REPUBLIC OF TURKEY
ÇUKUROVA UNIVERSITY
INSTITUTE OF SOCIAL STUDIES
ENGLISH LANGUAGE TEACHING DEPARTMENT

ENGLISH FOR SPECIFIC PURPOSES (ESP) PROGRAM EVALUATION OF AN ENGINEERING FACULTY AT A PRIVATE UNIVERSITY IN TURKEY

Özgür Berivan SANDAL

MASTER OF ARTS

ADANA / 2019

REPUBLIC OF TURKEY
ÇUKUROVA UNIVERSITY
INSTITUTE OF SOCIAL STUDIES
ENGLISH LANGUAGE TEACHING DEPARTMENT

ENGLISH FOR SPECIFIC PURPOSES (ESP) PROGRAM EVALUATION OF AN ENGINEERING FACULTY AT A PRIVATE UNIVERSITY IN TURKEY

Özgür Berivan SANDAL

Supervisor : Prof. Dr. Yonca ÖZKAN
Member of Examining Committee : Asst. Prof. Dr. Meryem AKÇAYOĞLU MİRİOĞLU
Member of Examining Committee : Asst. Prof. Dr. Ömer EREN

MASTER OF ARTS

ADANA / 2019

To Çukurova University Institute of Social Sciences

We certify that this thesis is satisfactory for the award of the degree of Master of Arts in the Department of English Language Teaching.

Supervisor: Prof. Dr. Yonca ÖZKAN

Member of Examining Committee: Asst. Prof. Dr. Meryem AKÇAYOĞLU MİRİOĞLU

Member of Examining Committee: Asst. Prof. Dr. Ömer EREN

I certify that this thesis conforms to the formal standards of the Institute of Social Sciences. / /2019

Prof. Dr. Serap ÇABUK
Director of Institute

Note: The uncited usage of reports, charts, figures and photographs in this thesis, whether or original quoted from other sources, is subject to the Laws of Works of Art and Thought NO:5846.
Not: Bu tezde kullanılan özgün ve başka kaynaktan yapılan bildirişlerin, çizelge, sekil ve fotoğrafların kaynak gösterilmeden kullanımı, 5846 Sayılı Fikir ve Sanat Eserler Kanunu'ndaki hükümlere tabidir.

ETİK BEYANI

Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Tez Yazım Kurallarına uygun olarak hazırladığım bu tez çalışmasında;

- Tez içinde sunduğum verileri, bilgileri ve dokümanları akademik ve etik kurallar çerçevesinde elde ettiğimi,
- Tüm bilgi, belge, değerlendirme ve sonuçları bilimsel etik ve ahlak kurallarına uygun olarak sunduğumu,
- Tez çalışmasında yararlandığım eserlerin tümüne uygun atıfta bulunarak kaynak gösterdiğimi,
- Kullanılan verilerde ve ortaya çıkan sonuçlarda herhangi bir değişiklik yapmadığımı,
- Bu tezde sunduğum çalışmanın özgün olduğunu,

bildirir, aksi bir durumda aleyhime doğabilecek tüm hak kayıplarını kabullendiğimi beyan ederim. …. / …. / 2019

Özgür Berivan SANDAL

ÖZET

TÜRKİYE'DE ÖZEL BİR ÜNİVERSİTEDE MÜHENDİSLİK FAKÜLTESİNDEKİ ÖZEL AMAÇLI İNGİLİZCE PROGRAMININ DEĞERLENDİRMESİ

Özgür Berivan SANDAL

Yüksek Lisans Tezi, İngiliz Dili Eğitimi Ana Bilim Dalı
Danışman: Prof. Dr. Yonca ÖZKAN
Ağustos 2019, 73 sayfa

Bu araştırmanın amacı Toros Üniversitesi mühendislik fakültesindeki Özel Amaçlı İngilizce (ÖAİ) programının değerlendirilmesidir. Araştırma, Hutchinson ve Waters'ın (1987) Özel Amaçlı İngilizce çerçevesine dayandırılmıştır ve veri toplamak için çeşitli kaynaklar kullanılmıştır. Çalışmanın katılımcıları 66 mühendislik fakültesi öğrencisi ve altı ÖAİ öğretim görevlisidir.

Çalışmanın sonuçları ÖAİ programının temel amacının mesleki terminoloji geliştirmek, ve mesleki terminolojiyi akademik konuşma, dinleme, yazma ve okuma becerileriyle birleştirip kullandırmak olduğunu ortaya koymuştur. Mühendislik fakültesi öğrencilerinin dil ihtiyaçları mesleki, sosyal ve eğitimsel olarak gruplandırılmıştır. Mühendislik fakültesi öğrencilerinin temel dil ihtiyacı terminoloji geliştirmek olarak bulunmuştur. Öğrencilerin büyük kısmı gramerde yeterli olduklarını ancak mesleki terminoloji kısmında kendilerini geliştirmeleri gerektiğini ifade etmişlerdir. Bir diğer bulgu, farklı mühendislik branşlarında farklı derskitabı kullanma talebidir.

Bu tez Toros Üniversitesi'nde kullanılmakta olan ÖAİ branşları bilgilerine katkıda bulunmaktadır. ÖAİ konusunda çalışmaya hazırlanan öğretim görevlileri ve bu alanda araştırma yapmak isteyen araştırmacılara da katkıda bulunmaktadır.

Anahtar kelimeler: Özel amaçlı İngilizce (ÖAİ), İngiliz dili eğitimi, ihtiyaç analizi

ABSTRACT

ENGLISH FOR SPECIFIC PURPOSES (ESP) PROGRAM EVALUATION OF AN ENGINEERING FACULTY AT A PRIVATE UNIVERSITY IN TURKEY

Özgür Berivan SANDAL

Master Thesis, Department of English Language Teaching
Supervisor: Prof. Dr. Yonca ÖZKAN
August 2019, 73 pages

This thesis aims to evaluate the English for Specific Purposes (ESP) program at the engineering faculty at Toros University in Turkey. The research was based on Hutchinson and Waters' (1987) framework for ESP, and multiple sources of data collection were used. The participants of this study were 66 engineering faculty students and six ESP instructors.

The study demonstrated that the main objective of the ESP program is to develop personal strategies for reviewing new related vocabulary, to use vocabulary in a variety of academic speaking, listening, writing and reading activities. The students' needs were grouped in three categories which are occupational, social and educational. The main need of the engineering students is expansion of vocabulary because they are unfamiliar with the terminology of their future professions. The majority of the students believed they were competent in grammar but needed to develop their vocabulary. Most of the students wanted to use a textbook prepared specifically for their major study area.

This thesis contributes to the knowledge of the ESP branches employed at the engineering faculty of Toros University. It also contributes to language instructors who are preparing to practice teaching in this area and to researchers who are willing to conduct research about this field.

Keywords: English for specific purposes, ESP, ELT, Needs analysis

ACKNOWLEDGEMENT

I would like to express my gratitude to everyone who encouraged and supported me throughout my MA study. I am one of the most fortunate people on earth; I am surrounded by people who give me their full support and always encourage me even at times when I give up on myself.

I am very fortunate because I had the best advisor a student could have, Prof. Dr. Yonca ÖZKAN. Her enlightening ideas, sincerity and lasting encouragement supported and guided me at my darkest moments. I am deeply grateful to her and hope I that I have not disappointed her.

I would also like to thank the thesis committee members, Asst. Prof. Dr. Meryem AKÇAYOĞLU MİRİOĞLU and Asst. Prof. Dr. Ömer EREN for their valuable feedback and recommendations.

I am grateful to my dear friends and colleagues Kıvılcım Somuncuoğlu, Sena Tekeli, Gökçe Tezcan, Pınar Kaya, Bilge Nur Hayat, Uğur Harbelioğlu and Kerem Bereketoğlu who supported me and put up with me during my thesis research. I could not have done it without them.

My special thanks to my husband Metin Sandal and my son Can Sandal whose presence brightened my life and inspired me to take brand new paths.

Finally, I would like to express my deepest gratitude to my parents, Mustafa Çöplü and Naile Çöplü for their endless support, encouragement and patience to pursue my goals in life. We are a very special family and I am deeply grateful for having them as my parents. My academic journey could not have been possible without their support. This thesis is dedicated to them.

Özgür Berivan SANDAL

Adana / 2019

ABBREVIATIONS

ESP: English for Specific Purposes

ELT: English language teaching

EGP: English for General Purposes

EOP: English for Occupational Purposes

EAP: English for Academic Purposes

GE: General English

NA: Needs Analysis

P: Participant

I: Interviewee

TABLE OF CONTENTS

Page

ÖZET ..... **v**

ABSTRACT ..... **vi**

ACKNOWLEDGEMENT ..... **vii**

ABBREVIATIONS ..... **viii**

LIST OF TABLES ..... **xii**

LIST OF FIGURES ..... **xiii**

LIST OF APPENDICES ..... **xiv**

CHAPTER I

INTRODUCTION

1.1. Background to the Study 1

1.2. Problem Statement 2

1.3. Purpose of the Study 2

1.4. Limitations of the study 3

CHAPTER II

LITERATURE REVIEW

2.1. Origin of ESP 4

2.2. Definition of ESP 6

2.3. Classification of ESP 7

2.4. Teaching Approaches for ESP 10

2.5. Teaching Language Skills in EGP and ESP 12

2.5.1. Reading 12

2.5.2. Writing 13

2.5.3. Listening 14

2.5.4. Speaking 15

2.5.5. Grammar 16

2.5.6. Vocabulary 17

2.6. Needs Analysis in ESP Contexts 18

2.7. International Needs Analysis Studies 21
2.8. Needs Analysis Studies in Turkey 23

CHAPTER III
RESEARCH METHODOLOGY

3.1. Research Questions 25
3.2. Research Paradigm 25
3.3. Research Design 26
3.4. Rationale for adopting mixed method research design 27
3.5. Procedure 28
3.6. Setting and participants 28
3.6.1. The Research Site 28
3.6.2. Participants 28
3.7. Data Collection Tools 29
3.7.1. Questionnaire 29
3.7.2. Semi-structured Face to Face Interview 30
3.7.3. Reflection Papers 30
3.8. Data Analysis 31

CHAPTER IV
FINDINGS

4.1. Quantitative data analysis of the student participants of the study 32
4.1.1. Factor Analysis 34
4.1.2. Reliability Analysis 36
4.1.3. The association between the Participants' English Learning Needs And Demographic Data 38
4.2. Qualitative data analysis of the student participants 41
4.2.1. Reflection papers and open-ended questions 42
4.2.2. Semi-structured face to face interviews 44
4.3. Qualitative data analysis of the ESP instructors 47
4.4. Qualitative data analysis of the faculty academic English coordinator 50

CHAPTER V
DISCUSSION

5.2. The needs of the Engineering Students as Perceived by the Administrators and ESP Instructors 53
5.2.1. The needs of the Engineering Students as Perceived by the Administrators 53
5.2.2. The Needs of the Engineering Students as Perceived by the ESP Instructors 53
5.3. Are the Objectives Appropriate to the Needs of the Students of Engineering? 53
5.3.1 The students' Views about the ESP Program..... 53
5.3.2. The instructors' and administrators' views about the ESP program 54

CHAPTER VI
CONCLUSION

6.1. Conclusion of the study 55
6.2. Limitations of the study 56
6.3. Implications of the study..... 56
6.4. Suggestions for Future Research 57

REFERENCES..... 58
APPENDICES..... 67
CURRICULUM VITAE..... 73

LIST OF TABLES

Page

Table 1. Developments in ESP.....4
Table 2. Creswell's (2014, p.45) Table Comparing Research Designs. 27
Table 3. Gender Distribution of Student Participants 32
Table 4. Institutional Background of Student Participants 33
Table 5. Institutional Background Regarding Preparatory School of Student Participants.....33
Table 6. Distribution of Student Participants' Majors 33
Table 7. Student Participants' Level 34
Table 8. Factor Loads of Needs Analysis of Student Participants: Rotated Component Matrix.....35
Table 9. Reliability Analysis of the Questionnaire 36
Table 10. Descriptive Statistics of Occupational Needs 36
Table 11. Descriptive Statistics of Social Needs 37
Table 12. Descriptive Statistics of Educational Needs 38
Table 13. T-Test to Determine If the Learning Needs of the Student Participants Differed According to Their Gender.....39
Table 14. T-Test to Determine If the Learning Needs of the Student Participants Differed According to Their Institutional Background.....39
Table 15. T-Test to Determine If the Learning Needs of the Student Participants Differed According to Their Preparatory Education Background 40
Table 16. T-Test to Determine If the Learning Needs of the Student Participants Differed According to Their Level 40
Table 17. One-Way Anova to Determine If the Learning Needs of the Student Participants Differed According to the Distribution of Their Majors.....41

LIST OF FIGURES

Page

Figure 1. Framework of the study 2
Figure 2. The Tree of English Language Teaching 6
Figure 3. GE versus ESP..... 7
Figure 4. Continuum of ELT course types 9
Figure 5. Needs analysis cycle 19
Figure 6. Factors affecting the choice of research paradigms 26

LIST OF APPENDICES

Page

Apendix 1. Questionnaire for the engineering students on their opinions about the ESP courses..... 67

Appendix 2. Reflection paper for the engineering students on their opinions about the ESP courses 69

Appendix 3. Semi structured face to face interview questions of the engineering students 71

Appendix 4. Semi structured face to face interview questions of the ESP instructors 72

CHAPTER I

INTRODUCTION

This chapter gives information based on the background, problem statement, purpose, significance and research questions of the study.

1.1. Background to the Study

Nunan (2001) has stated that English is the language of education, science, technology, business, and entertainment and the Internet. He has also added that in industry, government and business; workers are increasingly expected to improve English proficiency. As Crystal (2003) indicated, a language accomplishes global position when it acquires a significant character which is respected in every country. Crystal (2003) has also pointed out that English is the tool of the majority of the world's information, specifically in areas of technology and science, and that the route to knowledge is the trade of education.

With the help of the internet people are more exposed to English than ever before and university students are not an exception. Although general English can help them improve their social skills, especially their communicative side, it is also certain that they need English in their professional lives. At this point English for Specific Purposes (ESP) courses become necessary for university students.

Hutchinson & Waters (1987) stated that as English became the acknowledged international language of trade and technology, it created a new group of learners who had a purpose for language learning. Therefore, these requirements and demands have resulted in the development of one aspect of English language learning, English for Specific Purposes (ESP). It is possible to say that, ESP is an approach to language teaching, which is based on learner needs and the basis of all ESP is the simple question: Why does this learner need to learn a foreign language? (Hutchinson & Waters, 1987) . The basis the philosophy of ESP is to fulfill as much as possible the specific needs of learners (Robinson, 1991). It can be said that ESP courses should not be conducted without needs analysis, either formal or informal.

The review of engineering literature and ESP may imply that the engineering specifically requires English as an instrument of communication. Multicultural work practices require engineers to be equipped with enhanced soft-skill competency, specifically, foreign language ability, communication confidence and cross-cultural experience (Gilleard & Gilleard, 2002). As evidenced by the extensive volume of reports related to English, English is

predominantly the foreign language in use. According to Bosher & Smalkoski (2002); if a course is expected to succeed, ESP and needs analysis literature specifies that learner needs must be addressed.

1.2. Problem Statement

By researching the views of English language instructors and engineering students at Toros University Engineering Faculty through a questionnaire, semi-structured face to face interviews, and reflection papers, this mixed-method study enabled the instructors to prepare a more effective syllabus for future use and also contributed to other instructors who are interested in improving themselves in the field of ESP, and ESP related issues.

1.3. Purpose of the Study

The purpose of this study was to evaluate the ESP program at the Engineering Faculty of Toros University in Turkey, and to find out the views of students and ESP instructors about the program.

Moreover, this study aimed to obtain whether the needs of the students were met by the current ESP program and the ESP instructors at the engineering faculty.

The framework of this study, which is illustrated in below chart, was based on Hutchinson and Waters' (1987) framework for ESP. The framework contained the following components: course evaluation, learner assessment and instructor participation.

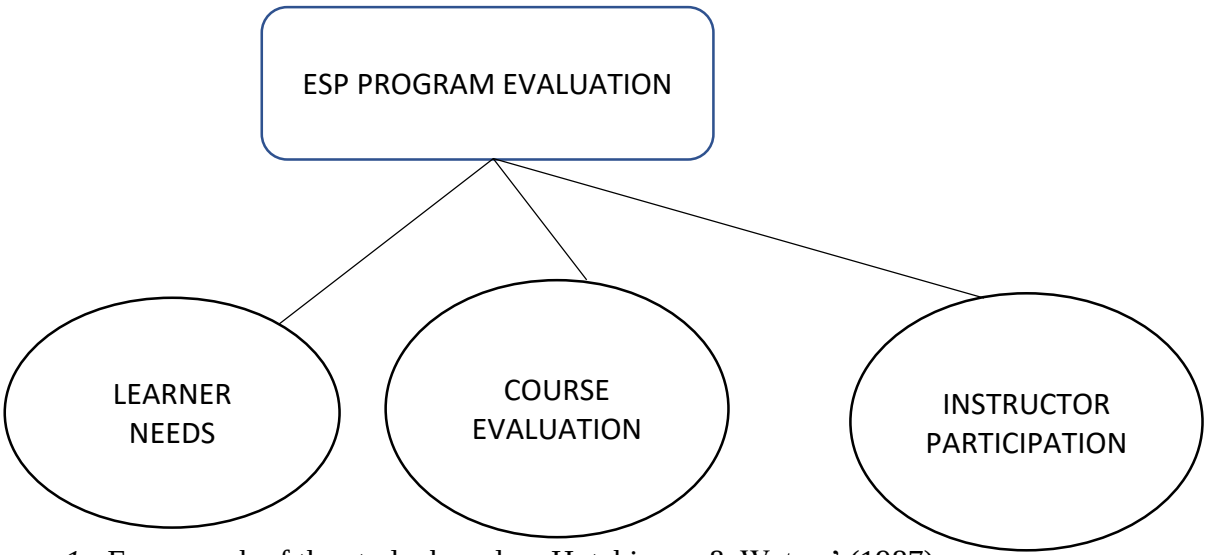


Figure 1: Framework of the study, based on Hutchinson & Waters' (1987)

1.4. Limitations of the study

The study was conducted with six language instructors and Engineering Students at Toros University Engineering Faculty in Mersin, Turkey during the Fall Term of the academic year 2018-2019. Since there is no possibility to reach all English language instructors and engineering students in various universities in Turkey, the findings cannot be generalized to all English language instructors and engineering students in Turkey. Creswell's Explanatory Sequential Mixed Methods design was used. In order to draw samples, convenience sampling technique was used. Drawing samples that are both willing to participate in the study and easy to access are involved in convenience sampling.

CHAPTER II

LITERATURE REVIEW

This chapter reviews the relevant literature to English for Specific Purposes.

2.1. Origin of ESP

English gained a privileged status among other languages in the world and is acknowledged as a "global language". English is spoken as a first language in more than 40 countries and as a second language in more than 55 countries and it seems that the language is on a continuously increasing and unstoppable curve of use as expressed by Graddol (1997). The developments in the world emerged a special (professional, occupational or educational) interest in the study of a special domain of English. These interests background produced the need for a new methodology, the study of English for Specific Purposes. Specialized English language teaching for developing specific skills according to the needs of the language learner is ESP. ESP science developed significantly over the years. Kern & Warschaeur (2000) summarized the changes in ESP development in below figure.

Table 1.

Developments in ESP

Stage	**1970s-1980s**	**1980s-2000s**	**21st Century**
Teaching Modes	Structural	Communicative	Integrative
View of Language	Structural (a formal structural system)	Cognitive (a mentally-constructed system)	Socio-cognitive (developed in social interaction)
English-Teaching Paradigms	Grammar Translation & Audio-Lingual	Communicative Language Teaching	Content-Based, ESP/EAP

Source: Kern & Warschaeur (2000, p 11)

As Dudley-Evans & St John (1998) stated, the ESP movement started to bloom as a result of improvements in the global economy in the 1950s and 1960s, technology and science

advancement, increase in the use of English as the international language of business, technology and science, increase in economic capability of numerous oil-rich nations and growing numbers of international students studying in Australia, USA and the UK. This ever increasing interest in English study drove to the development of the domain of ELT which is primarily concerned with the teaching of general English.

According to Hutchinson & Waters (1987) in the ESP context the impact of historical incidents arose from a great number of people across the world who wanted to learn English because it was the major language for the areas of science, technology and business. Hutchinson & Waters (1987) also pointed out that ESP emerged in English Language Teaching from the language needs of the learners according to their professions or job descriptions. They have also considered ESP to be a language teaching approach which bases all decisions regarding content and method to the learner's reasons for learning the language. Hutchinson & Waters have been supported by Strevens (1988) who stated that ESP is a specific case of general category of significant-purpose language training and that the same principles apply regardless the language being learnt and taught.

Hutchinson & Waters have presented a tree of English Language Teaching (Figure 1) which demonstrates the relationship between English for General Purposes and ESP.

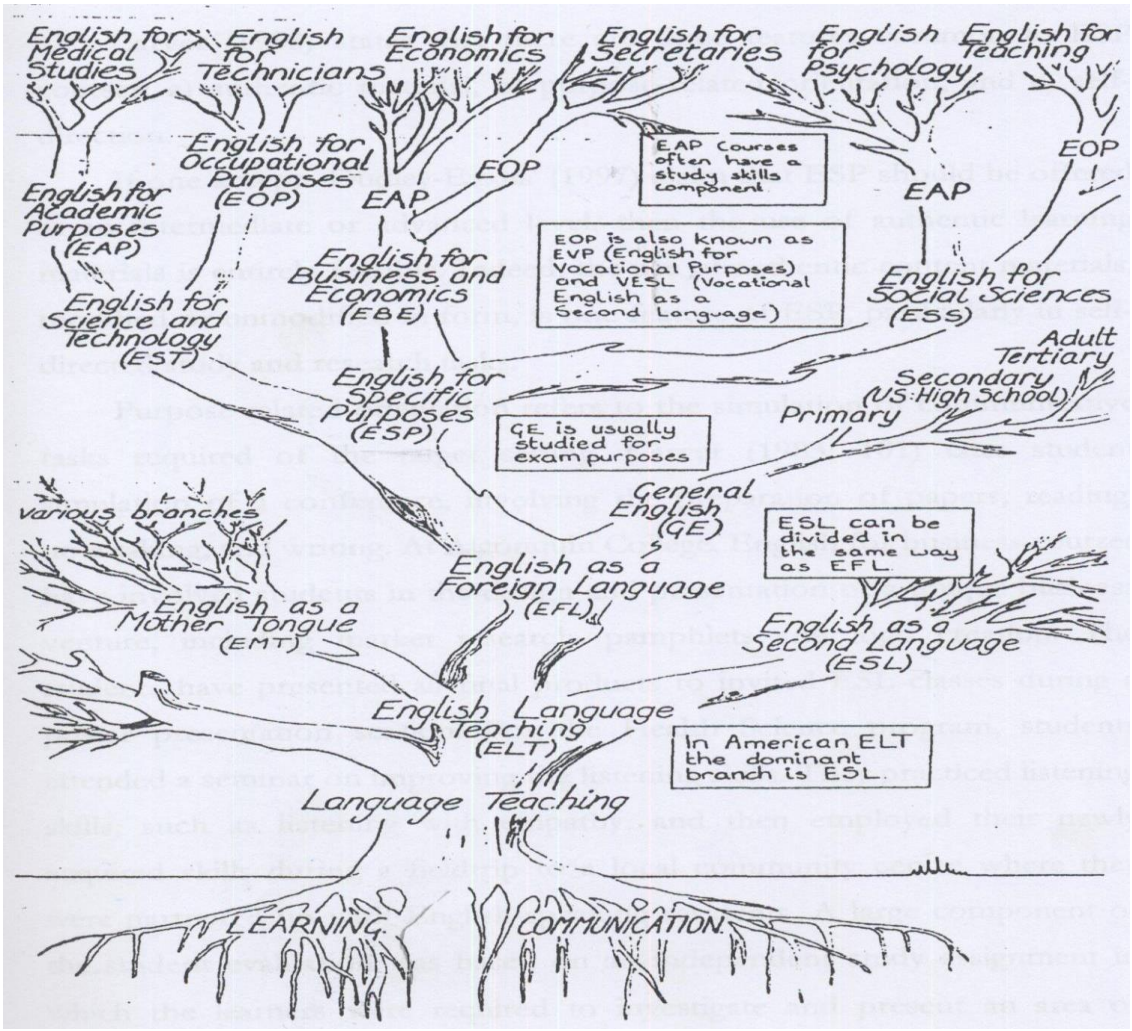


Figure 2: The Tree of English Language Teaching, Hutchinson & Waters (1987, p.17)

2.2. Definition of ESP

The definition of English for Specific Purposes (ESP) appeared as a conceptual phrase in the literature in the 1960s. Hutchinson & Waters (1987) considered ESP to be a language teaching approach, rather than a product, which means that ESP does not concern a particular type of language, teaching material or methodology. ESP bases all decisions regarding content and method to the learner's reasons for learning the language. According to Wright (1992), the term English for Specific Purposes means type of language learning which focuses on all forms of language related to a specific area of human activity. Gatehouse (2001) states that in the ESP syllabus, special language collection related to the specific aims required from the learners is equipped in the teaching content. ESP is a somewhat new development in Applied Linguistics which offers a new learner-focused approach to English language teaching with a specific learner needs methodology. Kennedy & Bolitho (1984) explained that ESP is based on an

investigation of the aims of the learner and the array of communicative needs emerging from these aims.

ESP is compared with English for General Purposes (EGP). EGP can be defined as the teaching of English as a second language along with other subjects for educational purposes. In this type of learning, there is usually no urgent demand for the learners to use English for real communicative aims. On the other hand, ESP can be described as the teaching of English for particular learners with some specific educational and vocational purposes. ESP is learner and learning centered, with a notion and inclination for communicative proficiency. Gatehouse (2001) states that ESP uses methodology and activities of the discipline it teaches by concentrating on the language suitable for these activities in order to meet the particular needs of the learners. Hutchinson & Waters (1987) explain that ESP, as a particular approach to language teaching, relies all decisions about method and content to the learner's reasons for learning the language.

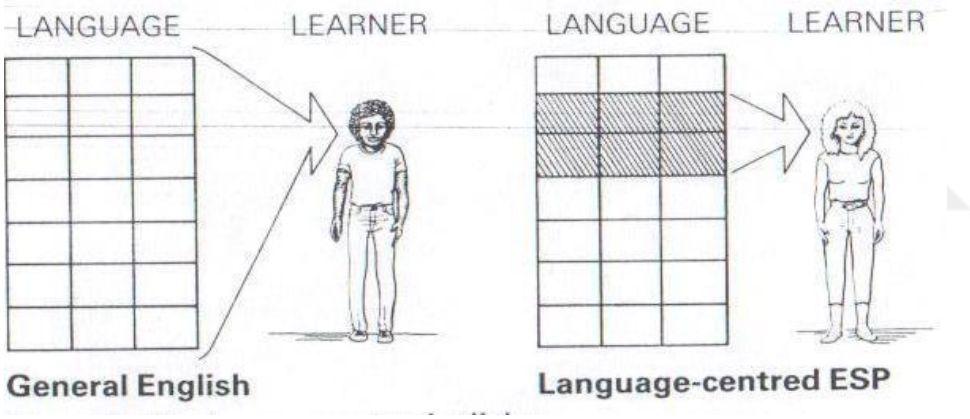


Figure 3: GE versus ESP (Hutchinson & Waters, 1987, P. 67)

2.3. Classification of ESP

Hutchinson & Waters' (1987) ELT Tree classifies ESP into three branches: English for business and economics, English for social science and English for technology and science. English for technology and science is then categorized into two branches, as English for academic purposes (EAP) and English for occupational purposes (EOP). These two branches are suggested to be only different in situational context. Although Hutchinson and Waters (1987) do not make a distinct separation between EAP and EOP, Cummins (2008) makes a more explicit contrast between the two phrases. Cummins (2008) stated that while the objective of EAP is providing academic competence, EOP's aim is the development of language in social

skills. Moreover, another target of EOP learners is communicating with co-workers and friends in daily life.

Strevens (1988) defined English for Specific Purposes according to variable characteristics and absolute characteristics. In respect of the variable characteristics, Strevens (1988) described that ESP might be limited to the learning skills to be learned (such as only writing) and may not be taught according to predetermined methodology. As for the absolute characteristics, Strevens (1988) described that ESP is distinctive from general English in terms of its design which is to meet specific learners' needs, related to specific discipline in content, and focused on language appropriate to semantics, lexis, syntax, discourse, and analysis of the discourse.

Generally speaking, Strevens' (1988) description regarding the content of the course validates that ESP is specifically and always related to the subject content. Robinson (1991), who explains that ESP is constrained by a limited period, and taught in homogenous classes regarding the work and studies which the students are engaged in supports Strevens' description. To sum up, ESP is based on common functions and vocabulary, and skills which belong to business activities or a specific academic area.

A description of ESP has been given by Dudley-Evans and St. John (1998), which is influenced by the description of Strevens (1988). Although Dudley-Evans & St. John (1998) eliminated the absolute characteristic about the distinctions between ESP and general English, they adjusted and added more variable characteristics. According to the adjusted definition of Dudley-Evans & St. John (1998) the absolute characteristics of ESP can be listed as; ESP is constructed to meet specific needs of learners, ESP uses the basic techniques and activities of its relevant disciplines, and finally ESP focuses on the language skills (register,lexis, grammar), discourse and genres in line with these activities.

Dudley-Evans and St. John (1998) have defined the variable characteristics of ESP as; ESP can be designed or related to specific disciplines, ESP may use different teaching techniques than English for general purposes, ESP is most probably constructed for adult learners and these learners can be at higher education or in a professional working environment, and ESP is usually developed for advanced or intermediate learners. Therefore the majority of ESP courses assume essential knowledge of the language system, however it can also be used with beginners.

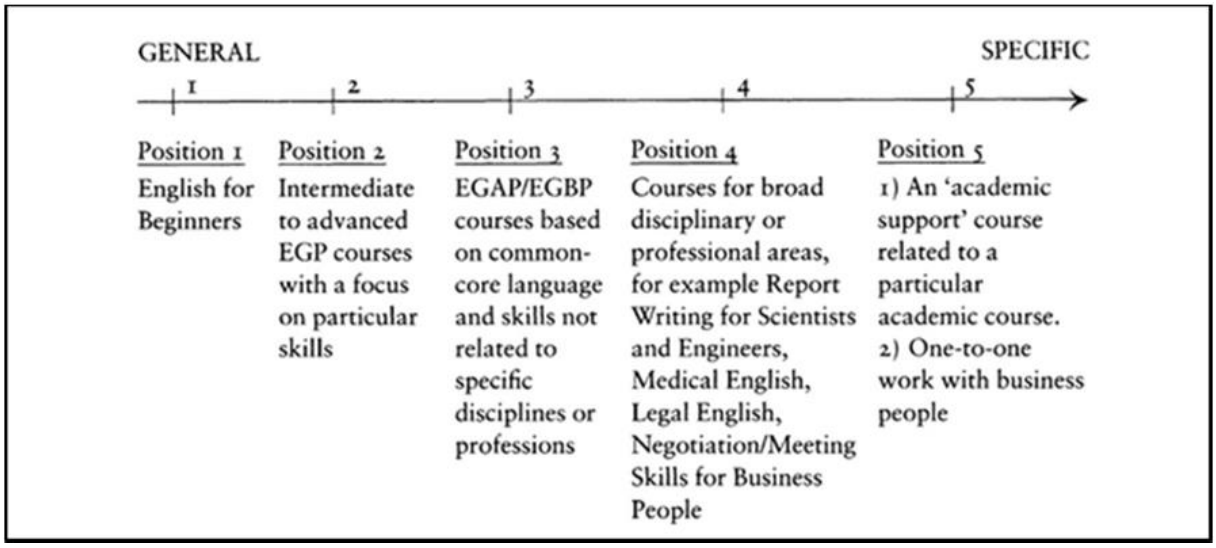


Figure 4: Continuum of ELT course types (Dudley-Evans & St. John, 1998, p. 9)

In the 21st century, ESP researchers have the tendency to define ESP based on the needs of the learners for their subject-specific work and experiences. ESP has been explained by Basturkmen (2003) as related to the needs of the language use which learners will come accross in their particular working or study related situation. Another similar statement has been expressed by Master (2005); ESP concentrates on the significance of numerous aspects in the real language situations which language learners will face. Dudley-Evans & St. John's (1998) definition of ESP was complied with by Johns and Salmani (2015), they supported the opinion that when ESP is relevant to adult learners' academic and professional contexts it becomes the most productive.

The themes of ESP courses have been described to be narrower than ELT courses by Basturkmen (2010), because they mainly concentrate on the learners' needs for working or studying purposes. Basturkmen categorizes ESP into three branches: English for Occupational Purposes (EOP), English for Professional Purposes (EPP) and English for Academic Purposes (EAP). Just as Strevens (1988), and Dudley-Evans and St John (1998), Basturkmen has pointed out that ESP has both absolute characteristics and variable characteristics, however she has referred to these phrases as ESP constants and ESP variability. The ESP constants of Basturkmen are; ESP contains viewing learners mainly in professional and educational roles and discussing their needs, the language and skills taught at ESP courses of necessity are expected to be narrowed down, and ESP courses use texts and draw on definitions of language use and communication from the disciplines' target communities.

Basturkmen's (2010) ESP variabilities are; ESP derives from the range of fields which ESP courses are developed, such as from general to specific (for example, English for hotel

receptionists), ESP derives from the diverged relationships the ESP learners have with their future community of practice, and ESP derives from differences in how well-known the target disciplines and professions are to the ESP instructors.

Alfehaid (2011) made an addition to the definitions by recommending that other than building up learners' proficiency of English in context, ESP should concentrate on promoting learners' language and study skills to support them with learning in their discipline.

ESP descriptions mentioned above appear to concentrate mainly on three fundamental notions: the particular language required, the learners' particular aims for learning and the particular settings in which language is used and taught, regardless of whether in scholarly or occupational settings. These descriptions also feature constant and variable characteristics.

This study shares some components of the previously mentioned ESP scholars' definitions and views ESP as an approach constructed to accomplish the specific needs of the learners and the use of particular language related to academic and professional contexts. This definition complies with Hutchinson and Waters' (1987) definition, that the content and methods of ESP are based on the learners' reasons for learning the language. In this study the learners are studying at the ESP program to facilitate their comprehension of their major subjects at the engineering faculty, and also to prepare themselves for possible careers abroad. Therefore, this study also complies with Strevens' (1988) definition of ESP absolute characteristics, which is ESP is related to content and focuses on the language of the specific branch of the learners, which is in this case the engineering faculty's program.

2.4. Teaching Approaches for ESP

Robinson (1991) points out that traditionally ESP teaching concentrates on learning the language for expert communication in a particular area. The traditional approach interfaces the language with the subject matter of the learners' future profession and the subject matter is utilized for learning language structures and contributes to the background for the acquisition of these language structures. Conventional ESP teaching methodologies are concerned with individual language skills and aspects such as sentence structure and vocabulary due to the fact that they can intervene with the learners' basic language skills. In ESP the significance of teaching grammar and vocabulary has been broadly acknowledged by numerous researchers (Coxhead, 2013; Dudley-Evans & St. John, 1998; Zhou, 2009). This approach does not require the learners to gain new information and skills directly identified with their discipline, yet to obtain the language structures of the future language for the future discipline. The subject matter

can be in related fields as science, innovation or medicine. Respectively, the conventional ESP approach is accepted to be frequently appropriate for the lower level language learners at the university because they have inadequate English knowledge and subject matter in their own ESP field (Tarnopolsky, 2013). This supports Dudley-Evans and St John's (1998) idea that ESP can be utilized with beginner level learners.

Tarnopolsky (2013), emphasized that ESP teaching approaches at tertiary levels in non-English speaking countries have currently moved from essential language concentration for expert communication to the incorporation of language with the subject matter of the future professions, including the incorporation of learning the objective language and the objective professional subject matter. This can be observed in two methods: content-based instruction and content and language integrated learning. These approaches are more incorporated approaches to ESP.

According to Tarnopolsky (2013), content-based instruction approach adjusts language teaching and content teaching by concentrating mainly on the language. Brinton (2013) states that it can be said that this approach incorporates reading, speaking, listening and speaking for professional purposes into the teaching and learning phases. Robinson (1991) adds that functional and thematic syllabi concentrating on activities with the appropriate language and relevant content to the significant field or profession are used with this approach. Liew and Khoe (2014) argue that the major concern of content-based instruction is learning the language, and in order to suit the learner's level the subject content is mostly accustomed and simplified.

Content and language integrated learning approach is one of the developments of integrated ESP approaches. With the social and political globalization of English, this approach has become prominent in higher education over Europe since the 1990s (Arnó-Macià & Mancho-Barés, 2015; Coyle, 2012; Taillefer, 2013). Because the teaching content subject through English can be suggested in place of ESP subjects and learners can learn English and another subject at the same time, especially European countries use widely the content and language integrated learning method instead of the conventional ESP approach and content-based instruction, (Raisanen & Fortanet-Gomez, 2008). Arnó-Macià and Mancho-Barés (2015) state that the students can learn the language naturally with the help of content and by mastering the language the learners can access their major subject matters as well. They also add that in order to help learners master the content, ESP instructors implement scaffolding strategies, without modifying much of its content level compared to content-based instruction. However, studies carried out by Tarnopolsky (2013) and Rosa Maria Jimenez Catalan and Fontecha (2015) have demonstrated that learners should have basic language skills in English, vocabulary

or syntax should not be a challenge for them and they should be able to read and write at a minimum level.

Nonetheless, main limitations of content and language integrated learning have been emphasized by many academics as explained by Tarnopolsky (2013) and Aguilar and Muñoz (2014). The first issue is, challenging objectives, subject content and linguistic development, cannot necessarily be achieved by an integrated ESP course because the concentration on the language is frequently reduced once the subject content is integrated. The second issue which is supported by many studies is that if enough language activity for linguistic development is not provided by the ESP course, learners with low levels of English proficiency cannot benefit from the integrated approach. One of the other issues with ESP discussed by Arnó-Macià and Mancho-Barés (2015) was that in the integrated teaching approach the role of the ESP instructors may become a secondary role to the content instructors.

2.5. Teaching Language Skills in EGP and ESP

Chalikandy (2013) points out that while in conventional EGP courses reading, writing, listening and speaking skills are integrated, conventional ESP courses oftentimes teach particular language skills with the specific pattern needed in the target situation. As mentioned by many scholars (Bojovic, 2006; Dudley-Evans & St. John, 1998; Fiorito, 2005; Jaglowska, 2012) ESP courses concentrate on teaching language skills which are the most needed by the learners, which are revealed with a needs analysis and the teaching methods and courses are adjusted accordingly. In studies conducted by researches around the world it has been found that different disciplines need different skills. Zohoorian (2015) has revealed that computer engineering students in Iranian universities need writing and speaking skills, Alsamani & Daif-Allah (2016) have emphasized that computer science and information technology students in Saudi Arabia need vocabulary. Researchers Spence and Liu (2013) from Taiwan, Hyun Hyo (2013) from Korea and Kaewpet (2009a) from Thailand have suggested that engineering students in their countries need communication skills.

2.5.1. Reading

Trimble (1985) and Jordan (1997) pointed out that research on reading in ESP started by studying register analysis or sentence – level analysis, and using reading in various communicative contexts. Although many studies revealed that reading was often considered as the less difficult skill of all the language skills, there are still reading challenges mentioned in

ESP contexts. Faiza (2010) reported that cellular and molecular biology students in Algeria faced problems while reading scientific texts and Spence and Liu (2013) found out that engineering students in Taiwan had problems while reading memos, reports and emails in English. Another study conducted by Rostami and Zafarghandi (2014) revealed that chemistry students in Iran found the reading comprehension of texts about chemistry and the reading speed challenging. Rajprasit (2015) also stated that reading inter – office documents, manuals, engineering – related articles and project reports were difficult for engineering students in Thailand.

Jordan (1997) has defined some of the major reading strategies which can be applied to ESP including scanning, skimming, distinguishing between factual and non – factual information, prediction and drawing inferences and conclusions. Dudley-Evans and St. John (1998) emphasized scanning and skimming as the essential skills for the ESP readers to decide if the text should be read completely or to read some parts of it carefully.

2.5.2. Writing

Writing is seen as one of the difficult skills for language learners. In a study conducted by Javid, Farooq and Umer (2013) it was found that writing with the use of correct lexical items, grammar and the organization of ideas was challenging for students in Saudi Arabia. A similar result was reported by Vaghari and Shuib (2013) stating that the graduates' English writing proficiency was not satisfying their employers in Malaysia, and students also considered writing as the most difficult skill. Jie and Cross (2014) stated that postgraduate students in ICT majors at a Japanese university found writing abstracts for conferences challenging.

Reid (2001) explains that in the 1970s writing in English as a second language focused on grammar and form, which meant that students used to copy sentences and change their tenses. After a decade, in the 1980s because of the study of strategies and techniques in composition the language-focused writing courses started to concentrate on teaching the organization patterns which were common in academic English writing. Reid (2001) emphasizes that writing is a productive skill with regard to styles of communication, and successful writers require skills such as planning, drafting and revising.

According to Bhatia (2002a) and Hyland (2013) genre analysis is the most extensively used and effective technique while teaching writing in ESP. ESP writing covers numerous categories, such as emails, resumes, writing essential personal information and business letters (Kaewpet, 2009a; J.-Y. Liu et al., 2011). Written texts influence all of the tasks of students of

English for Specific Purposes. Writing field trip reports, taking notes in lectures, writing test/exam answers and lab reports, and abstracts for projects are specific writing categories used by science students (Al-Tamimi & Shuib, 2010; Kaewpet, 2009a; Liu et al., 2011).

Studies conducted by Kaewpet (2009a) and Kassim and Ali (2010) about engineering have put forward that a wide scope of writing assignments and exercises are needed, such as preparing and presenting slides for oral presentation, writing safety checklists/forms, abstracts of projects, minutes of meetings, and business letters.

2.5.3. Listening

Nunan (2001) states that listening is essential and is seen as one of the major mediums of learning a language. It can be said that the development of writing, reading and speaking skills in language learning are affected by listening. All learners need good listening skills to become competent communicators. Goh (2013) explains that when learners listen to a message, they employ three types of knowledge: "knowledge about context, facts and experiences (prior or background knowledge), knowledge about language use (discourse and pragmatic), and knowledge about the language (phonology, syntax, and vocabulary)". In order to recognize the sound they hear, and to understand the message, learners must incorporate these three knowledge types with two processing types, which engage different mental abilities.

Listening is seen as one of the most difficult skills by most of the foreign language learners due to its process being so complicated and the various knowledge types needed for successful listening (Kavaliauskienė, 2011; Nowrouzi, Shu Sim, Zareian, & Nimehchisalem, 2015).

As Rost (2001) and Goh (2013) state, there are many similarities between listening in ESP and listening in English as a second language, because they share the same mental processes and they both require the use of the same basic skills in line with listening purpose. The difference between the two listening types is that listening in ESP requires special types of knowledge and vocabulary alongside more additional skills. Goh (2013) and Likaj (2015) both mention that developing listening in ESP might demand listening skills which are more high-level in English for academic purposes and English for occupational purposes situations than for English as a second language.

Kavaliauskienė (2011) points out that teaching listening skills is a difficult task for ESP teachers as it takes much time and requires a lot of practice due to the requirements for high-level skills. Over the past decade, examples of teaching methods include Renandya and Farrell's

(2011) teaching important listening strategies for extensive listening, Wilson's (2003) teaching higher level cognitive and metacognitive strategies, Hamada's (2016) shadowing for listening comprehension and as stated in studies by Anusienė and Kavaliauskienė (2009), Dudley-Evans and St. John,(1998) and Nunan (2001) using bottom-up, top down, and interactive models.

2.5.4. Speaking

Teaching speaking is a difficult task for second language instructors and ESP instructors due to its dependency on many components. Studies carried out by Rotschild (2015) and Tavil (2010) demonstrated that teaching speaking becomes a challenge for instructors when they do not have a clear understanding of an approach to teaching second language. Teaching speaking effectively provides students with opportunities to practice various speaking tasks and activities in the target situations. According to Goh and Burns (2012) these tasks and activities should engage students at the cognitive and affective level, and Qamar (2016) adds that they should help students develop sociolinguistic competence.

Speaking and listening in ESP are both engaged within real communicative circumstances, including multi-person spoken communications and one on one spoken communications. Dudley-Evans and St. John (1998) express that ESP teachers should, just like second language teachers, increase the awareness of their learners regarding the specifics of successful interaction by paying attention to appropriate language and skills, and providing effective evaluation at the feedback stage. To sum up, ESP teachers' roles are helping learners understand and produce discourse for social interaction and comprehension, provide chances for learners to practice speaking in a wide range of language functions and situations, and to help learners produce academic language.

Numerous studies researched speaking challenges faced by ESP learners at the higher education level. Gan (2012) mentioned that lack of vocabulary can be considered as a major barrier in verbal communication. During internships, or employment right after graduation learners frequently face communication difficulties.

A study carried out by Myles (2009) demonstrated that interacting in informal social settings, understanding and using conversational language (idioms, slang), understanding native English speakers who speak very fast and change the topic to another one before the students continue their conversation and answering questions after a presentation was a challenge for engineering students.

Studies in English as a second language context showed that learners fear being embarrassed when speaking out in their English classes, as with cellular and molecular biology students in Algeria (Faiza, 2010) and undergraduates in Taiwan (Liu & Chu, 2010). However, Fujiwara (2014) observed that compared to those with lower levels, the higher the proficiency levels of the learners were, the less likely they were to hesitate in speaking English with other people.

2.5.5. Grammar

According to Robinson (1991) the knowledge of grammar and vocabulary is an essential part of the English language and learners who do not receive grammar guidance appear to be unable to develop their linguistic competence. Trimble (1985) stated that rhetorical aspects in scientific discourse exist at numerous levels and they should be taught in ESP courses. The scientific discourses can be listed as visual – verbal relationships, instructions, definitions, descriptions, and classifications. Trimble (1985) added that relative clauses, passive-stative distinctions, definite articles, modals and tenses have been found to cause non-native language students the greatest problems. Dudley-Evans and St. John (1998) focused on teaching syntax and morphology as grammatical forms which are necessary for ESP learners. Jianfeng, Qingdong, and Shibo (2009) broadened their idea by analyzing the sentence structure characteristics in ESP contexts, and this revealed that essential tenses – the perfect tense, past tense and present tense – should be taught. The study also revealed that written texts in ESP are organized with sentences using participles, the passive voice, the infinitive and gerunds. Overall speaking, studies regarding teaching ESP grammar have varied from morphology to rhetorical functions.

Grammar is a challenging area in foreign language learning, and many language teachers consider teaching grammar as a problem (Al-Mekhlafi & Nagaratnam, 2011; Myhill, Jones, Lines, & Watson, 2012). Many ESP classes struggle with these problems. In a study carried out by Al-Khasawneh (2010), students of a Malaysian business school were facing challenges with syntax, articles, prepositions and tenses. Phoocharoensil and Simargool (2010) reported that relative clauses created problems for language students at a Thai university. Ming-chu and Hung-chun (2009) pointed out an inconsistency between instructors' perception of teaching grammar and learners' perception of learning grammar. In their study, the learners wanted the instructors to correct their grammar error in their writing and speaking, whereas the instructors considered that concentrating on grammar may delay the role of communicative

competence in their classes. In order to create a positive atmosphere and to save time peer correction was preferred by the instructors.

2.5.6. Vocabulary

Piribabadi and Rahmany (2014) pointed out that vocabulary is a critical component in second language acquisition. While teaching vocabulary, the eight dimensions of word knowledge should not be forgotten. Nation (2001) expressed the eight dimensions of word knowledge as spoken form, written from, meaning, association (the relation to other words), grammatical behavior (patterns the word occurs), register, collocations, and frequency. Akbarian (2010) states that the learners' productive language skills, such as writing, reflect their vocabulary knowledge. Laufer and Nation (1995) reported that a learner's writing production is affected by the learner's vocabulary. Zhou's (2009) study suggested that the learners' vocabulary contributes to their writing improvement. In a study conducted by Al-Khasawneh (2012) it was found that a student would lose his or her motivation and confidence in learning if he or she lacked vocabulary learning strategies. The study pointed out that while teaching vocabulary, the instructors should meet their students' needs.

When the vocabulary needs of ESP learners are considered there are no simple answers. According to many ESP scholars, the meanings of some words which are used in both EGP and ESP are usually quite different. Therefore, Coxhead (2013) and Jianfeng et al. (2009) stated that the actual meaning of words should be determined in accordance with its context. To sum up, Greek, Latin or technical phrases, and ordinary words which have certain meanings in related contexts can compose the vocabulary in ESP.

Jordan (1997) Nation (1990) and Nation & Waring (1997) reported that ESP students would benefit from learning the 2000 words of the general basic vocabulary followed by the most common words to all academic disciplines. Similarly, many scholars, such as Dudley-Evans and St. John (1998) and Siyanova-Chanturia and Webb (2016) stated the ESP teacher is not responsible for teaching general technical vocabulary, however the teacher should monitor if the students comprehend the technical vocabulary which is used in an ESP activity. On the other hand, Strevens (1972), and Xhaferi (2015) disagreed with the idea of not focusing on technical vocabulary. Strevens (1972) pointed out that instructors who are unfamiliar with the scientific discipline's vocabulary might face great complications while explaining scientific terminology. Coxhead (2013) supported Strevens' idea by expressing that developing a full understanding and usage of specialized vocabulary in their major area at university or in an

occupational context, might be an extremely important learning activity for ESP learners. Therefore, it is important for ESP instructors to prepare students to be aware of the specific discipline's vocabulary.

Basturkmen (2006) suggested two approaches for teaching functional terminology or technical vocabulary by classifying words in every field as common basic words or specific words. The first approach to these classifications is that common basic words are those that foreign language students need to know indifferent to their area of study. When the students have founded the common basic vocabulary, they need to start learning the specific words. Some of these basic words should already be known by university level ESP students. The second approach is teaching the primary specific words and their meanings at the same time as the basic words in a way which lets the students recognize them for a long time.

2.6. Needs Analysis in ESP Contexts

In the field of language teaching, needs analysis procedure was first applied by Michael West in a survey report published in 1926. But this type of analysis was not paid much attention in the following decades. Needs analysis re-emerged as a part of ESP during the 1970s in order to explore and monitor the needs of language learners. One of its most important aims is to design language classes or courses that can fulfill the learner's personal and social needs (Palacios, 1992). Council of Europe team conducted a number of studies during these years with above-mentioned aims and they concluded that determining the exact needs of the target language learner would bring out the success of language learning rather than using the traditional methods within the traditional frame.

At the first stages of the ESP procedures (the 1960s and early 1970), needs analysis were focusing more on measuring the communicative needs of language learners and the techniques to reach specific aims of teaching. However today, needs analysis endeavor to collect information about the learners in order to define the target situation and the environment of studying ESP. As Iwai (1999) suggests, needs analysis refers to the activities involved in collecting the necessary information for developing an effective curriculum that meets students' particular needs. Target needs in this sense are learners' lacks, needs and wants.

As ESP courses rely on needs analysis and as the learning aims are clearer than general ESL courses, learners will be more motivated to learn about topics and texts that are related to their own studies or field. Four types of ESP teaching objectives were distinguished by Stern (1992): knowledge, proficiency, affective and transfer. Knowledge objectives involve the

gaining of cultural and linguistic knowledge. Linguistic knowledge objectives correspond to language analysis and awareness of the systematic aspects of language and knowledge objectives include the control of socio-cultural rules (mastery of the society norms, values and orientations in addition to the ability to identify culturally significant facts). Proficiency objectives indicate the mastery of the four language skills: reading, writing, listening and speaking. Affective objectives are related to the improvement of positive feelings towards the subjects of the study. Transfer objectives are about the ability to generalize from the learned knowledge from each context.

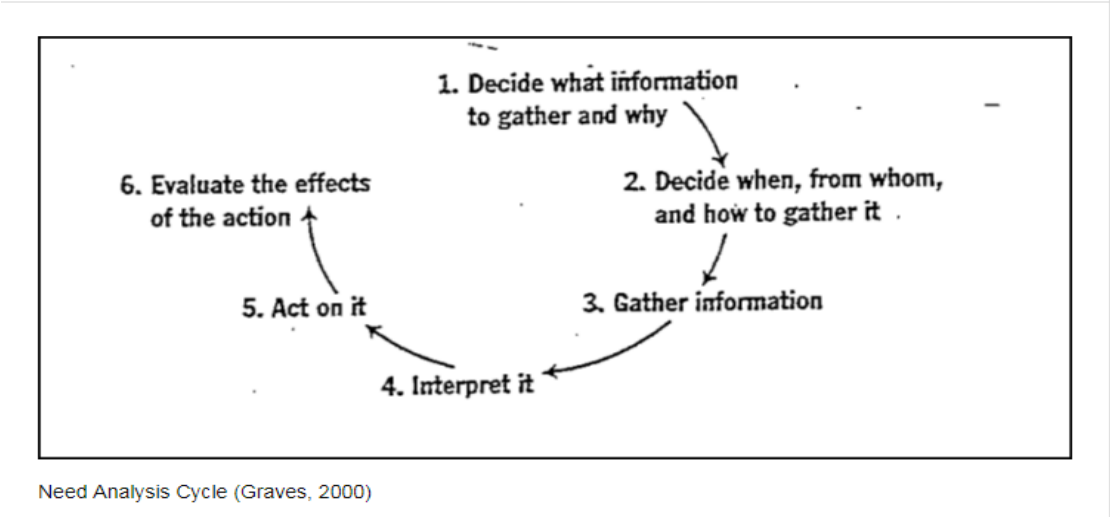


Figure 5: Needs analysis cycle (Graves, 2000)

Needs analysis in language learning is proposed by Graves and Xu (2000) as the process of systematic and continuous collection of information about the requirements and preferences of the students, interpretation of the collected data and finally decision-making to meet these requirements. In various social and educational environments of adult language learners in which languages are used, one can observe their language needs. However, needs and motivation are different than each other in that the former stem from the reality of the language domains and whether the language is known or not affects this demand, while the latter is about the attitudes and level of willingness towards making an effort to learn the language. With this respect, setting profound objectives is made possible through exploration and the inquiry of the needs of the learners so that the which steps to follow would be determined. The main concern of needs analysis in educational sense is transforming the needs into goals and consequently into a set of appropriate activities, materials and techniques in the suitable program (Brown, 2009).

A similar view has been stated by Hyland (2007) who points out that needs analysis in ESP describes fundamental language skills, contents, language structures and communicative activities for instructors to produce appropriate teaching materials and curriculum for specific scholar, professional and occupational situations. Many studies (Hutchinson & Waters, 1987; Palacios, 1992; Hyland, 2007; Brown, 2009) have mentioned that this realization is reconstructed to logical content to deal with in language classes. Johns (1991) stated the vitality of conducting an extensive needs analysis prior to any material development or ESP teaching program. Cacumba (2014) briefly emphasized that this complicated structure establishes stakeholders, levels of language, context and the learners' learning defects and "gaps". Hence, Cacumba (2014) points out that the process of gathering information on all these aspects, which is a needs analysis, is of great significance in developing materials and programs which are appropriate for learners' needs, the levels and the contexts they are likely to use the language in. Kumazawa (2006) indicates, in language programs properly described objectives, which can be regulated with a complete needs analysis, are essential and through these objectives the detection of to what extent learners achieve these objectives and to assess the efficacy of the tools and the program and accordingly to develop the most suitable evaluation tools to assess the learners' proficiencies. When specific academic skills are considered, Grabe and Stoller (2001) argue that reading is the most significant skill which learners should gain. This argument is supported by many studies (Rosenfeld, Leung, & Oltman, 2001; Snow, Burns, & Griffin, 1998) which report a considerable amount of learners' and academicians' opinions that reveal the importance of reading skills for academic purposes. Reading is the major tool to learn new information and reach alternative understandings. Furthermore, reading skills contribute to the improvement of critical thinking skills.

Dudley-Evans and St. John (2009) indicate that in today's concept of needs analysis there are eight components which have been grouped into five broad areas including:

1. Analysis of the target situation and objective needs analysis (e.g. tasks and activities learners will use English for);
2. Linguistic analysis, discourse analysis, genre analysis, knowledge of how language and skills are used in the target situations;
3. Subjective needs analysis, including learners' wants, means, factors that affect the way they learn such as previous learning experiences, reasons for attending the course, expectations;

4. Present situation analysis for the purpose of identifying learners' current skills and language use;
5. Means analysis, i.e. information about the environment where the course will run. (Dudley-Evans, T., & St John, M.J. 2009)

2.7. International Needs Analysis Studies

Scholars Dudley-Evans and St. John and Hutchinson and Waters have pointed out that needs analysis is the most essential component of a well-designed ESP course. In this section various needs analysis studies around the world have been reviewed.

A needs analysis study was carried out by Al-Tamimi and Shuib (2008) with 81 petroleum engineering students. For data collection a questionnaire was used. The results of the study revealed that the ESP course did not meet the engineering students' language needs. The students considered almost all of the language skills important to acquire which reveals the students' awareness of the significance of English. The students also preferred to take EOP courses and emphasized that main focus should be on speaking, communication and listening skills.

Choi (2010), made a study on the needs analysis of three groups of tourism students of a two-year college. The first group consisted of 120 students who took three regular classes during the day. The second groups consisted of 40 students who took a class at night. In the last group, there were 40 students who worked at their regular jobs during the day. The study used two questionnaires, one at the beginning and the other at the end of the semester. It was a comparative study discussing needs analysis results of three groups of tourism English students. The results showed that the students feel the deficiency of speaking and grammar skills. According to the findings of the study, the most important skill for the students was speaking. The students stated that they weren't happy with the curriculum because they wanted more classes focusing on TOEIC, grammar and communicative skills. In addition, the students thought that knowing a foreign language is more significant and necessary than having knowledge related to their job. They have also expressed that English is more useful for their future employment processes and academic studies than other foreign languages.

In a study conducted by Boroujeni and Fard (2013) with 90 students and 30 instructors, two questionnaire were used to gather data. The findings of the study determined that the majority of the students believed the current approach and materials of the ESP course did not contribute to their improvement in English. Another finding was similar to the findings of Al-

Tamimi and Shuib (2008); speaking was the most preferred skill compared to listening, reading and writing. Another important finding of the study was, 64.03% of the students considered university education as their reason for studying English.

Zohoorian (2015) carried out a needs analysis study on the lacks of English needs of 66 students majoring in Information Technology and Computer Engineering. All the students expressed that speaking was the most important skill followed by writing, listening and reading. A mismatch between the content of EAP textbooks in Iran as the major skill and the expectations of the course was observed. The study also revealed that students prefer learning productive skills rather than receptive skills. The reading skill which was emphasized a lot by means of both literature but also the text book – was claimed to be the least preferred language skill by the participants of this study.

Another study was carried out to analyze the English language needs of 120 undergraduate engineering students at Bahauddin Zakaria University and Institute of Southern Punjab in Pakistan by Ayoub and Khan (2017). For the data collection, a questionnaire was designed and it was distributed to 120 randomly selected engineering students. According to the study results, 67% of the students considered English "very important" and majority of the participants stated they needed English for facilitating their studies, to find better jobs, and for communication. Also, most of the participants found themselves weak at speaking and communication skills. It was clear that the productive skills (speaking and writing) were the skills that were given least importance in English language courses and the students hardly ever used these skills in the courses. A majority of the students preferred lessons in which presentation projects were done, audio-visual materials are used and group discussions were made, respectively.

One of the latest studies conducted on needs analysis is by Namasari (2018) with informatics engineering students. A questionnaire developed by Khan (2007) was used for the data collection. 67.37% of the students thought English was necessary for their success in their future occupation. Also, many students found English beneficial for the situations in which they would meet foreigners. Most of the students used English for academic context rather than their social and daily activities. A higher percentage of the students thought that there should be specific English textbooks for informatics engineering students. The majority of the students agreed that speaking skill rather than reading, writing and vocabulary is the most preferred and the most difficult skill.

2.8. Needs Analysis Studies in Turkey

A needs analysis study was conducted by Alagözlü (1994) at Faculty of Medicine of Cumhuriyet University, whose aim was to explore the fourth-year medicine students' English language needs. The English reading course, which was assigned to them in Turkish-medium classes even though they had studied obligatory preparatory English classes for one year, was challenging for these students. The informants included three groups: 50 fourth-year medical students, 10 English language teachers and two administrators. The methodology of the study involved questionnaires and interviews that elicited these participants' notions on the students' needs in English. According to the results of this study, it became obvious that the fourth-year medicine students' most important skills were reading and translation, that the used instructional materials needed to be revised and that language teachers required to get a proper training in teaching ESP. Also, the medical students' needs were not fulfilled properly by the present curriculum.

Another needs analysis study was carried out at the Veterinary Medicine Faculty of Selçuk University in Konya to explore the English language related needs of the Veterinary Medicine students (Elkılıç, 1994). According to Elkılıç (1994), the language teachers working there were not aware of the special needs of the students. The study, in which questionnaires were used and in which comments of sixty-seven students, five EFL teachers and fifteen veterinary medicine professors were assessed, revealed that the most important skill that the students of veterinary medicine had to develop was reading for the purpose of understanding academic journals and magazines more efficiently.

Also, Gündüz (1999) carried out a need analysis study whose aim was to find out the needs of English Language and Literature Department students at Selçuk University. The methodology of this study involved interviews and questionnaires which were given to three groups of informants consisting of students, instructors, administrators, lecturers at different universities. At the end of the study, a set of guidelines for a suitable preparatory program for the department was presented by Gündüz (1999).

Savaş (2009) conducted a needs analysis research in Faculty of Education of Kocaeli University. The participants, who were fourth year students and 40 teachers in the Department of Foreign Languages, answered a questionnaire regarding their experiences and expectations about ESP teaching and learning, whose examination was on the familiarity levels of students and lecturers with the problems of ESP teaching and their ideas on possible solutions. At the end of the study Savaş (2009:5) proposed "both prospective EFL/ESP teachers and lecturers

agree that an ESP teacher needs to have a prior content knowledge, functional academic literacy in content-specific language and knowledge of methodologies suitable to ESP teaching".

In addition, according to Köse, Yüksel, Öztürk and Tömen's article on the foreign language academic literacy of Turkish academics (2019), Savaş (2009) claimed that many Turkish students who take foreign language exams have difficulty in reading comprehension questions and they fail to make inferences.

Arık, S. (2002) conducted a study at Niğde University Vocational School focusing on content course teachers' view about English language use in their classes. 177 content course teachers answered questionnaires and the results showed that teachers find reading as the most important skill for students to have.

CHAPTER III

RESEARCH METHODOLOGY

This chapter provides a general overview of the research methodology by focusing on the key aspects that construct the framework of the study. First, the research questions are presented. Then, the interpretivist approach underlying this study is explained in relation to the reasons for adopting this paradigm. Following that, the profile of participants and the setting of the research are introduced. Data collection methods and data analysis procedures are also included in this chapter. Finally, the chapter explains the trustworthiness and ethical considerations of the study.

3.1. Research Questions

The aim of this study was to evaluate the ESP program at the Engineering Faculty of Toros University in Turkey, and to find out the views of students and ESP instructors about the program.

This study was conducted in order to seek answers to the following research questions:

1. What are the goals and objectives of the ESP program in engineering education at Toros University ?
2. What are the engineering students' needs as perceived by:
   a. Administrator or Program designers?
   b. ESP instructors?
   c. Subject specialist teachers/instructors?
3. Are the objectives appropriate to the needs of the students of engineering?

What are the students', instructors', and administrators' views about the ESP program?

3.2. Research Paradigm

Guba and Lincoln (1994) define paradigm as a group of essential assumptions which deal with absolute or primary rules. A paradigm illustrates a *worldview* which describes the character of the "world", the place of the person in it and the types of probable relationships to it.

Schwandt (2001) states that paradigm is a joint worldview that displays the assumptions and principles in a field of study and also regulates how the obstacles in that field are managed.

Bogdan & Biklen (1998) explain the research paradigm as a separate compilation of reasonably associated beliefs, notions or hypotheses which adapt reasoning and research.

The factors which affect the choice of a paradigm are presented in below figure.

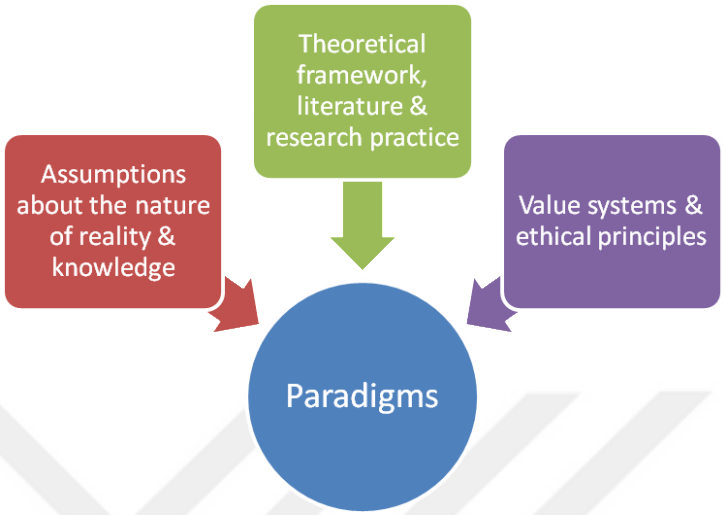


Figure 6: Factors affecting the choice of research paradigms, Chilisa, & Kawulich (2012, p.3)

The research paradigm selected for this study is the constructivist/interpretivist paradigm. According to Crotty (1998) the constructivist/interpretivist researcher's aim is to learn the social aspect of the participants as this leads to their understanding of the environment they live in. Therefore, the environment of the participants of the study is very important in the course of data collection.

Creswell's (2003) view is, that the aim of the study is mainly depending on the participants' perceptions of the situation which is being researched.

3.3. Research Design

For the collection of data, mixed methods research design was used in this study. Tashakkori & Creswell (2007) define mixed methods research design as, a single study of inquiry in which the researcher gathers and evaluates data, organizes the discoveries and depicts assumptions with the use of qualitative and quantitative approaches or methods. Cohen (1988) believes that qualitative and quantitative approaches are generally believed to be opposite foundations, since qualitative approaches are established on various views of human experience and quantitative approaches are based on numbers and facts. But Creswell (2009) thinks that they should not be accepted as thoroughly contradictory. According to Stake (2010) the difference between qualitative and quantitative methods is an issue of attention rather than a

distinct barrier.

Table 2.

Creswell's (2014, p.45) Table Comparing Research Designs.

Quantitative Methods	Mixed Methods	Qualitative Methods
Pre-determined	Both predetermined and emerging methods	Emerging methods
Instrument based questions	Both open- and closed-ended questions	Open-ended questions
Statistical interpretation	Across databases interpretation	Themes, patterns interpretation

The explanatory mixed methods design was applied in this study to provide a clearer insight to the research problem. Creswell (2014) points out that in explanatory mixed methods design, the quantitative data is collected initially and after that qualitative data is collected to help to explain results of the quantitative data.

3.4. Rationale for adopting mixed method research design

With mixed method research design quantitative and qualitative research methods are combined to understand the complexity of the research problem. Creswell (2012) has pointed out that mixed methods research is a very productive design to apply if the researcher pursues to depend on the strengths of both quantitative and qualitative data. Quantitative research method can be summarized as explaining phenomena by gathering numerical data which are analyzed by mathematically based methods (Aliağa & Gunderson, 2000). Burns and Grove (2005) state that, this research method can be used to describe variables and examine relationships and cause-effect interactions among them. Qualitative research method, on the other hand, is defined by Creswell (1994) as an investigation process of insight based on distinct methodological traditions of inquiry which analyze a social or human problem. He has also added that, the study is conducted in a natural setting where the researcher constructs a complex, holistic picture, analyses words and reports detailed views of informants. Denzin and Lincoln (2005) state that the researcher studies the issue and the participants in their natural settings with the goal to interpret the issues in terms of meanings people bring to them.

3.5. Procedure

Four decisions of Creswell (2003) were followed in this mixed-methods study: *1)implementation sequence of data collection 2)methods for data collection and analysis 3)integration stage of findings* and *4)theoretical perspective to be used*.

In this study, quantitative data was collected through likert-scale type of questions in the questionnaire based on ESP related issues from engineering faculty students at Toros University. They were informed that they have a right to stop taking part in the study any time they wanted and the participation would be voluntary. Firstly, the questionnaire was delivered to the participants in Turkish to avoid any possible communication challenges in English, and to obtain accurate data. The participants responded to the questions in 15 minutes. After the questionnaires were collected, the interviews were conducted and reflection papers were collected.

Qualitative data for the study was obtained via open ended questions on the questionnaire, semi-structured face to face interviews and reflection papers. The face to face interviews were conducted depending on the voluntariness of the instructors and students and more details about ESP and ESP related issues were elicited from the participants.

3.6. Setting and participants

3.6.1. The Research Site

The study was conducted at the Engineering Faculty of Toros University, the only private university in Mersin. The students of the engineering faculty have three hours of compulsory English classes every week. The assessment is done by one midterm exam, one oral presentation and one final exam throughout the semester. All the exams are prepared by the instructors of the course. These compulsory English classes continue for four semesters during their engineering education. Prior to their education at the engineering faculty, the students also attend a compulsory preparatory program which covers all four language skills.

3.6.2. Participants

This study was conducted with six English language instructors working at Toros University in Mersin and its engineering faculty students. The total number of female English instructors is four (60%) and the number of male English instructors is two (40%). Their age ranges between 28 and 60. All of the instructors have at least three-year experience in English

language teaching. The instructors have at least 20 hours of English lessons with a compromising course book covering listening, speaking, reading and writing skills.

56 male and 10 female, a total of 66 engineering faculty students participated in the study.

3.7. Data Collection Tools

In this study both qualitative and quantitative data were required to make statistical generalization and to obtain the perceptions as well as the experiences of English language instructors and engineering students of the ESP program. The quantitative data was collected through Likert-scale type of questions in a questionnaire. The qualitative data was obtained via open-ended questions in the questionnaire, semi-structured face to face interviews and reflection papers retrieved from the instructors and students. The interviews were held with 10 students, and six instructors. Triangulation was provided by collecting data through three different tools. Triangulation is a method which is used to increase the study's credibility. Burns (2000) explains triangulation as the use of two or more methods of data collection during the studies of human behaviors. In this study triangulation was employed with the participation of multiple participants which consisted of both students and instructors, and with performing multiple data collection instruments which were questionnaires, semi-structured face to face interviews and reflection papers.

3.7.1. Questionnaire

The questionnaire utilized in the study includes Likert-scale type of questions and eight open ended questions to understand the students' perceptions about ESP and ESP related issues. Dittrich, Francis, Hatzinger and Katzenbeisser (2007) have stated that Likert type data is both an important tool in psychology and social surveys and also an ever present method to collect data.

The questionnaire begins with the explanation and aim of the study and ethical issues shortly and clearly. The participants are informed in this part that they should feel free to skip the questions without any reason if they do not want to respond. Additionally, the contact information of the researcher is given. Moreover, there is a consent form approving that the participant has taken part in the study entirely voluntarily and there is another part including information based on whether the participant would like to volunteer in an oral interview and/or write a reflection paper.

The questionnaire also contained some questions to obtain background information about the participants.

3.7.2. Semi-structured Face to Face Interview

Since face to face interactions enable to broaden freedom of expressing thoughts, six language instructors and 10 voluntary participants of the engineering faculty students were selected on a volunteer basis so as to obtain deeper information about their perceptions and experiences on ESP and ESP related issues. According to Longhurst (2016), a semi-structured interview is an interchange of words in which an interviewer attempts to obtain information from an interviewee by asking questions. Participants are supposed to respond to some pre-determined questions and allowed to be flexible in the interview (Verma & Mallick, 1999). Therefore, the questions on the interview were based on the responses of the questionnaire. All participants were asked the same pre-determined questions in the same order so as to be consistent. Although the interview questions were in line with the ones in the questionnaire, the purpose of the interview questions was to obtain more detailed answers about ESP and ESP related issues. There was no time limitation set, yet each interview lasted roughly 15 minutes. The language of the interview was Turkish since the engineering faculty students might face communication problems in English, and holding the interview in English would have caused a major problem in collecting data. All the interviews were recorded with a recording tool with the permission of the participants.

During the analysis of the data of semi-structured face to face interviews, thematic analysis, colleague support and member checking were utilized. Guest, MacQueen and Namey (2012) have mentioned the rationale to use thematic analysis as not just based on counting words or phrases but that it also requires the involvement and interpretation of the researcher in the study. Since each interview was audio recorded, the answers of each participant were listened sentence by sentence and the data were categorized under the main themes which were related to the interview questions. Creswell (2007) points out that member checking provides validity, and helps to decrease incorrect data or misinterpretation of the data by the researcher.

3.7.3. Reflection Papers

All participants of the study were asked to write reflections papers about their ESP classes. Part of the qualitative data was obtained from the 66 reflection papers. The reflection papers were prepared with eight guiding questions. These questions were prepared to aid the

students in expressing their thoughts, and to ensure that the issues researched in this study were discussed. For the analysis of reflection papers, thematic analysis was employed.

3.8. Data Analysis

In order to analyze quantitative data, SPSS 20 was utilized, so the perceptions and experiences of English language instructors and engineering faculty students on the ESP and ESP related issues were obtained. So as to analyze qualitative data, thematic analysis steps of Creswell (2012) were used in the study. These steps are: 1*)preparation of the data, 2) defining the analysis units, 3) category improving and a coding scheme, 4) assessing the consistency of coding,* and *5) conclusion drawing.* While transcribing the data obtained from interviews and reflection papers, member checking and colleague support were used so that validity and reliability of the study were increased. Thematic analysis was conducted in order to interpret the interview and reflection papers data since it enables to classify many themes into fewer categories. The researcher, thesis supervisor and another departmental colleague collaborated in the theme coding process to sustain reliability of the data.

CHAPTER IV

FINDINGS

In this chapter the results of the quantitative and qualitative data analysis are presented. The first results presented are obtained through quantitative data which are provided with the needs analysis questionnaires filled in by the engineering faculty students. Following the quantitative results, the qualitative data analysis results are presented. The qualitative data was obtained through the reflection papers and semi-structured face to face interviews made with the engineering faculty students. The qualitative data of the six English for Specific Purposes instructors were obtained through reflection papers and semi-structured face to face interviews made with the them.

4.1. Quantitative data analysis of the student participants of the study

In this part, the demographic data of the participants are presented. The demographic data includes the gender distribution, the high school type they have graduated, preparatory education, their university departments and years. All relevant data is given in tables.

Table 3.

Gender Distribution of Student Participants

	f	**%**
Female	10	15.2
Male	56	84.8
Total	66	

As it is shown in Table 3, there were in total 66 participants of whom 56 (84.8%) were male and 10 (15.2%) were female.

Table 4.

Institutional Background of Student Participants

	f	%
Private School	22	33.3
State School	44	66.7
Total	66	

As it is shown in Table 4, 22 (33.3%) participants have graduated from private schools and 44 (66.7%) participants have graduated from public schools.

Table 5.

Institutional Background Regarding Preparatory School of Student Participants

	f	%
Yes	61	92.4
No	5	7.6
Total	66	

As it is shown in Table 5, 61 (92.4%) students have had English preparatory education. Five (7.6%) students have passed the proficiency exam and have not studied the English preparatory year.

Table 6.

Distribution of Student Participants' Majors

	f	%
Computer-Software	11	16.7
Electrical and Electronic	16	24.2
Civil	30	45.5
Industrial	9	13.6
Total	66	

As it is shown in Table 6, 11 (16.7%) students were studying at the computer-software engineering department, 16 (24.2%) students at the electrical and electronic engineering, 30 (45.5%) students at the civil engineering, and nine (13.6%) students were studying at the industrial engineering department.

Table 7.
Student Participants' Level

	f	**%**
1st Year	30	45.5
2nd Year	36	54.5
Total	66	

As it is shown in Table 7, 30 (45.5%) students were studying their first year and 36 (54.5%) their second year.

4.1.1. Factor Analysis

Factor analysis was done to analyze the English learning needs of the students. Before the factor analysis, to determine the sufficiency of the sampling, the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test was carried out. The test result demonstrated the KMO value as .854. This result, KMO>.50, demonstrates that there is no multiple dependency among the variables.

Since the acceptable lowest limit of KMO sampling sufficiency (which has a value between 0 and 1) is 0.50, the factor analysis according to these results was accepted convenient for application. For the Bartlett test, which analyses if there is sufficient relation between the variables, p=.000 that is less than p<.05 shows there is sufficient correlation between the variables for factor analysis.

In the first step of the factor analysis which was made to determine the learning needs of the students, the items (item 15 and item 16) whose extraction scores were under 50% were extracted and the analysis was repeated. In the repeated analysis the 14 items were gathered under three factors. Items 4, 6, 1, 5, 2, 3 and 14 were gathered under factor 1, occupational. Items 9, 8, 10, and 7 were gathered under factor 2, social. Items 13, 11 and 12 were gathered under factor 3, educational.

The three English Learning Dimensions and their sub variables obtained from the results of the factor analysis are given below.

1st Factor (Occupational): Items 4, 6, 1, 5, 2, 3 and 14.
2nd Factor (Social): Items 9, 8, 10, and 7.
3rd Factor (Educational): Items 13, 11 and 12.

Table 8 presents the occupational, social and educational dimensions, and the values of the items of these dimensions.

Table 8.
Factor Loads of Needs Analysis of Student Participants: Rotated Component Matrix

	Components		
Items	**Occupational (1)**	**Social (2)**	**Educational (3)**
Item 4	.907		
Item 6	.888		
Item 1	.874		
Item 5	.844		
Item 2	.821		
Item 3	.819		
Item 14	.666		
Item 9		.856	
Item 8		.811	
Item 10		.708	
Item 7		.639	
Item 13			.891
Item 11			.852
Item 12			.809

It can be seen in Table 8 that the results of the factor analysis have determined that three main components which define the English learning needs of the engineering faculty students have emerged.

4.1.2. Reliability Analysis

In order to analyze the reliability of the items, which constituted the needs obtained from the results of the factor analysis, Cronbach's Alpha Test was utilized. The results of this test are given in Table 9.

Table 9.

Reliability Analysis of the Questionnaire

	Number of items	**Cronbach's Alpha**
Occupational	7	.941
Social	4	.807
Educational	3	.859

As it can be seen in Table 9, the Alpha value for the occupational needs is .941, the Alpha value for the social needs is .807 and the Alpha value for the educational needs is .859. the reliability is high because the Alpha values of the scales are between 0.80-1.00.

Table 10.

Descriptive Statistics of Occupational Needs

	Mean	**Std. Deviation**
It is important for me to learn English in order to read and understand international studies in my field.	4.34	1.015
It is important for me to learn English to share views and collaborate with colleagues in different countries.	4.36	.954
It is important for me to learn English to practice my profession in the best way.	4.18	1.051
It is important for me to learn English in order to follow international developments in my profession.	4.37	.924
It is important for me to learn English in order to be able to participate in international trainings / conferences / seminars related to my profession and to achieve productive results.	4.30	.893
It is important for me to learn English in order to have a good command of the terms and expressions in my field and to make meaningful communication about my field in order to advance my career abroad.	4.42	.961
I would like to become a more confident individual in my professional life.	4.31	.914

Out of the seven statements about occupational needs, item six, “It is important for me to learn English in order to have a good command of the terms and expressions in my field and to make meaningful communication about my field in order to advance my career abroad” was the one with the highest mean value of 4.42. Item three; “It is important for me to learn English to practice my profession in the best way” was the statement with the lowest mean value, 4.18. When the homogeneity of the answers was evaluated, item three “It is important for me to learn English to practice my profession in the best way” was the most diverse statement with its standard deviation value of 1.051. Item five “It is important for me to learn English in order to be able to participate in international trainings / conferences / seminars related to my profession and to achieve productive results” was the item with the most similar answers according to its standard deviation value .893.

Table 11.

Descriptive Statistics of Social Needs

	Mean	**Std. Deviation**
It is important for me to learn English in order to actualize my social relations.	3.87	1.015
Making friends with foreigners increases my motivation in language learning.	3.95	1.169
I would like to have access and understand foreign popular culture products.	3.75	1.164
I would like to be able to read and understand literary works in their original language.	3.28	1.400

When the statements about social needs were reviewed, item eight “Making friends with foreigners increases my motivation in language learning” had the highest mean value; 3.95. Item 10 “I would like to be able to read and understand literary works in their original language” had the lowest mean value; 3.28. When the homogeneity of the answers was evaluated, the most diverse statement was also item 10 “I would like to be able to read and understand literary works in their original language” with a standard deviation value 1.400. Item seven “It is important for me to learn English in order to actualize my social relations” had the most similar answers according to its standard deviation value; 1.015.

Table 12.

Descriptive Statistics of Educational Needs

	Mean	**Std. Deviation**
I would like to continue my academic career after my undergraduate education.	3.68	1.204
After my undergraduate education, I would like to become an expert in my profession by gaining a master's degree.	3.89	1.138
After my undergraduate education, I would like to contribute to science by gaining master's and doctorate degrees and having an academic career.	3.74	1.113

When the statements about educational needs were reviewed, item 12 "After my undergraduate education, I would like to become an expert in my profession by gaining a master's degree" had the highest mean value; 3.89. Item 11 "I would like to continue my academic career after my undergraduate education" had the lowest mean value; 3.68. When the homogeneity of the answers was evaluated, the most diverse judgment was item 11 "I would like to continue my academic career after my undergraduate education" with a standard deviation value 1.204. Item 13 "After my undergraduate education, I would like to contribute to science by gaining master's and doctorate degrees and having an academic career" had the most similar answers according to its standard deviation value; 1.113.

4.1.3. The association between the Participants' English Learning Needs And Demographic Data

In this section, the analysis results for the T-Test are presented. The T-Test was utilized to determine if the learning needs of the participants of the study differed according to their gender, institutional background, preparatory education background, distribution of their level and their majors.

Table 13.

T-Test to Determine If the Learning Needs of the Student Participants Differed According to Their Gender

	Gender	n	Mean	Std. Deviation	Std. Error	t	p
Occupational	Female	10	.1921	.50506	.15971	-.388	.699
	Male	56	-.0343	1.06403	.14218		
Social	Female	10	.2230	.40549	.12822	-1.635	.107
	Male	56	-.0398	1.06969	.14294		
Educational	Female	10	.3095	1.13578	.35916	.141	.888
	Male	56	-.0552	.97477	.13026		

As it is presented in Table 13, p value for occupational learning needs was p=.699, for social learning needs p=.107 and for educational learning needs p=.888. All three values are p> .050 which indicates that the learning needs of the participants did not differ according to their gender, which means they were not statistically significant.

Table 14.

T-Test to Determine If the Learning Needs of the Student Participants Differed According to Their Institutional Background

	Institution	n	Mean	Std. Deviation	Std. Error	t	p
Occupational	Private	22	.1675	.35788	.07630	.962	.340
	State	44	-.0837	1.19479	.18012		
Social	Private	22	.0743	.97608	.20810	.425	.673
	State	44	-.0371	1.02082	.15389		
Educational	Private	22	-.0396	.91612	.19531	-.226	.822
	State	44	.0198	1.04906	.15815		

As it is presented in Table 14, p value for occupational learning needs was p=.340, for social learning needs p=.673 and for educational learning needs p=.822. All three values are p>

.050 which indicates that the learning needs of the participants did not differ according to their institutional background, which means they were not statistically significant.

Table 15.

T-Test to Determine If the Learning Needs of the Student Participants Differed According to Their Preparatory Education Background

	Preparatory School	**n**	**Mean**	**Std. Deviation**	**Std. Error**	**t**	**p**
Occupational	Yes	61	-.0137	1.02542	.13129	.657	.514
	No	5	.1678	.66289	.29645		
Social	Yes	61	-.0569	1.00882	.12916	.763	.448
	No	5	.6942	.57652	.25782		
Educational	Yes	61	.0050	1.02051	.13066	1.064	.291
	No	5	-.0611	.78940	.35303		

As it is presented in Table 15, p value for occupational learning needs was p=.514, for social learning needs p=.448 and for educational learning needs p=.291. All three values are p> .050 which indicates that the learning needs of the participants did not differ according to their preparatory education background, which means they were not statistically significant.

Table 16.

T-Test to Determine If the Learning Needs of the Student Participants Differed According to Their Level

	Gender	**n**	**Mean**	**Std. Deviation**	**Std. Error**	**t**	**p**
Occupational	1st year	30	-.0513	1.14137	.20838	-.379	.706
	2nd year	36	.0428	.87954	.14659		
Social	1st year	30	-.1684	1.12537	.20546	-1.255	.214
	2nd year	36	.1403	.87361	.14560		
Educational	1st year	30	.0378	1.01301	.18495	.279	.781
	2nd year	36	-.0315	1.00230	.16705		

As it is presented in Table 16, p value for occupational learning needs was p=.706, for social learning needs p=.214 and for educational learning needs p=.781. All three values are p> .050 which indicates that the learning needs of the participants did not differ according to their level, which means they were not statistically significant.

Table 17.

One-Way Anova to Determine If the Learning Needs of the Student Participants Differed According to the Distribution of Their Majors

	Major	**N**	**Mean**	**Std. Deviation**	**Std. Error**	**f**	**p**
Occupational	Computer	11	-.31654	1.19182	.35934	.611	.611
	Electric	16	-.07312	1.22051	.30512		
	Civil	30	.08858	.92137	.16821		
	Industrial	9	.22160	.49583	.16527		
Social	Computer	11	-.03115	.80756	.24348	.672	.573
	Electric	16	.13311	1.14038	.28509		
	Civil	30	-.15916	1.08193	.19753		
	Industrial	9	-.33198	.61014	.20338		
Educational	Computer	11	-.41370	1.08199	.32623	.828	.484
	Electric	16	.05784	1.10400	.27600		
	Civil	30	.05094	.84301	.15391		
	Industrial	9	.23299	1.21955	.40651		

As it is presented in Table 17, p value for occupational learning needs was p=.611, for social learning needs p=.573 and for educational learning needs p=.484. All three values are p> .050 which indicates that the learning needs of the participants did not differ according to the distribution of their majors, which means they were not statistically significant.

4.2. Qualitative data analysis of the student participants

In order to obtain more comprehensive data a reflection paper with eight guiding questions and semi-structured face to face interviews were performed with the engineering faculty students.

4.2.1. Reflection papers and open-ended questions

The student participants of the study (n=66) were asked to write reflection papers about their ESP courses. For the convenience of the participants, eight open-ended guiding questions were prepared on the reflection papers.

The first guiding open-ended question's aim was to disclose the participants' opinion about the duration of the ESP courses. The ESP courses are three consecutive hours per week. The majority (n=43) of the students expressed they were satisfied with this schedule and duration of the ESP courses. Five students considered it was too much, and that it could be reduced to two or even only one hour each week. On the other hand,14 students thought it was too few and that it should be increased. Remaining four participants did not want to have any English courses at all. One of the students also responded:

> *P27: "In my opinion three hours of English classes in one day are too much. I would prefer having one hour three days a week".*

Next, the participants were asked what the most beneficial language learning activity was for their own learning style. The most mentioned (n=55) (TOM 55) activities were *watching movies or authentic videos in English* and *listening to English music.* One of the participants stated:

> *P39: "When I watch movies or real life videos it is in casual speaking format and this also helps with the accents".*

These activities were followed with *participating in groups which communicate with foreigners on social media platforms* (TOM 28) and *"getting together with other language learners and speaking in English"* (TOM 25). Reading magazines/books/blogs was the least mentioned (TOM 16) activity. The answers of this part indicate that the participants are more interested with communication based activities.

The participants were asked to rank language skills according to their importance. The highest ranked language skill was speaking (48.3%), followed by vocabulary (28.3%) and grammar (13.3%). Pronunciation, listening, reading and writing skills were considered less important compared to the other skills. While 5% of the participants favored pronunciation, 1.7% listening, 1.7% reading and 1.7% regarded writing as the most important skill.

The majority of the participants mentioned (TOM 36) speaking as the skill they needed to improve. Speaking was followed by lexical knowledge (TOM 12), pronunciation (TOM 11), listening (TOM 10) and grammar (TOM 7). Reading (TOM 3) and writing (TOM 4) were the skills the participants thought needed to be improved the least.

The participants' opinion about the challenges they were facing when speaking English were various. The most common challenge (TOM 23) was struggling in understanding new vocabulary followed by speaking (TOM 22) and pronunciation (TOM 11). Other challenges mentioned were grammar (TOM 9), difficulty in understanding (TOM 5), writing (TOM 4) and anxiety for being ridiculed (TOM 2). Reading, listening and not understanding foreign culture were also uttered once.

In the reflection papers the students described their ideal English class activities. Speaking (TOM 25)was clearly the most preferred activity by the participants of the study. Listening and watching videos/movies were also very favored (TOM 16) followed by playing games (TOM 8). These opinions indicate that the students enjoy verbal communication activities in the ESP classroom. The least mentioned activities were group activities (TOM 2), learning new vocabulary (TOM 4), writing (TOM 5) and reading (TOM 6).

Doing vocabulary exercises and memorizing new vocabulary were mentioned (TOM 22), as activities the participants thought would help them study English after school hours. Online English activities (TOM 14), reading articles in English and discussing them(TOM 10) and watching foreign movies or television series (TOM 8) were other extra-curricular activities preferred by the students.

The participants expressed in their reflection papers their opinions about their ESP instructors. A great majority of the participants stated they were pleased with their ESP instructors. 6.45% were not satisfied with their ESP instructors and the reason for this was mentioned by one of the students as:

> *P47: "The classes are too slow, we are making progress too slowly in class" and "I wish our instructor would give us the writing topic before the midterm and final exams".*

The last theme observed from the reflection papers was that the textbooks were not satisfying for the participants. The exercises in the textbooks were too simple and not compatible with the ESP exam format (TOM 10). The listening parts in the textbook were dialogues spoken by two or more people, whereas the listening parts in the exams were lectures.

The students wrote that the reading parts of the textbooks were too short whereas the reading texts in the exam were much longer. One of the students wrote:

> *P56: "The only part which matches in the exam and textbook is the vocabulary part. Reading and listening are much more difficult in the exams."*

4.2.2. Semi-structured face to face interviews

10 randomly chosen participants were asked if they liked English. Almost all of them (n=9) stated they liked English whereas one participant did not like English. The majority of the interviewees (n=7) expressed they were learning English for their future careers while the remaining interviewees (n=3) uttered their English learning purpose as mainly educational. The answer of one of the interviewees is given verbatim:

> *I3: "I am learning English because my department is 100% English. I also like the language but I would not make an effort to learn it if my department were Turkish."*

Most of the interviewees (n=7) believed that the role of English on engineering was important when they would go abroad to work. When they were asked about the advantages of English in engineering, most of the interviewees (n=7) affirmed that they would be more successful in job recruitments because of their English. Some of the interviewees (n=3) also expressed that English would be an advantage to adjust to a new culture if they were to work abroad.

> *I5: "When you go abroad the only way to even buy a bottle of water is by speaking English. If you work abroad English is mandatory for an engineer because otherwise an engineer cannot work or make friends or understand the culture of that country."*

Half of the interviewees' (n=5) major was electrical engineering and they also explained English would be an advantage for them in their professional lives when they would have to read the using manuals of devices.

> *I5: "In our profession we must use many new technological devices. Most of them are imported from other countries and they come with a users' manual in English. In order to operate the devices correctly we must know English well, so yes, the role of English for engineering is very big."*

The interviews were continued by asking the interviewees how they were studying English by themselves. Three interviewees expressed they did not study English individually, while a few (n=2) students studied English only before the midterm and final exams by focusing on the textbook used in class.

> *I6: "Our major courses are very difficult and we have to spend many hours to study or prepare projects for them. English is important for me but I only study before the exams because I don't have time."*

The remaining interviewees (n=5) liked to learn new lexical and grammatical structures by reading English books, listening to English songs and watching English television series or films.

> *I9: "I learned English by watching television series. The English I learned from television series is not academic, I also learned a lot of slang, but it is very useful in communication with people. I went to Poland with the Erasmus program and I did not have any problems with speaking or understanding when other people were talking to me."*

The interviewees were also asked if the teaching materials used in ESP courses were fulfilling their learning needs. A few (n=4) interviewees stated that the textbook was inadequate for their learning needs. When asked to specify the inadequacy, they all uttered that besides the vocabulary parts of the units skills such as reading and writing were not compatible with the ESP midterm and final exams' concept of Toros University engineering faculty.

> *I1: "The reading parts in the textbook are very short, just one small paragraph. But in the exam you give us reading parts with four or five paragraphs and the language level is harder too."*

Another opinion mentioned by most of the participants (n=7) was that they would prefer if each department had its own ESP textbook because the current textbook's units were about different engineering departments.

> *I1: "I am studying industrial engineering but the ESP classes have only one or two units about my profession each semester. Why do I have to learn things about civil engineering or electrical engineering?"*

Larger part of the interviewees (n=7) verbalized they wanted the ESP courses to focus more on speaking activities and to have activities such as competitions, word games and debates.

> *I3: "It would be super if we did things like debates, or competitions about speaking English."*

The interviewees were also asked what the most effective skill for engineering was in learning English and half of the participants (n=5) expressed the speaking skill. Speaking was followed by the reading skill (n=3) and writing skill (n=2).

Half of the interviewees (n=5) preferred to study English individually. Four interviewees expressed studying English with a group was more beneficial for them and one interviewee stated he could not benefit from group study but private tutoring was the best way to study English for him.

The interviewees were also asked about the difficulties they were facing in the ESP courses. Majority of the interviewees (n=4) expressed they did not face any difficulties. Two participants stated that the pronunciation of ESP lexicon was difficult for them, two interviewees mentioned having the classes together with students with different English levels was making the ESP courses difficult and one participant verbalized that having three consecutive hours of ESP was too much.

> *I5: "I think the ESP classes would be more productive if they were only one hour three days a week. When we have three hours on the same day the lesson becomes boring after a while."*

The opinions of the interviewees on whether Toros University provided them with necessary English language learning opportunities was also taken. Most of the interviewees (n=8) responded affirmative to this question. They believed the school was providing them the necessary opportunities to learn English. However, the other interviewees (n=2) commented that Toros University did not provide them with the opportunities they expected. Their expectations included going abroad and having native professors in their major departments.

The last question was about their overall contentedness with the ESP courses at Toros University. Half of the participants (n=5) were satisfied with the ESP courses, three interviewees were contented with the ESP instructors and two interviewees were not pleased because they wanted more focus on speaking and listening skills.

> *I6: "I like the ESP classes but I wish we would have more speaking and listening lessons. It would be good if we could hear different accents so we could get used to understanding foreigners."*

4.3. Qualitative data analysis of the ESP instructors

In order to obtain more comprehensive data semi-structured face to face interviews were performed with the ESP instructors. In total six ESP instructors, four female and two male participated in the study.

The instructors were asked what the ESP program should focus on in terms of language skills. All instructors (n=6) agreed that the ESP program's focus should be on the four language skills; reading, writing, listening and speaking. The majority of the instructors (n=4) stated that communicative language teaching was not the most useful approach for their students. The instructors stated that apart from communicative language teaching, grammar translation method was in some cases more useful due to the major study field of the students.

> *P1: "Because of the technical terms used in engineering fields I believe that grammar translation method can be used in some classes."*

The instructors divided into two groups about focusing on fluency or accuracy. Half of the participants uttered that focusing on accuracy was more important and the other half expressed that focusing on fluency was more important.

Most of the instructors (n=5) did not think it was necessary to focus on educational games, role playing, group or pair work. However, one instructor stated that the lessons were more productive when the students were working in groups.

> *P3: "Especially when we are doing speaking activities, the students become more involved in the activity when I set them up in groups and ask them to look up some facts and talk about them in class."*

When the instructors were asked if the activities done in the ESP courses would be useful for the future jobs of the students, four instructors answered positively while two instructors stated that if the students were to stay in Turkey, these activities would not be useful for them.

All of the participants verbalized that the materials they used in the ESP courses were authentic. They were not only using a textbook, the courses were supported with extra materials such as videos and podcasts about the topics discussed in class.

> *P1: "In the engineering ESP classes we always watch a video before the lesson starts to discuss some type of technological innovation. These videos are motivating for the students because they also learn something new about their future profession's innovations."*

The instructors all (n=6) believed the materials used in ESP courses fulfilled the learning needs of the students. Two other issues all the instructors agreed on was that a placement test should be done before forming the ESP classes, and the classes should be formed according to the students' English proficiency level.

The participants were also asked to make self-assessment about their teaching practices. Half of the participants (n=3) believed their classes were not very fruitful due to the different English proficiency levels of the students. The same participants also stated they sometimes faced challenges while teaching in the ESP courses.

> *P6: "The proficiency level in one of my ESP classes is not homogenous, that is the most challenging class for me. There are quite a few students with low level of proficiency and they are struggling with the ESP courses. I find myself trying very hard to make them understand the discussions in the class and make them participate."*

The views of the participants on the assessment of the success of the students were homogenous. Four instructors assessed the students' English development only with the midterm, final and oral exams. The other two instructors evaluated the overall attitude of the students towards the ESP course.

While the majority of the participants (n=5) believed their opinions and ideas towards the ESP program were considered important by the administration, they did not feel comfortable by being evaluated regularly by the administration and students. They expressed they felt under pressure when the academic coordinator came to their class for observation, and they felt that the student's attitude towards the instructors might change in a negative way. One of the participant expressed his thoughts as:

> *P2: "Being evaluated by the administrators or students does not increase my motivation. I already love my job and I am happy to work here. I do not believe the students really read the questions on the instructor evaluation questionnaire. They just give us points randomly. I would prefer the students to write short reflection paragraphs about the instructors with their true and honest opinions. The papers should be anonymous so the students can be honest."*

4.4. Qualitative data analysis of the faculty academic English coordinator

For gathering data about the goals and objectives of the ESP program and the engineering students' needs an interview was conducted with the faculty academic English coordinator.

As explained by the faculty academic English coordinator the main objective of the ESP courses is to develop personal strategies for reviewing new related vocabulary, to use vocabulary in a variety of academic speaking, listening, writing and reading activities. Furthermore, the other goals are discussing a variety of topics needed for work in the student's professions, developing academic speaking, listening, writing and reading skills, evaluating a variety of texts and identifying the related terminology.

The engineering students' needs as perceived by the faculty academic English coordinator are in compliance with the perceptions of the ESP instructors. The main need of the engineering students is expansion of vocabulary because they are unfamiliar with the terminology of their future professions. Language structures are not a challenge for them, but vocabulary still is. The engineering students also need to improve their critical thinking skill.

> *"Basically the students are having difficulties with creativity, and because of this they are having trouble with critical thinking. We aim in our ESP program to assist the students in developing critical thinking."*

Another need expressed by the faculty academic English coordinator was to learn how to study. Not only studying English but studying in general was a challenge for the engineering faculty students.

> *"The students always ask us the same question before the exam week – 'Sir, how can be study/prepare for the midterm/final exam?' They are university students but they still need guidance in sitting down and studying for their exams."*

One of the assessment components of the students are oral presentations. The faculty academic English coordinator uttered that the students needed assistance in doing research about a topic.

> *"The students are competent in technology however, they are not aware of research methods and they need to learn this skill. I believe that if they learn how to do research they will also learn how to study English."*

The faculty academic English coordinator was asked if the objectives of the program were appropriate for the needs of the engineering students. He explained that the program was appropriate for the needs of the engineering students particularly in terms of teaching relevant terminology. The course textbooks were chosen according to the need for relevant occupational terminology, they focused mainly on vocabulary. Skills such as reading and listening should be supported with extra materials which was done each lesson. The faculty academic English coordinator also added that the courses would be much more effective if the ESP courses content could be prepared parallel to the students' major courses. But this was not possible at the time being but could be considered for future programs.

CHAPTER V

DISCUSSION

The purpose of this study was to evaluate the ESP program at the Engineering Faculty of Toros University in Turkey, and to find out the views of students and ESP instructors about the program through explanatory mixed-methods design. Moreover, this study aimed to obtain whether the needs of the students were met by the current ESP program and the ESP instructors at the engineering faculty. This chapter discusses the findings gathered from quantitative and qualitative data. The types of data are combined in order to provide a detailed understanding of the views of the students and instructors. This section is laid out according to the research questions.

5.1. The goals and objectives of the ESP program in engineering education at Toros University

The faculty academic coordinator of Toros University explained the goals and objectives of the English for Specific Purposes program. The main objective of the ESP courses is to develop personal strategies for reviewing new related vocabulary, to use vocabulary in a variety of academic speaking, listening, writing and reading activities. Furthermore, the other goals are discussing a variety of topics needed for work in the student's professions, developing academic speaking, listening, writing and reading skills, evaluating a variety of texts and identifying the related terminology. These goals and objectives are compatible with the principal concept of ESP pointed out by Hutchinson and Waters (1987). They claim that the main idea behind the skill-centered approach, ESP, is focusing on interpretive strategies which enable the language learner to figure out the surface forms, such as guessing the meaning of words from context, using visuals to identify the type of the text, exploiting words which are similar in the native tongue and target language.

5.2. The needs of the Engineering Students as Perceived by the Administrators and ESP Instructors

5.2.1. The needs of the Engineering Students as Perceived by the Administrators

The engineering students' needs as perceived by the faculty academic English coordinator are in compliance with the perceptions of the ESP instructors. The main need of the engineering students is expansion of vocabulary because they are unfamiliar with the terminology of their future professions. Language structures are not a challenge for them, but vocabulary is. The engineering students also need to improve their critical thinking skill.

Another need expressed by the faculty academic English coordinator was to learn how to study because studying in general was a challenge for the engineering faculty students.

5.2.2. The Needs of the Engineering Students as Perceived by the ESP Instructors

The ESP instructors believe that the engineering students need to focus on all four language skills but they need more emphasis on reading and vocabulary. The ESP instructors stated that communicative language teaching alone could not meet the engineering students' needs. Because of the technical terminology of the engineering students' majors, grammar translation method was meeting their needs occasionally.

According to the ESP instructors the engineering students also needed authentic extra material relevant to their majors, besides the textbook used in class, to improve fluency in reading comprehension. Therefore, relevant videos and articles were distributed to the students to engage them in critical thinking and to expand their vocabulary in their engineering field.

5.3. Are the Objectives Appropriate to the Needs of the Students of Engineering?

The objectives of the ESP program meet the engineering faculty students' needs. The most important skill perceived by the engineering faculty students was speaking and vocabulary knowledge. The majority of the students believed they were competent in grammar but needed to develop their vocabulary. The objectives of the ESP program concentrate on vocabulary building and support this with the main skills; reading, writing, listening and speaking.

5.3.1 The students' Views about the ESP Program

According to the quantitative data obtained from the questionnaire filled by the engineering students, the needs of the engineering students emerged as three groups which are

occupational, social and educational. These groups did not demonstrate any difference according to the demographic data of the students. In other words it can be said that these needs did not change depending on the engineering department, class, educational background, preparatory school education, age or gender of the students. Furthermore, the reflection papers and the semi-structured face to face interviews, which were applied to collect qualitative data, supported the findings of the quantitative data.

In the literature, reading is considered to be the most important skill in ESP (Rosenfeld, Leung, & Oltman, 2001; Snow, Burns, & Griffin, 1998; Grabe & Stoller, 2001), which is not in line with the findings of the current study. The students believed the ESP program fulfilled their needs, but they requested extra attention on speaking. The engineering students consider speaking to be the most important skill in their future careers. This result is similar to the findings of Al-Tamimi and Shuib (2008) who stated that the students in their study emphasized that the main focus should be on speaking, communication and listening skills. Likewise, in Boroujeni and Fard's (2013) study, speaking was found to be the most preferred skill.

The students had a request regarding the textbook used in the ESP courses. The majority of the students want to use a textbook prepared specifically for their major study area. This finding is in line with Namasari's (2018) study, in which a high percentage of the students thought that there should be specific English textbooks for informatics engineering students.

5.3.2. The instructors' and administrators' views about the ESP program

The ESP instructors believe the ESP courses meet the needs of their students. They are focusing on four skills and they keep vocabulary in the main focus. However, they find having students from different language levels in the same class quite challenging. They agree on the idea of having a placement test before forming the ESP classes and arranging the classes according to the placement test.

The faculty academic English coordinator who is the administrator of the ESP courses also believes that the ESP courses meet their students' needs. Even though the students did not mention critical thinking, the administrator points out that the ESP courses at Toros University encourage students to critical thinking and expanding of vocabulary.

CHAPTER VI

CONCLUSION

This is the last chapter of the thesis and its aim is to summarize and conclude the current study by stating significant points. Another aim of this chapter is to give recommendations for future studies.

6.1. Conclusion of the study

The interest of the study was the evaluation of the English for Specific Purposes program at the engineering faculty of Toros University in Turkey. The aims were to find out the goals and objectives of the ESP program in engineering education at Toros University, and to determine if the ESP program at Toros University was meeting the engineering faculty students' needs. To meet these aims, explanatory mixed method research design was used and in order to understand the complexity of the research problem quantitative and qualitative research methods were combined. The quantitative data was collected through likert-scale type of questions in the questionnaire based on ESP related issues from engineering faculty students at Toros University. Qualitative data for the study was obtained via open ended questions on the questionnaire, semi-structured face to face interviews and reflection papers. The face to face interviews were conducted depending on the voluntariness of the instructors and students and more details about ESP and ESP related issues were elicited from the participants.

The study was conducted at the Engineering Faculty of Toros University with six English language instructors and its engineering students.

The questionnaire applied to the engineering students has put forward that the needs of the students are gathered under three dimensions; occupational, social and educational.

The findings of the study have revealed that the main objective of the ESP courses is to develop personal strategies for reviewing new related vocabulary, to use vocabulary in a variety of academic speaking, listening, writing and reading activities. These goals and objectives are in line with the principal concept of ESP pointed out by Hutchinson and Waters (1987). The main need of the engineering students is expansion of vocabulary because they are unfamiliar with the terminology of their future professions. Language structures are not a challenge for them, but vocabulary is. The engineering students also need to improve their critical thinking skill. The study also found that the ESP instructors believe that the engineering students need to focus on all four language skills but they need more emphasis on reading and vocabulary. It

was also found that the objectives of the ESP program met the engineering faculty students' needs. The most important skill perceived by the engineering faculty students was speaking and vocabulary knowledge. The majority of the students believed they were competent in grammar but needed to develop their vocabulary. Most of the students wanted to use a textbook prepared specifically for their major study area.

Finally, the ESP instructors believe the ESP courses meet the needs of their students. They are focusing on four skills and they keep vocabulary in the main focus. However, they find having students from different language levels in the same class quite challenging.

This study can help the instructors at Toros University prepare a more effective syllabus for future use, and also contribute to other instructors who would like to improve their teaching skills in the field of ESP and ESP related issues. This study can also be further conducted with the other faculties of Toros University in order to obtain additional information about the ESP program, and to test the reliability and validity of the data gathering materials.

6.2. Limitations of the study

The first limitation of this study was being a case study; it was conducted at only one university. It could have been a more satisfying study if it could have been conducted at two or more universities, and the needs of the students, the contents and aims of those programs at the different universities could be compared.

Another limitation was that the study was carried out in only one semester. Also, the only data collection methods depended on the participants' views and comments. Classroom observations or certain tests could be performed at the beginning and end of the academic year and the results could have been compared.

6.3. Implications of the study

The implications of this study are for ESP administrators and program developers. Before the development of any ESP program, a detailed needs analysis should be carried out with the students of that program before the beginning of the semester. The textbooks to be used should be chosen carefully according to the needs of the students and their study majors. In order to develop more effective ESP courses, more detailed ESP studies should be conducted to grasp the needs of the students and the instructors.

6.4. Suggestions for Future Research

Future studies should be conducted in order to shed light on ESP issues. This was a case study which provided data about one faculty. Further research which covers all the ESP courses at all the faculties of the subject university should be carried out in order to have a more broadened comprehension about the ESP program.

A follow-up longitudinal study can be conducted in order to provide an insight into participants' views over a certain period of time and observe any changes in participants' perceptions. A possible research could include same participants after some revisions are made based on the findings of the study, and it could investigate whether these revisions helped to meet the needs of the students. Furthermore, it would be useful if future studies enrich the data collection process through classroom observations to possibly provide more extensive findings. It surely will enable researchers to reach more data and various perspectives with regard to points of views towards ESP.

REFERENCES

Aguilar, M., & Muñoz, C. (2014). The effect of proficiency on CLIL benefits in engineering students in Spain. *International Journal of Applied Linguistics, 24*(1), 1-18.

Akbarian, I. h. (2010). The relationship between vocabulary size and depth for ESP/EAP Learners. *System, 38*(3), 391-401.

Alagozlu, N. (1994). *An English language needs assessment of students of the medical faculty at Cumhurivet University* (Unpublished master's thesis). Bilkent University, Ankara, Turkey

Al-Khasawneh, F., M.S. (2010). Writing for academic purposes: Problems faced by arab postgraduate students of the college of business. *UUM. ESP World, 2*(28), 1-23. Retrieved from http://www.esp-world.info

Al-Khasawneh, F., M.S. (2012). Vocabulary learning strategies: A case of Jordan university of science and technology. *English for Specific Purposes World, 12*(34), 1-15.

Al-Mekhlafi, A. M., & Nagaratnam, R. P. (2011). Difficulties in Teaching and Learning Grammar in an EFL Context. *Online Submission, 4*(2), 69-92.

Al-Tamimi, A. S., & Shuib, M. (2010). Investigating the English language needs of petroleum engineering students at Hadhramout University of Science and Technology. *The Asian ESP Journal, 6*(1), 6-34.

Alfehaid, A. F. T. (2011). *Developing an ESP curriculum for students of health sciences through needs analysis and course evaluation in Saudi Arabia*. (Doctoral dissertation), University of Leicester.

Alsamani, A.-A. S., & Daif-Allah, A. S. (2016). Introducing project-based instruction in the Saudi ESP Classroom: A study in Qassim University. *English Language Teaching, 9*(1), 51-64.

Anusienė, L., & Kavaliauskienė, G. (2009). English for specific purposes: Podcasts for listening skills. *Santalka: Filologija, Edukologija, 17*(2), 28-37.

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.

Ayoub, M. T. & Khan, J. S. (2017), ESP Needs Analysis of Undergraduate Engineering Students: A Case Study of Multan. *Global Journal of Management and Social Sciences. No.3, No.1*, Jan-March, 2017. Page # 103-119.

Basturkmen, H. (2003). Specificity and ESP course design. *RELC Journal, 34*(1), 48-63.

Basturkmen, H. (2006). *Ideas and Options in English for Specific Purposes*. New Jersey: Lawrence Erlbaum Associates, Inc.

Basturkmen, H. (2010). *Developing Course in English for Specific Purposes*. Houndmills, Basingstoke, Hampshire: Palgrave Mcmillan.

Bhatia, V. K. (2002a). Applied genre analysis: Analytical advances and pedagogical procedures. In A. M. Johns (Ed.), *Genre in the classroom: multiple perspectives* (pp. 279-284). NJ: Lawrence Erlbaum Associates.

Bidabadi, F. S., & Yamat, H. (2010). Learning style preferences by Iranian EFL freshman university students. *Procedia - Social and Behavioral Sciences, 7*, 219-226.

Bojovic, M. (2006). Teaching foreign languages for specific purposes: Teacher development. *Paper presented at the proceedings of the 31st Annual Association of Teacher Education Conference*.

Boroujeni, S. A., & Fard, F. M. (2013). A Needs Analysis of English for Specific Purposes (ESP) Course For Adoption Of Communicative Language Teaching:(A Case of Iranian First-Year Students of Educational Administration*). International Journal of Humanities and Social Science Invention*, *2* (6), 35-44

Bosher, S., & Smalkoski, K. (2002). From needs analysis to curriculum development: designing a course in health-care communication for immigrant students in the USA. *English for Specific Purposes, 21*(1) 59-79. doi.org/10.1016/S0889-4906(01)00002-3

Brinton, D. M. (2013). *Content-Based Instruction in English for Specific Purposes.* The Encyclopedia of Applied Linguistics.

Brown, D. (2007). *Teaching by Principles: An Interactive Approach to Language Pedagogy*. Second Edition. Longman.

Brown, J. D. (1995). *The elements of language curriculum: A systematic approach to program development.* Boston: Heinle and Heinle.

Brown, J. D. (2009). Foreign and second language needs analysis. In M. H. Long & C.

Doughty (Eds.), *The Handbook of Language Teaching* (pp. 269-293). Chichester, U.K.; Malden, MA: Wiley-Blackwell.

Canale, M., & Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics,1*, 1-47.

Chalikandy, M. A. (2013). A Comprehensive Method for Teaching English for Specific Purpose. *Arab World English Journal*, *4*(4).

Chilisa, B. (2011). *Indigenous research methodologies*. Thousand Oaks: Sage.

Chilisa, B. & Kawulich, B. (2012). Selecting a research approach: Paradigm, methodology and methods. In C. Wagner, B. Kawulich and M. Garner (Eds.), *Doing social research: A global context* (pp. 51-61). New York: McGraw-Hills.

Choi, K (2010). *Needs Analysis of Students of Tourism English*. Retrieved from http://www.paaljapan.org/resources/proceedings/PAAL10/pdfs/kyunghee.pdf

Council of Europe (2001). *Common European Framework of Reference for Languages: Learning, teaching, assessment*. Cambridge: Cambridge University Press

Coxhead, A. (2013). Vocabulary and ESP. In B. Paltridge & S. Starfield (Eds.), *The handbook f English for Specific Purposes*. West Sussex: John Wiley & Sons, Inc.

Coyle, D. (2012). Content and language integrated learning: Language using, learning gains. In M. G. Davies (Ed.), *New trends in early foreign language learning* (pp. 26-33). Newcastle upon Tyne: Cambridge Scholars Pub.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: SAGE Publications.

Creswell, J.W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage

Creswell, J. W. (2012). *Educational research: Planning, conducting and evaluating quantitative and qualitative research* (4th edition). Boston: Pearson.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th edition). Thousand Oaks, CA: SAGE Publications.

Creswell, J. W. & Plano-Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Creswell, J. W.; Plano-Clark V.L.; Gutmann, M. & Hanson, W. (2003). Advanced mixed methods research design. In A. Tashakkori and C. Teddlie (Eds.), *Handbook on mixed methods in the behavioral and social sciences* (pp.209-240). Thousand Oaks, CA: Sage Publications.

Croker, R. A. (2009). An introduction to qualitative research. In J. Heigham and R. A. Croker (Eds.). *Qualitative research in applied linguistics: A practical introduction*. (pp.3-24). England: Palgrave Macmillan.

Crystal, D. (2003). *English as a global language* (2nd edition). Cambridge: Cambridge University Press.

Cummins, J. (2008). BICS and CALP: Empirical and theoretical status of the distinction. In B.Street & N.Hornberger (Eds.), *Encyclopedia of language and education: Vo. 2. Literacy (2nd ed., pp. 71-83)*. New York: Springer.

Dittrich, R., Francis, B., Hatzinger R. & Katzenbeisser, W. (2007). A paired comparison approach for the analysis of sets of Likert-scale responses. *Statistical Modelling 7*(1), 3-28. doi:10.1177/1471082X0600700102

Dudley-Evans, T., & St. John, M. J. (1998). *Developments in English for Specific Purposes*. Cambridge: Cambridge University Press.

Duff, P. A. (2001). Learning English for Academic and Occupational Purposes. *TESOL Quarterly, 35*(4), 606. doi:10.2307/3588437

Duff, P. (2008). *Case study reserach in applied linguistics*. New York: Lawrence Erlbaum Associates.

Durmusoglu Kose, G., Yuksel, I., Ozturk, Y., & Tomen, M. (2019). Turkish Academics' Foreign Language Academic Literacy: A Needs Analysis Study. *International Journal of Instruction, 12*(1), 717-736.

Elkilic, G. (1994). *An analysis of the English language needs of veterinary medicine students at Selcuk University* (Unpublished master's thesis). Bilkent University, Ankara, Turkey

Faiza, H. (2010). Conducting a needs analysis for an ESP course design: The case of fourth year students of cellular and molecular biology. *International Journal of the Humanities, 8*(9), 78-97.

Fiorito, L. (2005). *Teaching English for Specific Purposes* (ESP). Retrieved from http://www.usingenglish.com/articles/teaching-english-special-purposes.html

Fraenkel, J. R., Wallen, N. E. & Hyun, H. H. (2012). *How to design and evaluate research in education.* New York: The McGraw-Hill Companies.

Fujiwara, T. (2014). Language learning beliefs of Thai EFL university students: Variations related to achievement levels and subject majors. *Electronic Journal of Foreign Language Teaching, 11*(2), 300-311.

Galletta, A. (2013). *Mastering the Semi-Structured Interview and Beyond: From Research Design to Analysis and Publication*. New York: New York University Press.

Gan, Z. (2012). Understanding L2 speaking problems: Implications for ESL curriculum development in a teacher training institution in Hong Kong. *Australian Journal of Teacher Education, 37*(1), 43-59.

Gatehouse, K. (2001). Key issues in English for specific purposes (ESP) curriculum development. *The Internet TESL Journal, 7*(10), 1-10.

Goh, C. C. M. (2013). ESP and listening. In B. Paltridge & S. Starfield (Eds.), *The handbook of English for Specific Purposes* (pp. 55-76). West Sussex: John Wiley & Sons, Inc.

Goh, C. C. M., & Burns, A. (2012). *Teaching Speaking : A Holistic Approach*. New York: Cambridge University Press.

Graddol, D. (1997). *The future of English.* London: The English Company Ltd.

Graves, K., & Xu, S. (2000). *Designing language courses: A guide for teachers*. New York.

Guba, E.G., & Lincoln, Y.S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage.

Guest, G., MacQueen, K. M. & Namey, E. E. (2012). *Applied thematic analysis*. Thosand Oaks: CA: Sage.

Gunduz, N. (1999). *An Analysis of Students English Needs in the English Language and Literature Department of Selcuk University* (Unpublished master's thesis). İhsan Doğramacı Bilkent University: SBE, Ankara, Turkey.

Hamada, Y. y. g. a.-u. a. j. (2016). Shadowing: Who benefits and how? Uncovering a booming EFL teaching technique for listening comprehension. *Language Teaching Research, 20*(1), 35-52.

Hutchinson, T., & Waters, A. (1987). *English for specific purposes*. Cambridge: Cambridge University Press.

Hyland, K. (2006). *English for Academic Purposes*. London: Routledge.

Hyland, K. (2013). ESP and writing. In B. Paltridge & S. Starfield (Eds.), *The Handbook of English for Specific Purposes* (pp. 95-113). Malden, Mass.: Wiley-Blackwell.

Hyun Hyo, K. (2013). Needs Analysis for English for Specific Purpose course Development for Engineering Students in Korea. *International Journal of Multimedia & Ubiquitous Engineering, 8*(6), 279-288.

Ivankova, N. V.; Creswell, J. W. & Stick, S. L. (2006). Using mixed methods sequential explanatory design: From theory to practice. *Field Methods, 18*(1), 3-20. doi:10.1177/1525822X05282260

Javid, C. Z., Farooq, M. U., & Umer, M. (2013). An Investigation of Saudi Efl Learners' Writing Problems: A Case Study along Gender-Lines. *Kashmir Journal of Language Research, 16*(1), 179.

Jianfeng, W., Qingdong, W., & Shibo, X. (2009, 19-20 Dec. 2009). *Analysis of linguistic features of English for Science and Technology*. Paper presented at the Knowledge Engineering and Software Engineering, 2009. KESE '09. Pacific-Asia Conference.

Jie, S., & Cross, J. D. (2014). An investigation into problems in the writing of conference abstracts by Japanese graduate students. Paper presented at *the Advanced Mechatronic Systems* (ICAMechS), 2014 International Conference on.

Johns, A. M., & Salmani, N., M.A. (2015). English for Specific Purposes: The state of the art. *International Journal of Language Studies*, *9*(2).

Jordan, R. R. (1997). *English for academic purposes: a guide and resource book for teachers*. Cambridge, U.K.; New York, NY: Cambridge University Press.

Kaewpet, C. (2009a). Communication needs of Thai civil engineering students. *English for Specific Purposes*, *28*(4), 266-278.

Kassim, H., & Ali, F. (2010). English communicative events and skills needed at the workplace: Feedback from the industry. *English for Specific Purposes*, *29*(3), 168-182.

Kavaliauskienė, G. (2011). Blended learning in ESP listening. *English for Specific Purposes World*, *31*, 1-9.

Kennedy, C. & Bolitho, R. (1984) *English for Specific Purposes*. London: Macmillan

Kern, R. & Warschaeur, M. (2000). *Network Based Language Teaching: Concept and Practice*. Honolulu, HI: University of Hawaii, p 11-19.

Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *American Journal of Occupational Therapy*, *45*, 214-222. doi:10.5014/ajot.45.3.214

Laufer, B., & Nation, P. (1995). Vocabulary size and use: Lexical richness in L2 written production. *Applied Linguistics*, *16*(3), 307-322.

Liew, K. L., & Khor, C. P. (2014). ESP at tertiary level: traditional ESP or integrated ESP? Retrieved from https://pdfs.semanticscholar.org/f8d7/779f560fb56173be0d9cb8efcb476941d656.pdf

Likaj, M. (2015). Teaching Listening as a Communicative Skill in Military English. *Journal of Education and Practice*, *6*(24), 64-70.

Lincoln, Y. S, & Guba, E. A. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

Liu, T.-Y., & Chu, Y.-L. (2010). Using ubiquitous games in an English listening and speaking course: Impact on learning outcomes and motivation. *Computers & Education*, *55*(2), 630-643.

Master, P. (2005). Research in English for Specific Purposes. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 99-115). Mahwah, N.J.: L. Erlbaum Associates.

Marshall, N. M. (1996). Sampling for qualitative research. *Oxford Journals Family Practice*, *13*(6), 522-526. doi:10.1093/fampra/13.6.522

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: John Wiley & Sons.

Myhill, D. A., Jones, S. M., Lines, H., & Watson, A. (2012). Re-thinking grammar: the impact of embedded grammar teaching on students' writing and students'metalinguistic understanding. *Research Papers in Education, 27*(2), 139-166.

Myles, J. (2009). Oral competency of ESL technical students in workplace internships. *TESLEJ, 13*(1).

Nation, P. (1990). *Teaching and Learning Vocabulary*. New York: Newbury House/Harper-Collins.

Nation, P. (2001). *Learning vocabulary in another language* Cambridge: Cambridge University Press

Nation, P., & Waring, R. (1997). Vocabulary size, text coverage, and word lists. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary: Description, acquisition, and pedagogy*. Cambridge: Cambridge University Press.

Nimasari, P. (2018) An ESP Needs Analysis: Addressing the Needs of English for Informatics Engineering. *JEES (Journal of English Educators Society), 3*(1), 23-40.

Nowrouzi, S., Shu Sim, T., Zareian, G., & Nimehchisalem, V. (2015). Iranian EFL students' listening comprehension problems. *Theory & Practice in Language Studies, 5*(2), 263-269.

Nunan, D. (1988). *Syllabus design*. Oxford: Oxford University Press.

Nunan, D. (2001). *English as a global language. TESOL Quarterly*, *35*(4), 605-606.

Nunan, D. (2001). Listening in language learning. In J. C. Richards & W. A. Renandya (Eds.), *Methodology in Language Teaching : An Anthology of Current Practice* (pp. 238-241). New York: Cambridge University Press.

Piribabadi, A., & Rahmany, R. (2014). The Effect of the Keyword Method and Word-list Method Instruction on ESP Vocabulary Learning. *Journal of Language Teaching & Research, 5*(5), 1110-1115.

Qamar, M. B. (2016). The impact of learner's autonomy on teaching oral skills (speaking skills) in an EFL classroom. *Journal of Language Teaching & Research*, *7*(2), 293-298.

Rajprasit, K. (2015). Perceptions and problems of English language and communication abilities: A final check on Thai engineering undergraduate. *English Language Teaching*, *8*(3), 111-120.

Reid, J. (2001). Writing. In R. Carter & D. Nunan (Eds.), *The Cambridge Guide to Teaching English to Speakers of Other Languages* (pp. 28-33). Cambridge: Cambridge University Press.

Renandya, W. A., & Farrell, T. S. C. (2011). "Teacher, the tape is too fast!" Extensive listening in ELT. *ELT Journal, 65*(1), 52-59.

Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching*: Cambridge University Press.

Robinson, P. C. (1991). *ESP today: A practitioner's guide*. New York: Prentice Hall.

Rosa Maria Jimenez Catalan, & Fontecha, A. F. (2015). Lexical phrases in compositions by CLIL and non-CLIL EFL learners. In D. Marsh, M. L. Pérez Cañado, & J. Ráez Padilla (Eds.), *CLIL in Action : Voices from the Classroom (*pp. 82-97). New Castle upon Tyne, UK: Cambridge Scholars Publishing.

Rossman, G. B., & Rallis, S. F. (2003). *Learning in the field: An introduction to qualitative research*. Thousand Oaks, Calif: Sage Publications.

Rost, M. (2001). *Teaching and researching listening.* New York: Longman.

Rostami, F., & Zafarghandi, A. M. (2014). EAP needs analysis in Iran: The case of university students in chemistry department. *Journal of Language Teaching & Research, 5*(4), 924-934.

Rotschild, T. (2015). Teaching speaking in a foreign language: Proficiency-oriented second language instruction. *Education Today* (00131547), 65(4), 14-21.

Savas, B. (2009). Role of Functional Academic Literacy in ESP Teaching: ESP Teacher Training in Turkey for Sustainable Development. *Journal of International Social Research, 2*(9), 395-406.

Schwandt, T. A. (2001). *Dictionary of qualitative inquiry (2nd ed.)*. Thousand Oaks: Sage Publications.

Siyanova-Chanturia, A., & Webb, S. (2016). Teaching Vocabulary in the EFL Context. *English Language Teaching Today* (pp. 227-239): Springer.

Spence, P., & Liu, G.-Z. (2013). Engineering English and the high-tech industry: A case study of an English needs analysis of process integration engineers at a semiconductor manufacturing company in Taiwan. *English for Specific Purposes, 32*(2), 97-109.

Strevens, P. (1972). *Technical, Technological and Scientific English* (TTSE).

Strevens, P. (1988). ESP after twenty years: A re-appraisal. In M. Tickoo (Ed.), *ESP: State of the art.* Singapore: SEAMEO Regional Language Centre.

Taillefer, G. (2013). CLIL in higher education: the (perfect?) crossroads of ESP and didactic reflection. *ASp. la revue du GERAS (63),* 31-53.

Tarnopolsky, O. (2013). Content-based instruction, CLIL, and immersion in teaching ESP at tertiary schools in non-English-speaking countries. *Journal of ELT and Applied Linguistics (JELTAL), 1*(1), 1-11.

Tashakkori, A. & Creswell, J. W. (2007). The new era of mixed methods. *Journal of Mixed Methods Research, 1*(3). doi:10.1177/2345678906293042

Tashakkori, A., & Teddlie, C. (2003). Major issues and controversies in the use of mixed methods in the social and behavioral sciences. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in the behavioral and social sciences* (pp.3-50). Thousand Oaks, CA: Sage Publications.

Tavil, Z. M. (2010). Integrating listening and speaking skills to facilitate English language learners' communicative competence. *Procedia - Social and Behavioral Sciences*, *9*(0), 765-770.

Trimble, L. (1985). *English for science and technology: a discourse approach*. New York: Cambridge University Press.

Vaghari, S., & Shuib, M. (2013). A target needs analysis of the written communication skills for students of writing for professional purposes course. *Jurnal Teknologi (Social Science)*, *65*(2), 115-123.

Wilson, M. (2003). Discovery listening—improving perceptual processing. *ELT Journal*, *57*(4), 335-343.

Xhaferi, B. (2015). Teaching and learning ESP vocabulary. *Revista de Lenguas para Fines Específicos, 16*, 229-255.

Zhou, A. A. (2009). What adult ESL learners say about improving grammar and vocabulary in their writing for academic purposes. *Language Awareness*, *18*(1), 31-46.

Zohoorian, Z. (2015). A Needs Analysis Approach: An Investigation of Needs in an EAP Context. *Theory & Practice in Language Studies*, *5*(1), 58-65.

APPENDICES

APPENDIX 1

QUESTIONNAIRE FOR THE ENGINEERING FACULTY STUDENTS ON THEIR OPINIONS ABOUT THE ESP COURSES

The purpose of this study is to reveal the views and opinions of the students of Toros University Engineering Faculty about English for Specific Purposes courses. Your answers to the questions in the survey will be reserved by us and will only be used for scientific purposes.

This questionnaire consists of two parts. The first part of the questions prepared to obtain personal information; The second part consists of questions prepared to determine your views and opinions about English for Specific Purposes courses.

In order to obtain accurate results, you should answer the questions sincerely and correctly. Please do not specify names on the surveys.

Thank you in advance for your interest and help.

Özgür Berivan Sandal

PART I

Gender	Female ( )	Male ( )
Have you studied at English preparatory school?	Yes ( )	No ( )
Age		
Graduated high school		
Major department		
Class/Year		

PART II

This section provides several questions to learn your views on English for Specific Purposes courses and learning English. Please consider these questions in accordance with your own thoughts and put an **(X)** in the box which you agree with.

1-Completely disagree, 2-Disagree, 3- No opinion, 4-Agree, 5- Completely agree,

	QUESTIONS	Completely disagree	Disagree	No opinion	Agree	Completely agree
1.	It is important for me to learn English in order to follow international developments in my profession.					
2.	It is important for me to learn English to share views and collaborate with colleagues in different countries.					

	QUESTIONS	Completely disagree	Disagree	No opinion	Agree	Completely agree
3.	It is important for me to learn English to practice my profession in the best way.					
4.	It is important for me to learn English in order to read and understand international studies in my field.					
5.	It is important for me to learn English in order to be able to participate in international trainings / conferences / seminars related to my profession and to achieve productive results.					
6.	It is important for me to learn English in order to have a good command of the terms and expressions in my field and to make meaningful communication about my field in order to advance my career abroad.					
7.	It is important for me to learn English in order to actualize my social relations..					
8.	Making friends with foreigners increases my motivation in language learning..					
9.	I would like to have access and understand foreign popular culture products.					
10.	I would like to be able to read and understand literary works in their original language.					
11.	I would like to continue my academic career after my undergraduate education.					
12.	After my undergraduate education, I would like to become an expert in my profession by gaining a master's degree.					
13.	After my undergraduate education, I would like to contribute to science by gaining master's and doctorate degrees and having an academic career.					
14.	I would like to become a more confident individual in my professional life.					

APPENDIX 2

REFLECTION PAPER FOR THE ENGINEERING FACULTY STUDENTS ON THEIR OPINIONS ABOUT THE ESP COURSES

The purpose of this study is to reveal the views and opinions of the students of Toros University Engineering Faculty about the English for Specific Purposes courses. Your answers on this reflection paper will be reserved by us and will only be used for scientific purposes.

In order to obtain accurate results you should answer the questions sincerely and correctly. Please do not write your names on the papers.

Thank you in advance for your interest and help.

Öğrt. Gör. Özgür Berivan Sandal

QUESTIONS

1. You have three hours of English for Specific Purposes classes per week. Do you think these hours are sufficient? If not, how long should they be? What are your thoughts on this?

2. Which of the following activities do you find more appropriate for your own learning style to learn a language?
    a. Watching authentic videos/movies
    b. Listening to music
    c. Reading stories/ articles/newspapers
    d. Participating in the classes at school
    e. Using social media applications which allow communication with foreigners
    f. Chatting in the target language with other language learners

3. List the below given skill according to importance. 1 – most important 7 – least important.
   - Speaking
   - Listening
   - Reading
   - Writing
   - Pronunciation
   - Vocabulary
   - Grammar

4. Which language skill do you think you need to improve? Why?

5. What are the challenges when you use English?

6. Define the ideal foreign language lesson and activity for you.

7. What kind of assignments would you benefit from after school hours? For example: doing vocabulary exercises / reading articles / doing online activities on the web.

8. Are you pleased with you ESP instructors? If not, how would you want them to be?

9. Would you like to add any other thoughts/suggestions/issues about your ESP courses?

APPENDIX 3

SEMI STRUCTURED FACE TO FACE INTERVIEW QUESTIONS OF THE STUDENTS

1. Do you like English?
2. Why are you learning English?
3. What is the role of English in your future profession?
4. What are the advantages of English in your future profession?
5. Do you study English outside of the ESP course?
6. Do your major study area professors advice you to follow foreign web sites about your engineering field?
7. Do the materials used in the ESP course meet your language needs?
8. What can be used to make the ESP course more effective?
9. For your engineering branch, on which language skill should the ESP course focus on?
10. What kind of activities help you to study more productively? For example, individual study, group work etc.
11. Are there any challenges for you in the ESP course?
12. Does Toros University provide you the necessary circumstances to learn English?

APPENDIX 4

SEMI STRUCTURED FACE TO FACE INTERVIEW QUESTIONS OF THE INSTRUCTORS

1. What should the ESP syllabus focus on?
2. Which ELT approach is the most suitable for the engineering faculty students?
3. What should the teaching of ESP focus on? Fluency or accuracy?
4. Do the materials used in the ESP classes meet the students needs?
5. What is the most challenging issue in the ESP class for you?
6. How do you make the assessment of the students?
7. Does the administration of the university take your opinions about the ESP program into consideration?
8. How are the instructors of the ESP program evaluated by the students and administrators?

CURRICULUM VITAE

Adı Soyadı: Özgür Berivan SANDAL

Doğum Tarihi: 20.05.1977

Derece	Alan	Üniversite	Yıl
Lisans	Hollanda Dili ve Edebiyatı	Ankara Üniversitesi	1999
Lisans	İngilizce Öğretmenliği	Mersin Üniversitesi	2016
Y. Lisans	İngiliz Dili Eğitimi	Çukurova Üniversitesi	2019

Yabancı Dil Puanı: 93.75

Yüksek Lisans Tez Başlığı: English for Specific Purposes (ESP) program evaluation of an engineering faculty at a private university in Turkey

Danışman: Prof. Dr. Yonca Özkan

Görevler:

Görev Unvanı	Görev Yeri	Yıl
Öğretim Görevlisi	Toros Üniversitesi	Eylül, 2016 –