
 a) any b) a few c) some d) many
2. Katie: ____ do you usually go on holiday? (1 pt)
 Sue: I go to Greece. I really like it.
 a) Where b) When c) How long d) How
3. The doctor doesn't have any time in the morning. But, she ____ you in the afternoon. (1 pt)
 a) can see b) can't see c) saw d) mustn't see
4. I ____ in London five years ago. (1 pt)
 a) were b) was c) am d) did
5. I ____ go to the theatre because I don't like it. (1 pt)
 a) usually b) always c) often d) never
6. I ____ this fridge five years ago, and I am still very happy with it. (1 pt)
 a) bought b) buy c) am buying d) buys
7. Where were you last night? I called you but you ____ answer! (1 pt)
 a) didn't b) don't c) isn't going to d) won't
8. This is my friend Lydia. She is a nice person. I like _____. (1 pt)
 a) me b) her c) him d) them

20. Could you tell me where ____? (1 pt)
- a) is the post office b) the post office is
c) is it the post office d) it is the post office
21. If I had known about the accident, I ____ it to the police. (1 pt)
- a) reported b) would have reported
c) was reporting d) have been reporting
22. The Taj Mahal is really worth _____. (1 pt)
- a) to see it b) seeing c) you see it d) see
23. Would you mind ____ the window? (1 pt)
- a) open b) opening c) to open d) I open
24. If I went to live in a foreign country, ____ my friends. (1 pt)
- a) I'd miss b) I'm missing c) I missed d) I miss
25. Chicago, ____ is nicknamed the Windy City, is the largest city in Illinois. (1 pt)
- a) it b) which c) what d) that
26. A: "I can't speak German." - B: "____ can I." (1 pt)
- a) No b) Never c) Not d) Neither
27. I had an accident. I wish I ____ more careful. (1 pt)
- a) was being b) will be c) have been d) had been
28. Ken failed the test. He should ____ more. (1 pt)
- a) studying b) to study c) studied d) have studied
29. Betty's husband suggested that she ____ a few days off from work. (1 pt)
- a) has took b) taking c) take d) will take
30. The man ____ lives across the street is a dentist. (1 pt)
- a) who b) he c) whose d) what

31. Ankara is a very ____ city. I want to live in a more interesting city. (2 pts)
 a) crowded b) boring c) noisy d) dangerous
32. I want to ____ around Europe and see different countries this summer. (2 pts)
 a) learn b) travel c) plan d) find
33. Mike: "I get nervous before the exams. How can I relax?" (2 pts)
 John: "I think you can go ____ a walk."
 a) for b) in c) at d) of
34. I have four exams this week so I am very ____ . (2 pts)
 a) worried b) relaxing c) rich d) smart
35. The roof of our building has been ____ in recent storm and we should get it fixed as soon as possible. (2 pt)
 a) damaged b) covered c) stolen d) pushed
36. I enjoy spending time with my cousin. I think she is so ____ because she never gets angry at me. (2 pts)
 a) available b) easygoing c) proud d) reliable
37. The boss ____ my request to leave early, and it made me unhappy. (2 pts)
 a) accepted b) repeated c) refused d) received
38. Mary is 5 years old and ____ about everything around her. She always asks lots of questions. (2 pts)
 a) curious b) careless c) polite d) generous

Reading: Paragraphs

*Read the paragraphs and answer the questions that follow accordingly.

39. Akram: "Leila. Sorry to hear your heating isn't working. As you said, it'll get very cold later this week so you really should get it fixed. Let me know if I can help."
 Why did Akram send Leila a text message? (2 pts)
 a) to apologize about something
 b) to encourage her to do something
 c) to warn her about something

40. Southside Fitness Club: "Join before next Friday and enjoy free club membership until 1st September. Full range of gym equipment and fitness classes available. Click here for more details."

What does the advert say? (2 pts)

- a) You can't become a member of this club before 1st September.
- b) You don't need to become a member to use any of the club's facilities.
- c) You don't have to pay anything to become a club member at the moment.

41. Anna's email: "Roberto, could you come round later today? I've just bought a new printer and I'm having problems installing it. I can't really follow the instructions and I'm a bit worried about damaging it."

Why is Anna writing to Roberto? (2 pts)

- a) She has lost the instructions for the printer.
- b) She wants help with the printer.
- c) She has broken the printer.

42. Kristina's note: "Hello Miguel! Today, Amir rang. He said he was sorry for not answering your email. He'd like a meeting about the project. Perhaps you could ring him back when it's convenient."

What does Kristina say Miguel should do? (2 pts)

- a) return Amir's phone call
- b) attend a meeting with Amir
- c) reply to the email Amir sent

43. A notice about lost property: "There are a number of items of lost property still available for collection from the school office. If any of these items belong to you, you must collect them by the end of next week."

What does the notice say? (2 pts)

- a) The lost property office will be closed next week.
- b) There is a limited time to pick up any lost property.
- c) Students should take lost property to the school office.

44. A blog entry: "I saw Bounce play yesterday. No they haven't split up and there's nothing else like them. We couldn't always hear the voices – equipment issues – but that didn't bother the fans. They went crazy as usual. That's what Bounce are all about."

What does the blogger say was wrong with the concert? (2 pts)

- a) the performance of the band
- b) the attitude of the audience
- c) the quality of the sound

Reading: Projects & Holidays

* After reading the following text, please specify the most appropriate project / working holiday for each individual below based on their aims and characteristics.

Nairobi

This two-week project in Nairobi, Kenya, is specially designed for families, although couples are also welcome. The work includes walking and driving through the area as you try to spot individual rhinos, record the movement of giraffes, and study the behaviour of elephants. It could transform your family from computer addicts into active environmentalists. Simple accommodation and food is provided, but not flights.

Liverpool

In this one-week working holiday for adults, you will be clearing the banks of the river Mersey in Liverpool, England. Plants here are growing out of control and causing problems for both wildlife and boats, so you will be digging them up and burning them on the beach nearby. If you are interested, you can also join beach-cleaning parties run by local women and take part in a seabird survey. Meals and good quality accommodation are included.

Languedoc

Organic World is a project that brings volunteers and producers of organic food together. The idea is simple: you provide the hard work and your English-speaking host provides meals and basic accommodation. The farm is in Languedoc, France and is situated in the mountains, not far from the sea. You will help to grow organic vegetables, carry out general repairs on equipment, and feed the sheep and chickens. Volunteers are welcome to stay as long as they like.

Maissade

The Family Centre in the town of Maissade, Haiti, provides daycare for children. This means that their mothers can work on local farms to support their families. The project is open all year round and the centre only takes volunteers for a minimum of three weeks. Beginners' conversation classes are organized so that volunteers are able to talk to the children they are working with, and the accommodation provided is with families in the town. Weekend trips to the surrounding countryside are also available – a great opportunity to see the interesting wildlife of Haiti.

45. Anna, who is taking a break from her job, would like to work on an environmental project. She wants to stay somewhere comfortable, preferably near the seaside. (2 pts)
a) Nairobi b) Liverpool c) Languedoc d) Maissade
46. Bindu is a college student and she would like to go on a working holiday for a month. She is keen to get involved in something to make other people's lives better. She has done babysitting in the past but would like to gain more experience. (2 pts)
a) Nairobi b) Liverpool c) Languedoc d) Maissade
47. Helen would love to work on a wildlife project with her husband, Andrew. They want to take a fortnight's break from their jobs to learn something interesting. (2 pts)
a) Nairobi b) Liverpool c) Languedoc d) Maissade
48. William is a student at agricultural college and would like to take part in a project that will offer practical experience related to his studies. He wants to stay for a month and would like to try a variety of jobs. (2 pts)
a) Nairobi b) Liverpool c) Languedoc d) Maissade
49. Jola would like to be involved in a project helping other women. She's interested in learning a new language and would prefer to stay with local people. (2 pts)
a) Nairobi b) Liverpool c) Languedoc d) Maissade
50. Paul wants a working holiday for himself and his fourteen-year-old daughter Caroline, who would like to train as a vet when she leaves school. They are looking for a scientific outdoor project that will be of value in Caroline's future studies. (2 pts)
a) Nairobi b) Liverpool c) Languedoc d) Maissade

Writing

Please do the following writing task, which has been divided into 3 parts below.

Write 80–130 words in total for the following 3 sections.

Topic:

You recently had a party in a room at a sports centre. First, read the email from Helen Maxwell, the sports centre manager. Then, write a reply to Ms Maxwell, under the appropriate sections.

From: Helen Maxwell

Subject: Party at Greenway Sports Centre

Dear Customer,

Thank you for having your party at the Greenway Sports Centre partyroom last week. I would like to ask you some questions about it.

How did you find out about the party room at Greenway Sports Centre?

Say how...

What things did you like about having your party here?

Give details

I want to improve the service we provide for parties. Do you have any suggestions?

Suggest...

Kind regards,

Helen Maxwell

51. Say how...
(10 pts)

52. Give Details
(10 pts)

53. Suggest
(10 pts)

Appendix 5: Students' Semi-structured Interview Questions - Turkish Version

1. İçerik odaklı ders materyalini ne kadar süredir kullanıyorsunuz?
2. İçerik odaklı ders materyalinin genel görünümünü nasıl değerlendirirsiniz? (Görsel, yazı tipi, düzen, tasarım vb. açısından)
3. İçerik odaklı ders materyalindeki görsel materyalleri içerik bilgisini arttırmada faydalı buldunuz mu?
4. İçerik odaklı ders materyali motivasyon seviyenizi hangi yönlerden etkiledi?
5. İçerik odaklı ders materyalinin öğrenci özerkliğine hitap ettiğini düşünüyor musunuz?
6. İçerik odaklı ders materyalindeki dil seviyesinin sizin dil yeterlilik seviyenize uygun olduğunu düşünüyor musunuz?
7. İçerik odaklı ders materyalinde sunulan materyal miktarının (okuma metinleri ve izleme etkinlikleri gibi) bir akademik dönem için yeterli olduğunu düşünüyor musunuz? Neden/neden değil?
8. İçerik odaklı ders materyalindeki materyal miktarının sınıf dışında kullanım için yeterli olduğunu düşünüyor musunuz?
9. Ünitelerin organizasyonunu geçişler, yoğunluk, akış vb. açılardan nasıl değerlendirirsiniz?
10. İçerik odaklı ders materyalinin, üniversitede öğrendiğiniz diğer konularla ilişki kurarken İngilizce öğrenmenize yardımcı olabileceğini düşünüyor musunuz?
11. İçerik odaklı ders materyalindeki dilbilgisi sunumunu nasıl değerlendirirsiniz?
12. Neden İngilizce öğreniyorsunuz? İhtiyaçlarınız ve amaçlarınız nelerdir?
13. Dersimiz ve İçerik odaklı ders materyalimiz ihtiyaçlarınızı ve hedeflerinizi karşıladı mı?
14. İçerik odaklı ders materyalinde sunulan içeriğin çeşitliliğini nasıl değerlendirirsiniz?
15. İhtiyacınız olan teknik terminolojiyi tanıtmada kelime alıştırmalarını nasıl değerlendirirsiniz?
16. Etkinlikler, 4 dil becerisini (dinleme, okuma, konuşma ve yazma) ve içerik bilgisini geliştirmek için size yardımcı oldu mu?

Appendix 6: Students' Semi-structured Interview Questions - English Version

1. How long have you been using the CBI material?
2. How would you evaluate the general appearance of the CBI course material in terms of the visuals, fonts, layout, design, etc.?
3. Did you find visual materials in the CBI course material helpful in enhancing content knowledge?
4. In what ways did the CBI course material affect your motivation level?
5. Do you think the CBI course material addressed student autonomy?
6. Do you think the language level in the CBI course material is appropriate to your proficiency level?
7. Do you think the amount of material (such as reading texts and viewing activities) presented in the course material is sufficient for an academic term? Why/why not?
8. Do you think the amount of material in the CBI course material is sufficient for use outside the classroom?
9. How would you evaluate the organization of the units in terms of transitions, intensity, flow, etc.
10. Do you think the CBI course material can help you learn English while relating to other subjects that you learn at the university?
11. How would you evaluate the grammar presentation in the CBI course material?
12. Why do you learn English? What are your needs and purposes?
13. Did our course and CBI course material meet your needs and aims?
14. How would you evaluate the variety of content presented in the CBI course material?
15. How would you evaluate the vocabulary exercises in promoting the technical terminology that you need?
16. Were the activities helpful for promoting the 4 language skills (listening, reading, speaking, writing) and content knowledge?

CURRICULUM VITAE

ÖZGEÇMİŞ			
Adı-Soyadı	Cem Şencan		
Bildiği Yabancı Diller	İngilizce		
Eğitim Durumu	Başlama - Bitirme Yılı		Kurum Adı
Lise	2007	2011	Balıkesir İstanbulluoğlu Anadolu Öğretmen Lisesi
Lisans	2011	2018	Boğaziçi Üniversitesi
Yüksek Lisans	2020	2022	Bursa Uludağ Üniversitesi
Doktora	-	-	-
Çalıştığı Kurum (lar)	Başlama - Ayrılma Yılı		Çalışılan Kurumun Adı
1.	2018	-	İstinye Üniversitesi Yabancı Diller Bölümü
2.	-	-	-
3.	-	-	-
Üye Olduğu Bilimsel ve Meslekî Kuruluşlar	-		
Katıldığı Proje ve Toplantılar	-		
Yayımlar:	-		
Diğer:	-		
		Tarih	
		İmza	
		Adı-Soyadı	