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

CORPORA IN FOREIGN LANGUAGE TEACHER EDUCATION: INTRODUCING A CORPUS LITERACY COURSE TO ELT PRE-SERVICE TEACHERS

Tuğba ŞİMŞEK

A PhD DISSERTATION

ADANA / 2020

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

CORPORA IN FOREIGN LANGUAGE TEACHER EDUCATION: INTRODUCING A CORPUS LITERACY COURSE TO ELT PRE-SERVICE TEACHERS

Tuğba ŞİMŞEK

Supervisor: Assoc. Prof. Dr. Cem CAN
Member of Examining Committee: Prof. Dr. Zuhal OKAN
Member of Examining Committee: Asst. Prof. Dr. M. Pınar BABANOĞLU
Member of Examining Committee: Prof. Dr. Hatice SOFU
Member of Examining Committee: Prof. Dr. Türkay BULUT

A PhD DISSERTATION

ADANA / 2020

To the Directorship of the Institute of Social Sciences; Çukurova University

We certify that this dissertation is satisfactory for the award of the Degree of Doctor of Philosophy.

Supervisor: Assoc. Prof. Dr. Cem CAN

Member of Examining Committee: Prof. Dr. Zuhal OKAN

Member of Examining Committee: Asst. Prof. Dr. M. Pınar BABANOĞLU

Member of Examining Committee: Prof. Dr. Hatice SOFU

Member of Examining Committee: Prof. Dr. Türkay BULUT

I certify that this dissertation confirms to the formal standards of the Institute of Social Sciences. …/…/2020

Prof. Dr. Serap ÇABUK
Director of the Institute

NOTE: The uncited usage of the reports, charts, figures, photographs in this thesis, whether original or quoted from other sources, is subject to the law of Works of Art and Thought No: 5846.
NOT: Bu tezde kullanılan ve başka kaynaktan yapılan bildirişlerin, çizelge, şekil ve fotoğrafların kaynak gösterilmeden kullanımı, 5846 sayılı Fikir ve Sanat Eserleri 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. …. / …. / 2020

Tuğba Şimşek

ÖZET

YABANCI DİL ÖĞRETMENİ EĞİTİMİNDE DERLEM: İNGİLİZ DİLİ EĞİTİMİ ÖĞRETMEN ADAYLARINA DERLEM OKURYAZARLIĞI DERSİ

Tuğba ŞİMŞEK

Doktora Tezi, İngiliz Dili Eğitimi Ana Bilim Dalı
Danışman: Doç. Dr. Cem CAN
Temmuz 2020, 249 sayfa

Derlemlerin yabancı dil öğrenimi ve öğretiminde kullanımı giderek daha yaygın hale gelmektedir ve günümüzde çoğu öğretmen ve öğrenci çoğunlukla hiç farkında olmadan derlemlerden elde edilen verilerle hazırlanan kaynakları kullanmaktadırlar. Derlemleri kullanmanın özgün dile ulaşma, dili bağlam içerisinde öğrenme, sezgiler yerine gerçek hayatta kullanılan dili temel alma, teknolojiyi dil öğrenimi/öğretimine uyarlama, öğrenicilerin daha özerk ve istekli olmasını sağlama, araştırmaya yönlendirme ve ayrıca kaynak üretimi için zengin bir veri tabanına erişebilme gibi yararlar sağladığı bilimsel çalışmalarla kanıtlanmıştır. Bu sebeple derlem okuryazarlığının dil öğretmeni eğitimine dahil edilmesi, dil öğretmenlerinin bu okuryazarlık becerilerini edinebilmeleri için şiddetle önerilmektedir.

Her ne kadar derlem okuryazarlığının dil öğretmeni eğitimine eklenmesinin önemi sıklıkla vurgulansa da Türkiye'de bu dersleri programlarına dahil eden İngilizce Öğretmenliği bölüm sayısının oldukça az olduğu anlaşılmaktadır. Bunları göz önüne alarak bu çalışma, temel öğretmenlik eğitiminin, derlem okuryazarlık becerilerini kazanmak için öğretmen eğitiminin en uygun aşaması olduğu önerildiğinden, hizmet öncesi yabancı dil öğretmenleri için bir derlem okuryazarlık dersi geliştirmeyi ve uygulamayı amaçlamaktadır.

Bu nitel çalışma öncelikle öğretmen adaylarının derlem dilbilimine ilişkin altyapı bilgilerini araştırmayı, daha sonra İngilizce öğretmen adaylarına derlem okuryazarlık dersini etkin olarak uygulamayı amaçlamaktadır. Çalışma aynı zamanda dersin dil farkındalığı ve öğretmenin materyal geliştirme sürecindeki rolü üzerindeki olası etkilerini incelemektedir. Son olarak, dersin etkili ve sorunlu yönlerini belirlemek için katılımcılar

ve ders öğretmeni tarafından yapılan ders değerlendirmelerini ve dersin verimliliğini artırmak için yapılan önerileri de çözümlemektedir. Araştırma çerçevesinde, süreci ayrıntılı bir şekilde izlemek için ders öncesinde, dönem içerisinde ve dersin sonunda veri toplanmıştır. Bu sebeple ders öncesi sormaca, raporlandırmalar, düşünüm ödevleri, yarı yapılandırılmış görüşmeler, odak öbeği tartışmaları, öğretmen günlüğü ve sınıf gözlemleri gibi çok sayıda veri toplama aracı kullanılmıştır. Bilgisayar destekli içerik analizi ile toplanan veri nesnel bir şekilde çözümlenmiştir.

Sonuçlar, öğretmen adaylarının çoğunun temel derlem dilbilim kavramlarını bilmedikleri ve gelecekteki İngilizce öğretmenleri için bir derlem okuryazarlık dersine gereksinim duyulduğunu göstermiştir. Bulgular ayrıca dersin dil farkındalığını arttıran bir etkisi olduğunu; buna ek olarak, İngilizce öğretmen adaylarının materyal geliştirmede öğretmenin rolüne bakış açıları üzerinde olumlu bir etkisi olduğunu göstermiştir. Sonuç olarak, katılımcılar dersi dil öğretmeni ve dil öğrenicileri için özgün dile ulaşma, farkındalığı artırma, teknolojinin dahil edilmesi, yenilikçi ders içeriği ve akademik geleceği destekleme gibi çeşitli nedenlerle oldukça etkili buldular. Ancak, bazı teknik sorunların dersin etkinliğini olumsuz yönde etkilediğini belirttiler. Dersi veren öğretmeninin değerlendirmeleri de öğrencilerin değerlendirmelerine uyumlu bulunmuş, materyal geliştiricilerinin ve yayınevlerinin dil öğretiminde derlem kullanımını yaygınlaştırmak için hizmet öncesi dil öğretmenlerini de göz önüne almasının gerekliliği vurgulanmıştır.

Anahtar kelimeler: Derlem okuryazarlığı, dil öğretmeni eğitimi, derlem uygulamaları, veri güdümlü öğretim.

ABSTRACT

CORPORA IN FOREIGN LANGUAGE TEACHER EDUCATION: INTRODUCING A CORPUS LITERACY COURSE TO ELT PRE-SERVICE TEACHERS

Tuğba ŞİMŞEK

Ph.D. Thesis, Department of English Language Teaching
Supervisor: Assoc. Prof. Dr. Cem CAN
July 2020, 249 pages

The use of corpora in foreign language learning and teaching is becoming increasingly popular, and nowadays most of the teachers and learners are using materials informed by corpora even without recognizing. As the advantages of using corpora such as reaching authentic language and language in context, depending on real-life language instead of intuitions, integration of technology into language learning/teaching, making the learners more autonomous and motivated, encouraging research, and also having access to a rich database for material production, etc. have already been proved, the integration of corpus literacy into language teacher education is highly suggested to equip the language teachers with corpus literacy skills.

Although the significance of corpus literacy integration into foreign language teacher education is strongly emphasized, it is found out that in Turkey, the number of ELT departments including such courses is highly scarce. As a result, this study aims to introduce a corpus literacy course to pre-service language teachers as initial teacher education is claimed to be the most convenient phase of teacher education to acquire corpus literacy skills.

This qualitative study aims to investigate firstly the familiarity of the pre-service teachers with corpus linguistics, then introduce a corpus literacy course to pre-service English language teachers. The present study also examines the possible effects of the course on language awareness and the role of the teacher in the material development process. Finally, it investigates the evaluations of the course proposed by the participants and the course teacher to identify the effective and problematic aspects of the course as

well as the suggestions made to improve its effectiveness. Throughout the research process, multiple data collection tools such as pre-course survey, minute papers, reflection papers, semi-structured interviews, focus group discussions, teacher journal, and classroom observations were utilized to monitor the process elaborately, and computer content analysis was conducted to analyze the collected data objectively.

The results revealed that the majority of the pre-service teachers were not familiar with basic corpus linguistics terms. It was found that there was a need for a corpus literacy course for prospective English language teachers. The findings also indicated that the course had a language awareness-raising effect; also, it had a positive effect on the perspectives of the English teacher trainees on the teacher role in material development. All in all, the participants found the course efficacious for language teachers and language learners for several reasons such as accessing authentic language, raising awareness, technology integration, innovative course content, and being supported in their academic career. However, they stated that some technical issues hindered the effectiveness of the course. The course teacher's evaluations were also in parallel to the students' while she added that material developers and publishers should target pre-service language teachers to expand the use of corpora in foreign language teaching.

Keywords: Corpus literacy, language teacher education, corpus applications, data-driven teaching.

ACKNOWLEDGMENT

It is an honor for me to express my deepest appreciation to all those people who supported me during this long process. I believe that without that great support I received from them, doing PhD would be more challenging. First and foremost, I would like to thank my supervisor Assoc. Prof. Dr. Cem CAN for his continuous support, guidance, and wisdom at all times. He was not only my supervisor but also the person who provided me with numerous opportunities of getting engaged in academic world. I am deeply thankful to him for all those opportunities making me more experienced and courageous. I would also like to thank to Prof. Dr. Zuhal OKAN for being in my examining committee and providing me with constructive feedback continuously. She inspires in many ways, and I feel truly lucky to be a student of her. I should also thank to Asst. Prof. Dr. M. Pınar BABANOĞLU for being in my examining committee and being always supportive throughout this process.

I would like to thank to Prof. Hatice SOFU for not only being in my examining committee but also being a mentor in life. I feel blessed that I was rewarded with sharing an office with her. Since I stepped into the office, I have always felt her support and encouragement. She is not only an academic mentor but also a guide in life for me. I will always be grateful to her. I am also grateful to Prof. Türkay BULUT for being in my examining committee. Her invaluable suggestions and feedback strengthened my study immensely.

I owe many thanks to Prof. Dr. Marcus CALLIES for his support and feedback especially in the difficult times of data analysis.

In this journey, I had a great company that we walked a long way together since 2008. I am more than grateful to Dr. Nebahat BADEM for being always there when I needed her. Having someone more than a friend is a true blessing, and I am blessed.

I also would like to thank to my dearest friend Burcu TURHAN, who is a sister to me. Feeling her support at all times kept me strong in difficult times. Moreover, for their constant support and everlasting encouragement, my heartfelt appreciation goes to Dr. Handan NARİN, Dr. Tuçe ÖZTÜRK KARATAŞ, Dr. Özden BALLI, Dr. Esra ÖRSDEMİR PANPALLI, and Ali Ceyhun MÜFTÜOĞLU. I am deeply thankful to Fabian RACKELMANN who was one of the greatest supporters for me on the road. Without his optimism, the PhD life would be much more difficult for me.

Finally, I owe my family a debt of gratitude for all their myriad contributions.

Especially without the constant support and encouragement of my mother Emine ŞİMŞEK and my sister Sıdıka ŞİMŞEK AKDEMİRCİ, completing my dissertation would have been much more challenging. I dedicate my dissertation to my mother and sister.

This study has been supported by the Scientific and Technical Research Council of Turkey (TÜBİTAK).

Tuğba ŞİMŞEK

Adana / 2020

TABLE OF CONTENTS

Page

ÖZET **iv**

ABSTRACT ..... **vi**

ACKNOWLEDGMENT ..... **viii**

ABBREVIATIONS ..... **xvi**

LIST OF TABLES ..... **xvii**

LIST OF FIGURES ..... **xx**

APPENDICES ..... **xxi**

CHAPTER I

INTRODUCTION

1.1. Introduction 1

1.2. Background of the Study 1

1.3. The Statement of the Problem 4

1.4. The Purpose of the Study 5

1.5. The Significance of the Study 6

1.6. Operational Definitions 7

1.7. Chapter Summary 7

CHAPTER II

LITERATURE REVIEW

2.1. Introduction 8

2.2. Corpus Revolution 8

2.3. Corpus Linguistics in Language Education 10

2.4. Uses of Corpora in Language Education 10

2.4.1. Direct Uses of Corpora in Language Education 11

2.4.1.1. Teaching About *11*

2.4.1.2. Teaching to Exploit *13*

2.4.1.3. Exploiting to Teach *15*

2.4.2. Indirect Uses of Corpora in Language Education 17

2.4.2.1. Reference Publishing 17

2.4.2.2. Material Development and Syllabus Design 18
2.4.2.3. Language Testing 20
2.4.2.4. Teacher Development 21
2.5. Corpus Linguistics in Language Teacher Education 21
2.6. Advantages of Integrating Corpus Applications into Language Teacher Education Programs 24
2.6.1. Raising Awareness 24
2.6.2. Reaching Authentic Language 28
2.6.3. Material Development 28
2.7. Chapter Summary 32

CHAPTER III
METHODOLOGY

3.1. Introduction 33
3.2. Research Paradigm 33
3.3. Research Design 34
3.4. Participants and Sampling Method 35
3.5. Research Context 37
3.5.1. "Corpus Literacy in Foreign Language Teaching" Course 38
3.5.1.1. Week 1 40
3.5.1.2. Week 2 41
3.5.1.3. Week 3 42
3.5.1.4. Week 4 43
3.5.1.5. Week 5 44
3.5.1.6. Week 6 45
3.5.1.7. Week 7 45
3.5.1.8. Week 8 46
3.5.1.9. Week 9 47
3.5.1.10. Week 10 48
3.5.1.11. Week 11 48
3.5.1.12. Week 12 49
3.5.1.13. Week 13 50
3.5.1.14. Week 14 50

3.5.1.15. Week 15 and Week 16 50
3.5.2. Moodle 50
3.6. Data Collection Tools 51
3.6.1. Pre-Course Questionnaire 52
3.6.2. Minute Papers 52
3.6.3. Student Reflection Papers 53
3.6.4. Teacher Journal 53
3.6.5. Teacher Classroom Observation 54
3.6.6. Semi-Structured Interviews 54
3.6.7. Focus Group Discussions 55
3.7. Procedure 56
3.8. Data Analysis 58
3.9. Data Annotation and Analysis Tool 61
3.10. Trustworthiness 63
3.11. Ethical Considerations 65
3.12. Chapter Summary 65

CHAPTER IV

FINDINGS

4.1. Introduction 67
4.2. Results for the Research Question 1 67
4.3. Results for the Research Question 2 71
4.3.1. Results of the Pre-course Survey 71
4.3.2. Results of Semi-Structure Interviews 77
4.3.3. Results of Focus Group Discussions 94
4.4. Results for the Research Question 3 103
4.4.1. Results of the Reflection Papers 104
4.4.2. Results of the Semi-structured Interviews 107
4.4.3. Results of the Focus Group Discussions 111
4.5. Results for the Research Question 4 113
4.5.1. The Efficacious Aspects of the Course 113
4.5.1.1. Supporting Language Learning 115
4.5.1.1.1. Results of the Minute Papers 115

4.5.1.1.2. Results of the Reflection Papers 117
4.5.1.1.3. Results of the Semi-structured Interviews 119
4.5.1.1.4. Results of the Focus Group Discussions..... 121
4.5.1.2. Supporting Language Teaching 122
4.5.1.2.1. Results of the Minute Papers 122
4.5.1.2.2. Results of Reflection Papers..... 124
4.5.1.2.3. Results of Semi-structured Interviews..... 126
4.5.1.2.4. Results of Focus Group Discussions 127
4.5.1.3. Raising Awareness..... 129
4.5.1.3.1. Results of Minute Papers 130
4.5.1.3.2. Results of Reflection Papers 132
4.5.1.3.3. Results of Semi-structured Interviews 133
4.5.1.3.4. Results of Focus Group Discussions..... 134
4.5.1.4. Providing Effective Course Qualities 136
4.5.1.4.1. Results of Minute Papers 136
4.5.1.4.2. Results of Reflection Papers 139
4.5.1.4.3. Results of Semi-structured Interviews 140
4.5.1.4.4. Results of Focus Group Discussions..... 142
4.5.1.5. Supporting Academic Career..... 143
4.5.1.5.1. Results of Reflection Papers 144
4.5.1.5.2. Results of Semi-structured Interviews 146
4.5.2. The Difficulties that Pre-service Teachers Faced during the Course..... 147
4.5.2.1. Results of Minute Papers..... 148
4.5.2.2. Results of Reflection Papers..... 150
4.5.2.3. Results of Semi-structured Interviews..... 151
4.5.2.4. Results of Focus Group Discussions 152
4.5.3. The Suggestions to Increase the Effectiveness of the Course..... 153
4.5.3.1. Results of Minute Papers 154
4.5.3.2. Results of Reflection Papers 156
4.5.3.3. Results of Semi-structured Interviews 157
4.5.3.4. Results of Focus Group Discussions.....160
4.6. Results for the Research Question 5.....162
4.6.1. The Efficacious Aspects of the Course 162
4.6.1.1. Innovative Course Content..... 162

4.6.1.2. Effective Course Format 163
4.6.1.4. Technology Integration 164
4.6.1.5. Raising Awareness 165
4.6.2. The Difficulties Faced by the Teacher during the Course 166
4.6.2.1. Course Content 166
4.6.2.2. Course Format 166
4.6.2.3. Technical Issues and Classroom Setting 167
4.6.2.4. Course Materials 167
4.6.3. The Suggestions to Increase the Effectiveness of the Course 168
4.6.3.1. Course Content 168
4.6.3.2. Course Format 169
4.6.3.3. Technical Issues and Classroom Setting 169
4.6.3.4. Technology and Corpus Integration into the Other Courses 170
4.6.3.5. Target-specific Materials 170
4.7. Chapter Summary 171

CHAPTER V
DISCUSSION

5.1. Introduction 172
5.2. Discussion for the Research Question 1 172
5.3. Discussion for the Research Question 2 173
5.4. Discussion for the Research Question 3 177
5.4. Discussion for the Research Question 4 180
5.5. Discussion for the Research Question 5 186
5.6. Chapter Summary 190

CHAPTER VI
CONCLUSION

6.1. Introduction 191
6.2. General Conclusion 191
6.3. Implications 199
6.4. Recommendations for further research 200

6.5. Limitations.....201
6.6. Chapter Summary.....201

REFERENCES 202
APPENDICES.....216
CURRICULUM VITAE 244

ABBREVIATIONS

ATCOSIM: Air Traffic Control Simulation Speech Corpus

MA: Master's Degree

BA: Bachelor's Degree

BASE: British Academic Spoken Corpus

BAWE: British Academic Written English

BNC: British National Corpus

BYU: Brigham Young University Corpus

CHILDES: Child Language Data Exchange System

CIC: Cambridge International Corpus

CK: Content Knowledge

CL: Corpus Linguistics

COCA: Corpus of Contemporary American English

EAP: English for Academic Purposes

EFL: English as a Foreign Language

ENPC: English Norwegian Parallel Corpus

ESL: English as a Second Language

ESP: English for Specific Purposes

ICLE: International Corpus of Learner English

ICT: Information, and Communication Technologies

MICASE: Michigan Corpus of Academic Spoken English

MoNE: Ministry of National Education of Turkey

OANC: The Open American National Corpus

PCK: Pedagogical Content Knowledge

PK: Pedagogical Knowledge

SACODEYL: System Aided Compilation and Open Distribution of European Youth Language

TCSE: TED Corpus Search Engine

TESOL: Teaching English to Speakers of Other Languages

TPACK: Technological Pedagogical Content Knowledge

TK: Technological Knowledge

LIST OF TABLES

Table 1. The Demographic Data of the Participants 37
T**able 2.** The Syllabus of the Corpus Literacy in Foreign Language Teaching Course . 39
Table 3. The Data Collection Tools and Data Analysis Plan per Research Question ... 59
Table 4. The Familiarity of Students with Corpus Linguistics Terms 68
Table 5. "Corpus" Definitions Written by the Students 69
Table 6. "Concordance" Definitions Written by the Students 70
Table 7. "Concordancer" Definitions Written by the Students 70
Table 8. Overall Results of the Pre-course Survey regarding Teacher Role in Material Evaluation, Adaptation, and Development 72
Table 9. Results of the Pre-course Survey for "Teachers' Pedagogical Competence" Category 74
Table 10. Results of the Pre-course Survey for "Need Analysis" Category 75
Table 11. Results of the Pre-course Survey for "Material Development" Category 76
Table 12. Overall Results of the Semi-structured Interviews regarding Teacher Role in Material Evaluation, Adaptation, and Development 79
Table 13. Results of the Semi-structured Interviews for "Teachers' Pedagogical Competence" Category 80
Table 14. Results of the Semi-structured Interviews for "Need Analysis" Category 83
Table 15. Results of the Semi-structured Interviews for "Material Development" Category 85
Table 16. Results of the Semi-structured Interviews for "Material Content Selection" Sub-category 86
Table 17. Results of the Semi-structured Interviews for "Material Evaluation" Sub-category 89
Table 18. Results of the Semi-structured Interviews for "Material Adaptation" Sub-category 91
Table 19. Results of the Semi-structured Interviews for "Material Production" Sub-category 92
Table 20. Overall Results of the Focus Group Discussions for Teacher Role in Material Evaluation, Adaptation, and Development 96
Table 21. Results of the Focus Group Discussions for "Teachers' Pedagogical Competence" Category 97

Table 22. Results of the Focus Group Discussions for "Need Analysis" Category 100
Table 23. Results of the Focus Group Discussions for "Material Development" Category..... 101
Table 24. Overall Results of the Reflections Papers regarding Language Awareness Raising Effect of the Corpus Literacy Course..... 105
Table 25. Overall Results of the Semi-structured Interviews for Language Awareness Raising Effect of the Corpus Literacy Course..... 108
Table 26. Results of the Minute Papers for "Supporting Language Learning" Category..... 116
Table 27. Results of the Reflection Papers for "Supporting Language Learning" Category..... 118
Table 28. Results of the Semi-structured Interviews for "Supporting Language Learning" Category 120
Table 29. Results of the Focus Group Discussions for "Supporting Language Learning" Category 121
Table 30. Results of the Minute Papers for "Supporting Language Teaching" Category..... 123
Table 31. Results of the Reflection Papers for "Supporting Language Teaching" Category..... 125
Table 32. Results of the Semi-structured Interviews for "Supporting Language Teaching" Category..... 126
Table 33. Results of the Focus Group Discussions for "Supporting Language Teaching" Category..... 128
Table 34. Results of the Minute Papers for "Raising Awareness" Category..... 130
Table 35. Results of the Reflection Papers for "Raising Awareness" Category 132
Table 36. Results of the Semi-structured Interviews for "Raising Awareness" Category..... 133
Table 37. Results of the Focus Group Discussions for "Raising Awareness" Category..... 135
Table 38. Results of the Minute Papers for "Providing Effective Course Qualities" Category..... 137
Table 39. Results of the Reflection Papers for "Providing Effective Course Qualities" Category 139
Table 40. Results of the Semi-structured Interviews for "Providing Effective

Course Qualities" Category 141
Table 41. Results of the Focus Group Discussions for "Providing Effective Course Qualities" Category 142
Table 42. Results of the Reflection Papers for "Supporting Academic Career" Category 144
Table 43. Results of the Semi-structured Interviews for "Supporting Academic Career" Category 146
Table 44. Overall Results of the Minute Papers for the Difficulties Faced by the Participants 149
Table 45. Overall Results of the Reflection Papers for the Difficulties Faced by the Participants 150
Table 46. Overall Results of the Semi-structured Interviews for the Difficulties Faced by the Participants 151
Table 47. Overall Results of the Semi-structured Interviews for the Difficulties Faced by the Participants 153
Table 48. Overall Results of the Minute Papers for the Participants' Suggestions to Improve the Effectiveness of the Course 155
Table 49. Overall Results of the Reflection Papers for the Participants' Suggestions to Improve the Effectiveness of the Course 156
Table 50. Overall Results of the Semi-structured Interviews for the Participants' Suggestions to Improve the Effectiveness of the Course 158
Table 51. Overall Results of the Focus Group Discussions for the Participants' Suggestions to Improve the Effectiveness of the Course 160

LIST OF FIGURES

Figure 1. The online teaching platform, Moodle, used in the course 51
Figure 2. The interface of UAM corpus tool 3.0 62
Figure 3. An exemplary annotation scheme designed by the researcher..... 62
Figure 4. The overall coding scheme of pre-course questionnaire results for teacher role in material evaluation, adaptation, and development..... 72
Figure 5. Overall coding scheme of semi-structured interview results for teacher role in material evaluation, adaptation, and development 78
Figure 6. Overall coding scheme of focus group discussion results for teacher role in material evaluation, adaptation, and development 94
Figure 7. Overall coding scheme of the reflection papers' results for raising language awareness 105
Figure 8. Overall coding scheme of the semi-structured interviews' results for raising language awareness 108
Figure 9. Overall coding scheme of the focus group discussions' results for raising language awareness 111
Figure 10. Overall coding scheme of the efficacious aspects of the course 114
Figure 11. Overall coding scheme of the efficacious aspects of the course 148
Figure 12. Overall coding scheme of the participants' suggestions to improve the effectiveness of the course 154

APPENDICES

APPENDIX A. Informed Consent Form 216
APPENDIX B. Pre-Course Survey 217
APPENDIX C. Antconc Practice 218
APPENDIX D. AntConc Practice Completed by the Participants 219
APPENDIX E. Concordancer Tool Practice Assignment 220
APPENDIX F. Concordancer Tool Practice Completed by the Participants 221
APPENDIX G. Practices on Register Variation 222
APPENDIX H Practices on Register Variation Completed by the Participants 224
APPENDİX I. Reflection Paper Template 225
APPENDIX J. Reflection Paper Written by a Participant 226
APPENDIX K. Specific Error Tagging Code 228
APPENDIX L. An Error Tagged Essay 229
APPENDIX M. Computer-aided Error Analysis Report 230
APPENDIX N. Computer-aided Error Analysis Report Completed by a Participant 232
APPENDIX O. Corpus-informed Material Evaluation and Adaptation Report 235
APPENDIX P. Corpus-informed Exercise Example 239
APPENDIX Q. Corpus-informed Material Development Exercise Template 240
APPENDIX R. Textbook Evaluation Practice 241
APPENDIX S. Semi-structured Interview and Focus Group Discussion Questions 242
APPENDIX T. Minute Paper Samples 243

CHAPTER I

INTRODUCTION

1.1. Introduction

In this chapter, the background of the study will be presented first. Then it will be followed by the statement of the problem, the purpose of the study, and the significance of the study. The research questions will also be presented in this section.

1.2. Background of the Study

Technology has revolutionized nearly all the areas of our lives, and education is one of these areas that has seen a great number of changes in the teaching-learning environment. With technological improvements, the concepts of the classrooms, teaching, and learning have changed dramatically. Nowadays nearly every classroom has computers, tablet PCs, projectors, WiFi, speakers, etc. which enrich the teaching-learning environment (Rassool, 2000). It has created considerably important opportunities that now teachers are having online, distant classes; preparing blogs, websites where learners and teachers can communicate simultaneously.

The revolution in technology has introduced an important tool to be used in language teaching and learning, namely corpus. A corpus is a collection of texts which are compiled to have a representation of the language. Using corpora, linguists can analyze the languages semantically, syntactically, phonologically, morphologically, etc.; they are now widely used to conduct discourse analysis studies, language assessment, error analysis, and many more. They are also used for in-class activities; the majority of the dictionaries are now based on corpora, teaching materials are informed by corpora, and learners are introduced to corpora to be active learners. Regarding all of these, corpora are now an indispensable part of our language teaching and learning process as even the internet itself is considered as a large corpus (McCarthy, 2008). As a result, introducing corpora in teacher education should also be an integral part of initial teacher education as it is the duty of teacher education programs to prepare pre-service teachers for the current requirements of the teaching career. Another reason for integrating corpora use in initial

teacher education is that even the importance and benefits of using corpora in language teaching are accepted by the teachers, there is not much evidence of active use of it in the classroom (Tribble, 2000).

Not only teacher and learner roles have changed along with these innovative dynamics, but also the materials used in language education have undergone some profound developments. For example, starting with Collins Cobuild Dictionary (Collins Cobuild, 1988), dictionaries have evolved to include the corpus data which depict the authentic uses of the words, collocations idioms, and phrases. After that 'corpus revolution' (Rundell & Stock, 1992) which has been fed on technological revolution, not only dictionaries but also course books and reference grammar books have started to be published as corpus-based or corpus-informed materials. Developing corpus-based language education materials has received such a great interest and support that if a publishing company presents a fabulous dictionary but it is not corpus-based, it would be laughed out of court as corpus-based dictionaries have firmly founded a place for themselves (McCarthy, 2008). However, there is a point that is immensely important that teachers have been seen as the consumers of these materials throughout that process, not the producers (Pim, 2013).

In 21st century, professionals are not supposed to be passive consumers but content developers in their professions. In order to be an active producer, a teacher should be knowledgeable enough about what s/he is teaching and have an awareness about the content and the innovative materials to be used. This should be handled in teacher education programs in an integrative way for there is a shift in the idea of teachers that they are seen as solely consumers of commercial products yet producers of the materials that their students' need (McCarthy, 2008). It is now strongly defended in the literature that the teacher should not anymore be merely the consumer but researcher, reflective practitioner, someone who is more critical about the content s/he is teaching, and someone who is more actively involved in what is happening in the classroom setting (Schön, 1987).

As it increasingly stated that teachers should not be the consumers but content developers who have critical awareness, teachers should be provided with an education that helps and encourages them to be more productive. Taking these into consideration, a crucial integration has recently been made to teacher education to raise teachers' awareness making them linguistically more mindful: corpus literacy, which is defined as "the ability to use the technology of corpus linguistics (CL) to investigate language and

enhance the language development of students" by Heather and Helt (2012, p. 417). It is suggested that with the integration of corpus literacy in teacher education, teachers' language and pedagogic awareness will be elevated, and they will be able to evaluate the materials critically. Also, by supporting them with hands-on activities, they will be actively involved in producing materials based on the real-life language of natives, not artificial sentences (Farr, 2010). Consequently, they will not be consuming the materials, and along with being more productive, they will also improve themselves professionally (McCarthy, 2008).

It is now an accepted fact that professional development is not a certain limited time, but a lifelong process (Kukulska-Hulme, 2012). Regarding the indispensable characteristics of professional development, corpus literacy integration is suggested as one of the key components in it (Breyer, 2009).

It is also highlighted that pre-service teacher education should have a component of corpus literacy in their programs as before entering the profession officially, the student teachers should acquire the competence of using corpora in teaching as a requirement of the 21st century which has experienced a technological revolution and corpus revolution. However, the reality does not reflect the ideal picture suggested in the literature. Although the importance of corpus linguistics in teacher education is acknowledged (Callies, 2019), its involvement in teacher education programs is limited around the world. The number of the courses and the trainings that have been devoted to the integration of corpus literacy in language teacher education is still limited (Callies, 2019, Frankenberg-Garcia, 2012; Heather and Helt, 2012; Lenko-Szymanska, 2014; Mukherjee, 2004; O'Keeffe & Farr, 2003). The implemented courses and the trainings have introduced language teachers how to use corpora in their classrooms, and most of them aimed to raise their language awareness and pedagogical awareness and to make them competent in preparing corpus-based materials at the graduate level. For example, Heather and Helt (2012) conducted an English grammar course for TESOL students at undergraduate and graduate level, pre-service language teachers, and introduced corpora and their uses during that one-semester long course. The study results revealed that only one of the 52 participants could make an accurate definition of the term and only 4 of them had previous experience with corpora. At the end of the course, the positive outcomes highlighted by the participants varied; however, they found the course effective. For instance, they felt themselves empowered to evaluate the teaching materials better and create their own teaching materials. Another course introducing corpus literacy to pre-service teachers was offered

by Lenko-Szymanska (2014) in Poland to graduate students. She offered a one-semester course to 13 students introducing the concepts in corpus linguistics, analysis of corpus data, various concordancers and their uses, and the use of corpora in material development. The study results showed that the participants had a poor grasp of the key concepts in corpus linguistics in the beginning of the semester. Nevertheless, at the end of the semester, the whole group found the course efficacious and they stated that the course met their expectations that they had sufficient understanding of corpus linguistics concepts and the use of corpora. In addition, they liked the format of the course as it was easy to follow and informative. Although they found the course effective, some students faced some difficulties during the course such as not being able to command the corpus analysis tools as they needed more intensive and long interaction with those tools with guidance. The results implied that the students wanted to be introduced with corpora at the undergraduate level and not only as a separate course but also implementing it in the other courses of theirs so that they could do more practice (Lenko-Szymanska, 2014). For example, in writing classes, different genre's features could be introduced to the students so that they could learn about genre-specific features and apply what they learn in their own writing.

1.3. The Statement of the Problem

Taking the above-mentioned pedagogical issues into consideration, excluding a course that introduces corpora in teacher education would not be a logical omission (Farr, 2010). For that reason, prior to this research, the English Language Teacher Education programs in Turkey were examined, and it was found to the best knowledge that there was not an undergraduate level course that introduces corpora and pertinent implementation in language teaching and learning for future language teachers. As a result, a corpus literacy course as a part of technological literacy in language teacher education is not an option but a necessity to integrate an important component of the 21st-century skills. It raises pre-service teachers' language awareness; it makes them content developers in the classroom who can prepare corpus-based and corpus-informed materials and lastly provides them with a teacher education program enabling them to be autonomous and open to lifelong learning.

There is a lack of courses that integrate corpora in language teacher education to raise language awareness of pre-service teachers and to provide them with an opportunity to

prepare corpus-based and corpus-informed materials for language teaching. In order to meet this need, for the present study, a one-semester-long elective corpus literacy course for the undergraduate third year students studying at the English Language Teaching Department of Cukurova University was designed and offered. The study aims to explore whether the corpus literacy course raises student teachers' language awareness; whether it affects student teachers' perspectives on teachers' role in material evaluation, adaptation, and development; what student teachers' and teacher's / researcher's overall evaluations of the course are.

1.4. The Purpose of the Study

The aims of this study are:

- to investigate the pre-knowledge of the student-teachers in corpus linguistics and its fundamental terms and concepts to check whether they know about corpora and their uses,
- to design and conduct a corpus literacy course which introduces corpus and its applications into language teacher education program,
- to raise language awareness of pre-service teachers at undergraduate level of English Language Teaching (ELT) Department, Cukurova University.
- to examine whether the course has any impact on the student teachers' views on the teacher's role in material evaluation, adaptation, and development. It is aimed to teach them about developing materials using corpora which suggest an invaluably rich collection of texts to have insights. They also give the teachers the opportunity of being autonomous and productive on their own along with the chance of being more critical about the readily given materials given to them.
- to gather the overall evaluations of the student teachers and the teacher/researcher about the corpus literacy course to discover the efficacious aspects of the course, the difficulties faced, and the suggestions made to improve the course for future semesters.

By doing so, the purpose of the study is to help pre-service teachers at the ELT department be creatively autonomous in the teaching profession, not just consumers of what they are given. To equip them with this mindset qualities in general, the researcher

aims to raise awareness about two sub-components of being an effective teacher as proposed by Shulman (1987): content knowledge and pedagogical knowledge.

Parallel with these purposes, the study aims to seek answers to the following questions:

1. Are pre-service English teachers familiar with corpus linguistics? If yes, to what extent?

2. Does a corpus literacy course in language teacher education affect ELT pre-service teachers' perspectives on teacher role in terms of material evaluation, adaptation, and development? If so, how?

3. Does a corpus literacy course in language teacher education raise ELT pre-service teachers' language awareness? If yes, how?

4. What is the overall evaluation of ELT pre-service teachers about the corpus literacy course in their language teacher education program?
   4.a. What are the efficacious aspects of the course?
   4.b. What are the difficulties that pre-service teachers faced during the course?
   4.c. What kind of improvements are suggested to increase the effectiveness of the course?

5. What is the overall evaluation of the teacher/the researcher about the corpus literacy course in language teacher education program?
   5.a. What are the efficacious aspects of the course?
   5.b. What are the difficulties the teacher/the researcher faced about the course?
   5.c. What kind of improvements does she suggest to increase the effectiveness of the course?

1.5. The Significance of the Study

Corpora integration in language education is now getting popular around the world and current studies put forward that courses introducing corpora in language teacher

education have provided pre-service language teachers with the opportunities to raise their language awareness by analyzing corpus data and have deeper insight; also to raise pedagogical awareness by examining classroom corpora and have a better understanding of teaching practice (Callies, 2019; Chambers, Farr, & O'Riordan, 2011; Farr, 2008). Farr (2008) introduced a two-semester long corpus linguistics course to 25 graduate students in Ireland and taught them about corpora and their uses. The results of the study showed that all the students found the course effective as they could have access to real life language, language in context, a new understanding about the "correctness" of the language, etc. Such courses also provided students with the opportunity of developing authentic materials using corpora data and evaluating materials critically (Leńko-Szymańska, 2014; Tyne, 2012). Previous studies also revealed that the students wanted to learn about corpora during their undergraduate studies as they found that learning about corpora in their undergraduate studies limited the time to interact with corpora (Farr, 2008; Leńko-Szymańska, 2012); as a result, this study introduces a corpus literacy course in English language teacher education program for a semester for third year students. To the best knowledge of the researcher, there was not an undergraduate level course at any of the 57 ELT departments in Turkey directly aiming at introducing corpora to pre-service language teachers to raise their awareness of language knowledge and to teach them how to develop corpus-driven materials and evaluate them critically before this course was proposed in Turkey.

1.6. Operational Definitions

Teaching about: Teaching students about corpora/corpus linguistics **(**(Fligelstone, p. 99).
Teaching to exploit: Teaching students how to exploit corpus data (Fligelstone, p. 100).
Exploiting to teach: Exploiting corpus resources to teach (Fligelstone, p. 101).

1.7. Chapter Summary

In this chapter, the problem has been presented, and the purpose of the study and the significance of the study have been demonstrated. The research questions have also been proposed in the purpose of the study part. In the following chapter, related literature to the study will be presented.

CHAPTER II

LITERATURE REVIEW

2.1. Introduction

In this chapter, the literature review for the study will be introduced in detail. The chapter starts with the corpus revolution and the relationship between corpus linguistics and language education. Then the uses of corpora, both direct and indirect uses, are explained reviewing the previous research conducted. Finally, the corpus applications' integration into foreign language teacher education is discussed in detail to understand the importance and effect of corpus literacy in teacher education.

2.2. Corpus Revolution

Since the Brown Corpus, the first computerized corpus, was compiled in the 1960s, the number of corpus linguistics studies and corpus tools has increased dramatically (Tognini-Bonelli, 2010). With the technological developments and the access to the internet, the compilation of corpora became easier as it was not the linguistic climate but the technological improvements which paved the way for the development of corpora (Tognini-Bonelli, 2010). The use of computers provided the researchers with the opportunity of collecting larger principled data systematically and analyze the data in a very short time giving reliable results. All these improvements led the researchers to investigate the language using corpora saving their time and effort. With the increasing availability of corpora due to technological developments, corpora were used for research purposes firstly, and shortly after its indirect applications such as dictionaries (Collins Cobuild, 1988), reference grammar books (Biber, Johansson, Leech, Conrad, & Finegan, 1999), corpus-informed language teaching materials (McCarthy, McCarten, & Sandiford, 2005) into language learning and teaching environments have also had great impact onto language teaching/learning context.

Following Johns' (1986) pioneering work, the direct use of corpora has also been highlighted more frequently, and more research have been devoted to corpus linguistics and language teaching (Chambers, 2019).Paralelly, corpora have become one of the resources that especially teachers and learners at higher education institutes use in language teaching and learning. These developments resulted in the question of whether

a corpus could make a revolution in language teaching and learning. In 1992, Rundell and Stock showed in their research paper how large computerized corpora changed the lexicography studies; in addition, they stated that "corpus data must now be regarded as an indispensable tool in any serious dictionary venture." (p. 2). Regarding the popularizing use of corpora, Leech (1997) also pointed out the increasing significance of corpora in language teaching and its gradual popularization, and he stated that research and practice convergence was being successfully established. More than 20 years later, now the connections between corpora and teaching are highly strong and the use of corpora in language teaching is embraced by not only language teachers but also by the language learners themselves. In addition to the research on the use of corpora in lexicography, their use in grammar teaching was also under investigation. Conrad (2000) asked the question of whether corpora could revolutionize grammar teaching and emphasized three significant revolutions in grammar teaching using corpora: register specific grammar teaching, teaching grammar and vocabulary together, and showing alternative uses of grammar constructions in context.

The use of learner corpora also provided numerous advantages for researchers, material developers, language teachers, and language learners. With the use of learner corpora, the interlanguage of English language learners could be investigated thoroughly using Contrastive Interlanguage Analysis (CIA) (Granger, 2015). Through CIA, it became possible first in 1996 to uncover a variety of characteristics distinctive of learner language and evaluate its generalizability across learner populations. As one of the well-known learner corpora, International Corpus of Learner English (ICLE) provides now in its 3rd version, ICLEv3, 5.5 million words data from 26 L1 backgrounds which makes the comparison of the language uses of learners from different backgrounds with a rich metadata provided. The use of corpora is expanding in many directions in language teaching, and learner corpora are already an important component of the field. In addition, it can be suggested that their use facilitated the corpus revolution in language teaching as well.

The convergence stated by Leech (1997) was developed gradually as he also claimed, and corpora became a popular facilitator for language teaching and learning. In the following section, the role of corpus linguistics in language education will be introduced in detail.

2.3. Corpus Linguistics in Language Education

Corpus revolution has affected language classrooms deeply as the usual practice of corpus integration into language teaching contexts has been accelerated recently. As Chambers (2019) states nowadays teachers and students are using corpus-informed materials such as dictionaries, textbooks, and grammar books without even recognizing that those materials are corpus-informed, which is an evidence that corpora are already a part of language teaching and learning context.

In addition to these uses of the natural integration of corpora into language teaching, a great number of research was devoted to corpora use in language education. As early as 1997, Cobb used corpora to teach university students academic English in Oman, he conducted an experimental study and thought vocabulary with two different techniques: first, use of corpora and concordance lines and the second was teaching via definitions of the words. The results showed that the students retained 79.3% of the vocabulary items they learned through concordance lines while they retained only 63.9% of the words they learned via definitions. This result shows that authentic sentences from real-life language use contribute to vocabulary learning more than traditional language teaching methods. After Cobb's study, in more than 21 years abundant number of studies have been conducted and the effect of corpus use in language classrooms has increased more and more.

Mukherjee (2006) states that the corpus revolution's impact on English language praxis is two-fold: a) the use of corpora *for* English Language Teaching and b) the use of corpora *in* the ELT classrooms. As it is claimed by Mukherjee, corpora serve as teaching tools in two ways: directly and indirectly. In the following section, these uses of corpora will be introduced in detail.

2.4. Uses of Corpora in Language Education

Especially after the 1990s, the use of corpora in and out of language classrooms has increased dramatically. There are some reasons for this improvement: one of these reasons is that there are considerably more studies specifically devoted to corpora and language learning/teaching; another reason is many publishing houses are now informed about the use of corpora and producing corpus-informed materials due to the research results proving the positive impact of corpora in language teaching and learning. In addition, there are specifically designed corpus linguistics courses and/or training for pre-

service and in-service language teachers. Furthermore, the number of corpora both commercially and publicly available (especially publicly available ones) are increasing day by day, and this creates variety for language teachers and learners. These developments are gradually making corpora an indispensable part of language teaching/learning context as indirect and direct uses them are increasing day by day. In the following part, these uses will be elaborately pointed out.

2.4.1. Direct Uses of Corpora in Language Education

Corpus has been a great language learning and teaching facilitator in recent years for all related stakeholders of ELT classrooms as various teaching applications of corpora have been put into practice. In 1993, as one of the earliest researchers highlighting the importance of corpus linguistics in language teaching, Fligelstone discussed that corpus linguistics could be a crucial scaffolder for language teachers and learners. He propounded three different direct uses of corpora in language teaching context: teaching about (i.e. teaching about corpora/corpus linguistics), teaching to exploit (i.e. teaching students to exploit corpus data), and exploiting to teach (i.e. exploiting corpus resources to teach).

2.4.1.1. *Teaching About*

Sampson (1992, cited in Fligelstone, 1993) states that "corpus linguists should spend less time talking to corpus linguists, and more time talking to other researchers whose work could be advanced by using corpora." Starting from that point on teaching corpus linguistics has become one of the main foci of the field. From that point on, many scholars have had publications on the integration of corpus linguistics in language teaching and several researchers have taught about corpora in different contexts and countries. Mukherjee (2004) and Callies (2019) introduced workshops for German language teachers. Mukherjee (2004) conducted a study with 248 English language teachers studying at secondary schools in Germany. He found out that the language teaching was quite unaffected by corpus linguistics at that time as nearly 80% of the teachers had not heard about corpora before the workshops, and he conducted 8-week long workshop with those teachers on what corpora are and how they can be used in language teaching and learning. At the end of the study, the results showed that 99% of the participants agreed that corpora could be useful in language teaching one way or

another. 15 years after Mukherjee's (2004) work, Callies (2019) reevaluated the situation in Germany using an online survey and collecting data from 26 teachers working at secondary and primary schools. The results showed that although the percentage of the people who heard of corpora in their studies increased (34.6%), the integration of corpus literacy into initial teacher education was quite limited as 80.8% of the teacher did not have any classes, workshops, or seminars during their training. These results indicate that there is still a need for more integration of corpora into teacher education.

O´Keffee and Farr (2003) wrote an elaborate paper on the very same topic showing how to use corpora to raise teachers' language, pedagogical, and sociocultural awareness. Similarly, Chambers, Farr, and Riodan (2011) also added an important study to the literature introducing language teachers different corpus resources to be used in language teaching and providing examples of how to integrate them into teaching.

In addition to the training for in-service language teachers, considerable attention has also been paid to pre-service language teachers. For example, Leńko-Szymańska (2017) designed a one-semester long pre-service teacher training course on corpora and their uses in language learning and teaching. She evaluated 53 projects developed by the trainees and concluded that a one-semester course is not sufficient to enable the students develop their corpus skills to the desired level. It was inferred from the analysis of the projects that they could master only basic technical skill and corpus skills. The researcher propounded at that point that teaching about corpora in only one course is not enough to validate its usefulness and enable the students to become proficient in corpus use, the use of corpora in other courses should be also encouraged. In the same line of reasoning, Fligelstone (1993) stated that "actions speak louder than the words" (p. 99) claiming that teachers should not only teach students about corpora, but they should actually use the corpora in the classroom to be able to demonstrate the students the use of corpora in real life.

The previous examples reveal that the number of works on teaching about corpus linguistics and its integration into language teaching has increased in recent years and the topics varied as it is now used in initial teacher education and in-service teacher education. This has contributed to the dissemination of corpus linguistics in language teaching professionals. In his paper, Fligelstone (1993) warned that the researchers should not let corpus linguistics to be overlooked because of its newness instead expand its use questioning how it can be extended to teaching professionals. Parallel to his claims, teaching about corpora has become one of the dominant components of using corpus

linguistics in foreign language teaching as exemplified above.

2.4.1.2. *Teaching to Exploit*

Fligelstone (1993) defined "teaching to exploit" as "teaching students how to exploit corpus data" (p. 100). Teaching about corpus might be the first step for this further development as firstly the teachers should be trained about how to use corpora, only after that step can the EFL students master using corpora in their language learning. Fligelstone (1993) also emphasizes the importance of choosing suitable materials for students also to make them motivated in language learning and become autonomous as well. Another point he highlights is that the introduction of easily available tools with user-friendly interfaces. O´Keeffe and Farr (2003) state that paper-based and computer-based corpus activities are the two ways to make the learners exploit corpora. Both of them have their own advantages and disadvantages. While paper-based activities might be effective to decrease the effective filters of the students who are not good at technology use, hands-on activities make students more autonomous to discover further and also make them more self-confident (Koo, 2006).

Although such activities help students be more autonomous and self-confident, it is still not easy to make students practice hands-on activities as the ideal point regarding the existence of user-friendly corpus tools are not always readily available. In her study Farr (2008) investigates the perceptions of the graduate students, student teachers, in an ELT department in Ireland on the use of corpora in language learning and teaching after they learned about corpora for 1 year. The results reveal that 80% of the students had technical difficulties at the beginning of the corpus linguistics course such as using the corpora and the software. Despite extensive exposure and assistance provided during the semester, these difficulties persisted for 60% of the participants. This implies that technical difficulties such as using the software interfaces should be addressed by corpus tool developers. Similarly, in Zareva`s study (2017) pointed out similar problems. She incorporated corpus literacy into a grammar course in the TESOL program and taught about corpora to 21 TESOL trainee teacher. After the course, she examined their evaluations of the course. The results showed that 74% of the participants found corpora useful language teaching. Nevertheless, it was also discovered the students had some difficulties as they stated that navigating the corpus, getting to know to interfaces, and making searches were problematic for them.

It is understood that developing tools which are easy to use could increase the use of corpora. Thus, the learners could focus on their prior purpose, learning a language, instead of struggling to discover the use of complicated tools which hinder learning. This area of corpus linguistics has been initiated mainly by Johns' studies. He stated in his study (1991a) that "research is too serious to be left to researchers" (p. 2) and claimed that learners should discover the language themselves through Data-Driven Learning (DDL). The wide availability of such user-friendly corpus exploitation tools would contribute to already flourishing use of DDL activities being implemented in EFL classes to train learners as language researchers.

Since the 1990s, the direct use of corpora in EFL classrooms have been continuously yielding student-centered learning atmospheres in which students are more active and involved during their own learning adventure. As also suggested by Johns (1991a) in his groundbreaking study, the students should discover the language they are learning, and the teacher should provide them with a learning setting facilitating their efforts to develop discovery-strategies, that is to say they can "learn how to learn" (p. 1). In this learning adventure, teachers are also encouraged to be guides or facilitators for the students rather than an active figure in the classroom. Johns' (1991a) claims are in line with Kolb's (1984, 2014) claims related with "experiential learning" through which people's experience transforms into "learning and reliable knowledge" (2014, p. xxi).

Emphasizing students' own experience with corpus resources, Johns (1991a) inserts:

> *"an alternative to a rule-based approach which attempts to encapsulate linguistic "competence", and that is a data-driven approach which gives the learner access to the facts of linguistic "performance". If we take this second approach, we do not attempt to make the system intelligent: we simply provide the evidence needed to answer the learner's questions and rely on the learner's intelligence to find answers." (p. 2)*

For example, through the concordancers, language learners are provided with authentic language evidence. When the students are exposed to this evidence, the second step would be their active involvement in the learning in an autonomous and explorative way. Johns (1991a) also indicates that through concordancers, students attain the target knowledge through generalizations using the concordance lines yielding the authentic language use examples. This illustrates a good example of inductive teaching and the discovery of real life language. In their pioneering study, Gilquin and Granger (2010)

state that DDL brings authenticity into language classrooms as it brings substantial amount of authentic language samples directly from native speakers. They also claim that a corrective function, which is a product of linguistic awareness built through such teaching, comes along with DDL. Thus, learners could correct their language productions using corpora.

Observed benefits of DDL implementations led a considerable number of researchers and teachers to devote themselves to practice and expand DDL to enable students exploit corpora to learn languages by discovery. As one of the important figures in corpus linguistics, Alex Boulton published numerous studies on corpora and language teaching with a specific focus on DDL (2009, 2009, 2010, 2012, 2017, 2017) discussing the use of it in language teaching and conducting both qualitative and quantitative studies in the field. In one of his studies (2012), he experimented the use of hands-on and paper-based (hands-off) teaching activities to teach 49 lower-intermediate level college students learning English. He aimed to investigate whether hands-on or hands-off activities had some superiority to the other one. The results revealed that paper-based DDL activities could be effective tools in language classrooms along with the hands-on activities. The reason behind this was suggested as the students were lower level English learners, their expertise in corpus use and data interpretation were not sufficient. Thus, having access to printed materials could be useful for them to analyze the language patterns manually. However, the researcher concluded that there is no generic template suitable for all learners and learning settings due to various local conditions and varying learners.

In this section, “teaching to exploit” was presented. In the following part, “exploiting to teach” will be introduced in detail.

2.4.1.3. *Exploiting to Teach*

Fligelstone (1993) defines “exploiting to teach” as exploiting corpus resources to teach. Teachers should be informed of corpus resources so that they can decide on what to teach and which tools to use in their own classrooms. By means of exploiting corpora, teachers can teach catering the specific learning needs of students. For example, Tyne (2012) in his study argues that the teachers can use concordancers or text collections to make students grasp how a specific genre is formulated. Tyne (2012) conducted a study with two Spanish teachers working at a secondary school in France to teach writing in a specific genre such as short news items or a letter to a friend. In his study, he trained two

language teachers how to integrate corpus resources into language teaching and how to make their students actively involved in DDL activities to deduce authentic language patterns. The teachers did not compile a corpus but asked the students to collect relevant documents. Then they analyzed the texts and discovered the recurrent patterns, which helped them to learn the specific lexical items and sentence structures in those genres.

Corpus resources have been largely integrated into teaching vocabulary, grammar, four language skills (reading, writing, listening, and speaking), English for Academic Purposes (EAP), and English for Specific Purposes (ESP). For example, Smith (2009) shows how corpora are used in an Asian context at universities, in Taiwan in his case, to teach vocabulary. He argues that the use of DDL activities are especially useful in teaching collocational patterns. He also adds that even the lower level students benefit from DDL activities in the classroom. Similarly, Anthony, Flowerdew & Costley (2016) highlight the advantages and disadvantages of DDL, and they introduce how DDL can be a part of a technical writing classroom and how it could be utilized to assess written performances. Anthony et.al. (2016) emphasize one of the most crucial advantages of DDL being a helpful assistant for the teachers to provide their students with target-specific corpus data.

The studies showing the effectiveness of DDL activities and integration of corpus resources into the language classroom is long, and the results show that DDL supports language learning in many aspects and the students perceive DDL activities positively (Barabadi & Khajavi, 2017; Baten, Cornu, & Engels, 1989; Boulton, 2007; Li, 2017). Barbadi and Khajavi (2017) compared the effectiveness of DDL activities to traditional activities while learning English in Iran. They instructed 62 students in total: 42 students in the experimental group and 20 students in the control group. For the experimental group, they prepared activities informed by the data from COCA, and they also provided the students with the opportunity of interacting with the corpus giving them some assignments to be completed using COCA. For the traditional group, they consulted to traditional grammar books and dictionaries. The post-test results revealed that the experimental group outperformed the control group. The reason behind this success was assumed to be the result of being actively engaged in the activities and it led to self-discovery. In another context, Li (2017) compared the collocation uses of 60 Chinese postgraduate students after completing a linguistics course. There were two groups in the study: an experimental group with 30 students and a control group with 30 students. In the experimental group's linguistics class, BNC and COCA were used while investigating

the language uses, and especially collocations. In the control group's class, they followed a traditional teacher-fronted way of teaching. At the end of the semester, the researcher analyzed the essays written by the participants, and the results showed that the experimental group were more successful in collocation use compared to the control group in many ways. They used more collocations with more variety, and they also used the collocations more accurately compared to the other group. This result indicates that the use of corpus can be successfully incorporated into linguistics classes. These results show that "exploiting the corpus resources to teach" (Fligelstone, 1993) has been one of the foci of CL in recent years, and language teaching has got invaluable support from it.

Until this point, direct applications of corpus linguistics in language teaching have been explained. In the following section, the indirect uses of corpora in language education will be explicated elaborately.

2.4.2. Indirect Uses of Corpora in Language Education

As well as direct applications of corpus resources into foreign language teaching, indirect uses of corpora are equally important. Nowadays, the range of indirect corpora uses is getting more varied e.g. reference publishing, syllabus design and material development, language testing, and teacher education (McEnery and Xiao, 2011). These indirect uses of corpus resources will be presented in the following section in detail.

2.4.2.1.*Reference Publishing*

Corpora`s use in various reference publications has increased significantly since the 1990s. Approximately all of the dictionaries published since the 1990s have been informed by corpora that even people who have not heard about corpora have been using corpus resources indirectly (McEnery and Xiao, 2011).

Especially with Sinclair`s (1987) work on the use of corpora to reflect the natural language and the collocational patterns, he proved that even a 7.3 million words (the largest corpus size of his time) corpus could provide evidence for the patterns of frequent words, the use of corpora in lexicography has increased dramatically (Hanks, 2012). Within the same line of reasoning, about the effective exploitation of corpora to create corpus-informed lexicography, Sinclair (1987) introduced the first corpus-informed dictionary "Collins COBUILD English Language Dictionary". After this milestone publication, today most of the publishing houses are publishing dictionaries based on real-

life language, and they are using authentic sentences informed by corpora. Some of these dictionaries are Longman Dictionary of Contemporary English (Summers and Gadsby, 1995), Oxford Dictionary of English (Stevenson, 2010), and Cambridge Dictionary of American English (Landau, 2000).

Although the developments took place more in monolingual dictionaries, corpus linguistics' effect on bilingual dictionaries has also been influential. Following Rundell and Stock`s study (1992) discussing that the corpora should be indispensable tools for any serious dictionary venture, Granger (2018) emphasizes that corpus data have profoundly changed the monolingual dictionaries in terms of authenticity, and they also have the potential to renew bilingual dictionaries, which are the most common dictionaries used by language learners. However, she underlines that because of the lack of available representative and balanced translation corpora, the bilingual dictionaries could not benefit from corpora sufficiently until now.

Similar to the developments in corpus-informed dictionaries, reference grammar books have also made use of corpora to represent authentic and reveal the descriptive nature of language. One of the best-known corpus-informed reference books could be the book titled "Longman Grammar of Spoken and Written English" (Biber, Johansson, Leech, Conrad, & Finnigan, 1999). The book is entirely based on Longman Spoken and Written English Corpus, and it thoroughly describes English language grammar through authentic examples from the corpus. The work is based on corpus analysis, and there is a strong emphasis on the linguistic function in the interpretation of the quantitative results of the analysis. They also centered register as an important factor in linguistic choices. Also, they treated the spoken English equal to written English in their pioneering work.

2.4.2.2. *Material Development and Syllabus Design*

Material development is one of the essential components of teaching as the quality and effectiveness of the material affect the learning outcomes directly. In foreign language teaching, developing materials is a naturally critical issue as well. As previously materials were developed mainly by intuition, the language used was not natural (Simpson-Vlach and Leicher, 2006). However, with the use of corpus data to develop materials, material developers could highlight the language which could be encountered by the learners the most frequently (Huang, 2017). This change in material development highlighted the importance of authenticity and descriptive nature of language. Römer

(2005) states that texts in the teaching materials should be representing the linguistic properties in the slice of real life.

In addition to emphasizing the importance of real-life language use, thanks to corpus studies, the genre-based teaching has become one of the significant components of language teaching. Hyland (2007) states that genre pedagogies enable teachers to base their courses in the texts that students will have to write in their target contexts, thereby supporting learners to participate effectively in the world outside the ESL classroom. Genre theory and research thus give teacher educators a more central role in preparing individuals to teach second language writing and to advise them on the development of curriculum materials and activities for writing classes. In her study, Conrad (2000) states that with the integration of corpus into grammar teaching, "the monolithic descriptions of English language will be replaced by the register-specific descriptions." (p. 549) and she adds that grammar and vocabulary will be taught together in harmony. Meunier and Reppen (2015) also suggest that corpus-informed textbooks are now being produced by key publishing houses, and the language presented in these books present the real-life language directly. Apart from the grammar textbooks, also general language teaching textbooks have also been informed by corpora. One of the most known corpus-informed textbooks series is McCarthy et. al.`s (2006) Touchstone series, which have been prepared by using Cambridge International Corpus. In this book series, not only the authentic language is presented but also frequency information of the language items is provided. In addition, the collocational patterns and recurrent syntactic structures are highlighted.

Considering the discrepancies between the real-life language and the language in the textbooks, it is obvious that language teaching syllabi should be evidence-based and empirical instead of following the intuitions. Mindt (1996) emphasizes this point stating that "teaching syllabuses should be based on empirical evidence rather than tradition and intuition, with the frequency of usage as a guide to the priority for teaching" (p. 245-246). Hunston (2002) restates Mindt`s statement, and she adds that the syllabus should be a lexical syllabus introducing the most common language items. The term lexical syllabus was first proposed by Sinclair and Renouf (1988) that a syllabus should focus on the most common words in a language, the central patterns of usage, and the combinations which they usually form. In this way, the grammar could also be acquired in the process parallelly. In line with these statements, Hunston and Sinclair (2000) also insert that through a lexical syllabus informed by corpora, the learners also learn about grammar which can be called "lexical grammar", the grammar covered in a lexical syllabus

(Sinclair, 2000, p. 191). Highlighting the importance of a corpus-informed lexical syllabus, many studies in the field agreed that learners can learn about grammar naturally while learning the lexical items as collocations (Altenberg and Granger, 2001; McAlpine and Myles, 2003; McEnery and Wilson, 2001).

2.4.2.3. Language Testing

Direct or indirect use of corpora in language teaching has been an indispensable part of language classrooms. The variety of corpus resources integrated into language teaching is increasing day by day. The corpora are recently used also in language assessment and testing. Although the use of corpora impacts language testing more nowadays, its use dates back to the 1990s. Alderson (1996) states that corpora can be used in language testing and assessment in different ways: "test construction, compilation and selection, test presentation, response capture, test scoring, and calculation, and delivery of the scores" (Alderson, 1996, cited in McEnery and Xiao, 2011, p. 368-369). Kaszubski and Wojnowska (2003) designed a program, TestBuilder, with which sentence-based exercises can be produced from the raw or POS-tagged data, tagged by a built-in POS tagger, and uses the input to create test material.

Corpus data have been used by the main test providers as a natural component of their language teaching and assessment process for different purposes:

- "as an archive of examination scripts;
- to develop test materials;
- to optimize test procedures;
- to improve the quality of test marking;
- to validate tests, and;
- to standardize tests." (McEnery and Xiao, 2011, p. 369).

Cambridge Learner Corpus is one of the most well-known and one of the largest learner corpora used in language testing, which is made up of around 40 million English words collected from L2 learners with various L1 backgrounds; and it is used in language testing actively (Park, 2014). Cambridge Learner Corpus (CLC) includes different variables about the learners such as their gender, age, L1 background, language proficiency level which enables the researchers to make interlanguage analysis to identify the distinctive features of learner's language. Along with these, this highly large corpus is also error tagged which is huge step in the field of corpus linguistics and learner corpora. As a result, it is a considerably prolific data for test developers at Cambridge to

design and revise language tests. These developments show that language testing and assessment is one of the other areas that corpus linguistics has had a great effect.

2.4.2.4. Teacher Development

Until this point, the applications of corpus resources into language teaching and learning have been covered. However, it is a fact that in order to make language learners benefit from corpora effectively, language teachers should be equipped with the skills to be able to exploit them in the classroom (McEnery and Xiao, 2011). Although its importance has been highlighted previously, the number of courses or training provided to language teachers are considerably few in number. Römer (2011) states that language teaching could have been only limitedly affected by corpus resources that relatively few teachers and learners are aware of the existence of corpus resources and how to reach them. Unfortunately, the gap between the research and practice has still not been bridged successfully due to some reasons (Chambers, 2019). Some of these reasons can be stated as that the provided interfaces of the tools are too complicated for language learners (Zareva, 2017), more focus on advanced learners, and the most importantly the lack of corpus literacy integration into language teacher education (Callies, 2019; Farr, 2008; Heather and Helt, 2012; Leńko-Szymańska, 2014; McCarthy, 2008; Mukherjee, 2004).

As stated before, one of the crucial steps to expand the use of corpora is introducing it and its uses to language teachers so that corpora can actively take part in the classroom informatively. As this dissertation focuses on introducing corpus literacy to future language teachers, more detail about corpus linguistics and its place in language teacher education is given below.

2.5. Corpus Linguistics in Language Teacher Education

As it has been stated previously, one of the indirect uses of corpus linguistics is introducing it to language teachers. Although use of corpora in language teacher education is accepted as one of the indirect applications of corpus linguistics into language teaching, it could be strongly claimed that it is one of the ways of bridging research and practice as teachers are the active practitioners in the teaching context, and they are the stakeholders who can equip students with corpus practice skills (Breyer, 2009). One of the most effective ways of introducing corpus linguistics to future language teachers is offering courses as a part of the curriculum which is “best-situated in initial

language teacher education" (Breyer, 2009, p. 154). When the teachers are encouraged to manage using corpora themselves, the picture changes as they become autonomous users of corpora. As a result, they might apply what they learn into their classroomsç However, corpus linguistics integration into language teacher education is still lacking; and the number of teachers who are aware of corpora is not high (Mukherjee, 2004; Callies, 2019). As a result, there is a need for more courses devoted to teaching how to use corpus resources in language teaching. For that purpose, language teachers should be equipped with a recently coined literacy, "corpus literacy" (Heather and Helt, 2012).

Applied linguists working on technological issues have asserted that technological changes in the digital global economy have an effect onto language learning and teaching (Chapelle, 2001; Warschauer, 2000). It has also been noted that *literacy* is not only about *reading* and *writing* anymore, but society also requires the teachers to have multiliteracies that demand them to have proficiency in digital and online competences (Warschauer, 2000). For that reason, now it is an obligation to integrate that literacy into language teacher education to meet the requirements of being literate. Barnes and Murray (1999) state that in both in-service and pre-service teacher education, technology integration should not be the extra part but an integral part of teachers' methodological education. And they also add that literacy should be integrated into initial teacher education as they will be too busy in their first years of profession and they will neglect to develop and integrating technology into their lessons.

It is agreed that promoting critical attitudes, developing conceptual as well as practical frameworks in using technology in language learning are the keys for future meaningful technology use (Egbert, Paulus, & Nakamichi, 2002). The desired knowledge that should be held by the teachers also increased as recently they are supposed to have good content knowledge (CK), pedagogical knowledge (PK), pedagogical content knowledge (PCK), and now, also technology knowledge (TK) (Meunier, 2020). When this is achieved, they can use their technological pedagogical content knowledge (TPACK) as a core of their teaching. These statements indicate that technological knowledge is an important component of teaching nowadays. Doering & Beach (2002) also state that raising the awareness of pre-service teachers and teaching them how to use technological tools in teaching can only be managed by involving them actively in practicing what they are supposed to learn, not instructing them about the tools. Tammelin (2001) emphasizes an important point that having technological skills leads to developing positive attitudes, self-confidence, teacher empowerment in teachers.

Nowadays, one of these literacies that language teachers are supposed to develop is "corpus literacy". It is defined by Heather and Helt as "the ability to use the technology of corpus linguistics to investigate language and enhance the language development of students" (2012, p. 417). They also add that corpus literacy is a complex concept consisting of multiple sub-skills. Mukherjee (2004) states that to acquire this literacy, the person should learn what a corpus is, what can and cannot be done with corpora, knowledge of data analysis through concordancers, and be able to reach generalizable results.

Several studies have been published showing how to integrate corpus linguistics into language teaching to provide teachers with corpus literacy. Chambers et al. (2011) suggest various ways of corpora use for teaching purposes both for novices and experienced teachers in corpus linguistics such as the use of spoken and written corpora, genre-specific corpora, DDL activities, etc. They claim that although the effect of corpus linguistics on language learning rather steadily increasing, its effect is relatively weak on the direct applications in teaching and learning. In order to bridge this gap, in recent decades, corpus literacy courses have been integrated into initial teacher education programs curricula. Breyer (2009) taught 18 student teachers in Germany for one semester about how to use corpus resources in teaching and how to produce materials. She collected the data through teacher journal, questionnaires, and the materials produced by the participants. The results revealed that the students were enthusiastic about this language exploration approach, and they thought they could inform their teaching in the future with this experience. Leńko-Szymańska (2014, 2017) taught in Poland about corpus linguistics and its applications in language teaching in pre-service teacher trainings. The results show that the participants have positive attitudes towards the use of corpora in teaching; however, the researcher notes that one-semester long courses are not enough for the students to develop corpus and technical skills at the same time.

Zareva (2017) added a corpus literacy component into the grammar course on a TESOL teacher training program. The participants found the corpus integration into the program useful as most of the students did not know about corpora and they learned how to use it. Nevertheless, they stated that they had some difficulties while navigating the tools to analyze the data. Similarly, in Turkey, Ozbay (2017) integrated a corpus literacy course into the curriculum focusing more on linguistic research than language teaching. He designed an elective course for 50 undergraduate students studying at an English Language and Literature Department and taught them how to do lexicogrammatical

investigations using corpora. At the end of the course, the students stated that they acquired various skills during this course such as making appropriate decisions in their use of grammar rules, words, and lexical combinations. As previously also presented Callies (2019) investigated how much language teachers were aware of corpus linguistics and its uses in teaching. The results showed that the majority of the language teachers (73.1%) had not heard of corpora before, and most of the teachers stating that they were using corpora were using them for reference purposes such as checking the acceptability of language units or structures. This indicates that the use of corpora in language teaching might be still limited. Many other studies can be added to this list, and the number is gradually growing around the globe (Chambers, 2019). The results of these studies showed that teaching future language teachers about corpus linguistics and corpus resources might bring some positive outcomes such as raising awareness, reaching authentic language, developing corpus informed materials, being autonomous, being a researcher, improving technical skills. These positive effects of integrating corpus applications into language teacher education programs will be introduced in the following section.

2.6. Advantages of Integrating Corpus Applications into Language Teacher Education Programs

As stated before, it is widely accepted that corpus literacy integration into teacher education programs brings along several advantages. These advantages will be introduced to express how a corpus literacy course can be of valuable assistance for language teachers.

2.6.1. Raising Awareness

In language education, teacher educators are expected to provide preservice teachers with three types of knowledge: content knowledge, pedagogical knowledge, and pedagogical content knowledge (Shulman, 1987). For language teacher education, it means that teacher educators need to support students 1) to deepen their understanding of language and its use, 2) to have insight about teaching practice, strategies; 3) to connect two knowledge types, content, and pedagogical knowledge, to understand how learners can think and best learn. Taking these knowledge types into consideration, researchers

currently use corpora as an awareness-raising tool in language teacher education programs as corpora can provide them with the opportunities of examining the authentic language collected to have deeper insights about the language. Classroom corpora might be examined to understand what works in the language classroom and what does not work, and identifying the errors students make while learning languages and discovering situations in which students have problems and need extra support could provide valuable information for the teachers.

As early as 1997, Coniam wanted to show English language teachers that the language used in teaching materials might not reflect the authentic language sometimes. In his study, he taught the ESL teachers in Hong Kong how to do searches using concordancers and interpret the results. He aimed to increase the language awareness (especially grammar) of the language teachers investigating the language structures and comparing them to textbooks they used. In the study, his aim was not teaching them the correct English, but to make them critical about the use of language and become aware of the use of language in context. The participants could also make pedagogical implications for their future teaching. Throughout the study, the participants gained autonomy gradually and developed discovery skills.

O'Keeffe and Farr (2003) state in their study that both native and non-native teachers need to learn about corpora to manipulate it for their own pedagogical aims, and because of the fact that most of the materials they are using are corpus-based. They should be able to approach them critically instead of being a consumer. The researchers suggest examples of corpus-based tasks for increasing the pre-service teachers' understanding of word classes, register-related grammatical choices, and sociocultural conditioned grammatical choices. Supporting the points suggested, Farr (2008) conducted a study about the integration of corpora in language teacher education to learn the students' reactions. The results indicated that the students generally had a positive attitude towards the course, they stated that the course promoted their vision of inquiry and research and it showed that awareness-raising purpose of the course reached its goal.

Not only courses are introduced in the literature, but activities to raise awareness in language teacher education with corpus integration have also been introduced. For example, Frankenberg-Garcia (2010) claims that novice teachers and preservice teachers should be informed about corpora, and activities should be prepared for that level to raise their language and pedagogical awareness. She argues that an appropriate corpus should be chosen for the students to facilitate the process. The novice teachers should learn about

different corpora and their features. After that step, starting from single word queries, word strings can be searched that they become aware of the words used together frequently. Breyer (2009) also stated that the course did not only raised students´ language awareness but also, they reflected that as teachers they should know how to connect linguistic knowledge and teaching. The results show that students were enthusiastic about that kind of language exploration and discovery as sometimes they were not sure about the use of grammatical points.

Leńko-Szymańska (2014) is another researcher introducing a graduate level course in a language teacher education department in Poland. The results revealed that the students had positive feelings towards the course, and it met their expectations. Even though nearly none of them knew what corpus was at the beginning of the study, after semester they were content to have a corpus-based course in their graduate studies; however, they stated that it would be better if they knew corpus during their undergraduate studies in not only one course, but most of them; they also added that not a one-semester but two semesters course would be more helpful. The writer concludes that only if are they exposed to corpora, the students will be able to use it in the future; as a result, firstly the colleagues in teacher education programs should be informed about corpora.

Similarly, in her study in which she incorporated the use of corpora into a grammar course in the program for one semester, Zareva (2017) also discovered that the participants found corpora helpful for their future teaching and it raised their awareness about how to teach the language. Discovering the English grammar using corpora, they also stated that learning about corpora opened a new world for them that they had not known about it before. It shows that the corpus integration into the grammar teaching course component of the TESOL program raised their "corpus awareness" as well. It is forwarded by Charles (2011) that having the "corpus awareness" is the first step of mastering corpus skills as after you have "corpus awareness", you might acquire "corpus literacy", and with lots of practice and being autonomous, you get "corpus proficiency" (p. 40).

Heyvaert and Laffut (2008) examined the place of corpora in English teaching at secondary schools in Belgium. They involved various stakeholders in teaching contexts such as textbook writers, teachers, teacher trainees, and teacher trainers. The results of the survey they used showed that the participants were aware of corpora and their applications, they felt insecure about tackling language problems on their own in

language teaching. However, they stated that they would use corpora in the future regularly as they were aware of their advantages. These results show that although the participants did not know how to use corpora in their teaching on their own, they were willing to integrate them into their teaching. The teachers stated they became aware of the potential of the corpora to deal with the issues to do with the language change and variation. They felt themselves more secure that if a student asks a question, they could reach the authentic data easily.

As it has been proved by previous studies, corpus literacy education is an effective way to increase the teachers' language and pedagogical awareness. Unfortunately, to the researcher's knowledge, there was only one case of introducing corpus literacy as a specific course into the university curriculum, especially into undergraduate studies, in Turkey. This course was designed by Ozbay (2017) who introduced an "Introduction to Corpus Linguistics" course into their "English Language and Literature Department" at a state university in Turkey. As the course was not offered at an education faculty, the main purpose was not about how to use corpora in teaching but more about how to do lexicogrammatical research. Although the specific focus was not on teaching, the students' responses indicated that the course raised their language and pedagogical awareness. The students highlighted that corpora are useful for teaching vocabulary, grammar, and language in general. It implies that the course increased pedagogical awareness. In addition to it, the results show that language awareness was also raised. For example, one of the participants of Ozbay's study (2017) stated that:

> "*Beneficial to see misusages of words, structures, and collocations. Many phrases that we accept as correct may come out as misusage (p.319).*"

This answer shows that the participants could discover their own language uses and compare it to the authentic languages; as a result, they could learn about their misuses.

A recent study conducted in Turkey by Çalışkan and Kuru Gönen (2018) also aimed to increase the language and pedagogical awareness of teachers, and they designed a four-week in-service education training for English teachers. The results showed that the teachers found corpora useful to teach vocabulary, especially for higher proficiency level students. They stated that they had not learned about corpora before, so the study raised their awareness of corpus-informed language pedagogy, as well.

As the previous studies suggest, integration of corpora in language teacher education provides valuable support in terms of raising student-teachers' awareness about

the content they will teach, pedagogical issues that how they will teach. In addition, it also provides them with a new concept and tool, corpus, which can be used functionally in and out of the classroom. For language teachers and learners, one of the other advantages of using corpus resources is that they can reach the authentic language used by L1 English speakers directly. In the following section, more information on this topic will be presented.

2.6.2. Reaching Authentic Language

Coniam (1997) suggests that thanks to concordance lines' analysis, the teachers can grasp the "correctness" of the language from the real-life language directly instead of the prescriptive materials they have been handed in. In his study, he shows ESL teachers how to discover the authentic language through concordance analysis.

In her study, Breyer (2009) introduced corpus linguistics and its uses in language teaching to student teachers of English. She taught 18 pre-service teachers about corpora and how to use them in teaching. During that 1 semester 11-week long course, the students also learned about how to develop corpus-informed materials and integration of theirs into teaching. In addition to teaching about the use of corpus resources, the researcher also investigated the reflections of the participants. They expressed that if solely simple grammar rules were taught and not the authentic language, it might lead to fossilization. They frequently highlighted the importance of teaching the real-life/ authentic language. Similarly, the participants, 21 TESOL trainee teachers, of Zareva`s (2017) study stressed the usefulness of having a corpus linguistics integration for learning about the descriptive and authentic language instead of a prescriptive language which is not encountered in real life.

In the study of Çalışkan and Kuru Gönen (2018), it was concluded that the teachers who took a four-week in-service teacher education found corpus resources awareness-raising. Besides, they stated that vocabulary instruction through the use of authentic excerpts from various contexts was useful for them.

2.6.3. Material Development

Several studies have already stressed the importance of making use of authentic language (use-based) in material development (Aşık, 2017; Çalışkan and Kuru Gönen; Khojasteh and Shokrpour, 2014; McCarthy, 2008; Meunier and Reppen, 2015; Römer,

2005). Meunier and Reppen (2015) claim that the materials produced by using corpus data can be named "corpus-informed" materials as this label covers:

- "the gatherings of the results and discoveries from research conducted on different genres,
- the collection of what should be covered in the material,
- the decisions about how to display the corpus analysis data, and
- deciding the texts to be used as prompters while focusing on language skills" (p. 499).

As it is an accepted fact that inauthenticity is not a learning goal, the inclusion of authenticity into language teaching materials is a part of material development. Taking this into consideration, corpus analysis results can inform language teaching materials in many ways, such as:

- "in helping select the linguistic target features (e.g. vocabulary, lexico-grammar; grammar),
- the amount of space in the text devoted to the features,
- in the sequencing of materials.
- through the inclusion of actual corpus data (e.g. lists of vocabulary or common lexico-grammar patterns),
- through the inclusion of information on register differences (e.g. conversation and academic prose),
- in the selection of the texts used in examples (e.g. do the texts accurately reflect the use of the target feature?)" (Meunier and Reppen, 2015, p. 501).

Corpus-informed materials are praised to be representing the authentic language used in real-life, and the traditional textbooks are criticized as they are prepared through the intuitions of the material developers (Meunier and Reppen, 2015).

As the number of corpus-informed materials is increasing day by day, many language teachers and learners are using those materials without being aware of corpora and corpus resources. In her study, Aşık (2015) found that only 11% of the English teachers (N=42) heard about or used corpora in teaching, and they needed training on corpus consultation and corpus resources use in language teaching. It shows that teaching language teachers about corpus-informed materials and how to develop them could be invaluable support for them. Although the importance of corpus linguistics integration's benefits for language teachers is well acknowledged, the language teacher education

programs are still not including corpus literacy courses into their curricula (Farr, 2010). Highlighting the significance of this phenomenon, McCarthy (2008) suggests that pre-service teachers should meet with corpora to evaluate materials and be lobbyist lobbying publishers and academicians about what the situation is and what they want; acquiring that attitude, they will be able to both develop materials for their students and also evaluate the materials published for language teaching. McCarthy (2008) also states that teachers should be the central stakeholders of the corpus revolution.

In order to equip future language teachers with the ability to use corpora in their teaching including material development, Aşık (2017) conducted a study with 21 pre-service language teachers. As a part of the course "Material Adaptation and Evaluation", she introduced corpora and their use in material evaluation. In this study, the students needed to evaluate the vocabulary items in the English coursebooks used at secondary schools. The participants investigated the target vocabulary items' frequency in COCA and discover whether they are in the top 5000 the most common words in that corpus. The results of the study showed that the higher the level of the coursebook the less frequently the vocabulary items were found in the corpus as higher-level students were supposed to be learning more detailed topics. However, the findings shared the shreds of evidence of misuses of some words in the B2 level book. One sentence example showing the use of the word "breadth":

"Coursebook use: Please be patient and breadth with your new experience."

Although the word "breadth" is used to indicate size or width or something, the word's use in the coursebook was not meaningful.

Aşık (2017) stressed that the study was beneficial for future teachers in many ways such as raising their awareness, research skills, and investigatory-discovery skills altogether. In addition, she suggested that corpus linguistics applications offering practical guidance for language teachers should be integrated into initial teacher education programs to inform and help future teachers to make better decisions on material choice and development.

Another study conducted in Turkey, Çalışkan and Kuru Gönen (2018) also initiated to inform English teachers about corpus-informed materials. Çalışkan and Kuru Gönen introduced 3 tertiary level instructors on how to produce materials to teach vocabulary. Although the knowledge of the participants on corpora was diverse, they had

not used corpus resources for teaching purposes at all. When their perceptions on the use of corpora in vocabulary teaching were investigated, the teachers stated that their awareness of corpus applications increased. They also added that these materials could be useful to increase the students' awareness, especially higher-level students. Another point they highlighted was the corpora were providing them with authentic data. These results also show that corpus applications' integration into language teacher education brings several benefits along (Farr, 2010; O'Keeffe and Farr, 2003; Römer, 2005).

In their study, Saeed and Waly (2008) introduce corpus-based materials to be used in language classrooms. They have prepared corpus-based materials to be used for elementary, intermediate, upper-intermediate, and advanced students and concluded that while developing materials the level of the students, cultures, educational backgrounds, and age groups should be taken into consideration; they also added that while teaching how to develop materials, online free corpora should be chosen as some students might not afford corpora or software to examine concordances.

Besides all these studies, one of the most important figures in using corpora in language teacher education is Breyer (2009), she also conducted research integrating corpora in language teacher education and got student perspectives. The results showed that linguistic analysis broadened their view and it also helped them how to prepare materials with a deeper understanding of language itself. Moreover, the participants stated that they prefer corpus-informed grammar books to traditional textbooks.

Corpus integration has provided many benefits in language teacher education such as raising linguistic awareness, pedagogical awareness, and pedagogical content knowledge awareness. In addition to these, corpora also are now a valuable source for teaching how to develop materials and evaluate them critically. Besides these advantages, corpora integration in language teacher education has other contributions for pre-service teachers that students' views about the role of the teacher also affected after the courses conducted. As the corpus-informed materials are now seen as the materials reflecting the authentic language and encouraging language teachers to be researchers (Aşık, 2017; Çalışkan and Kuru Gönen, 2018; Meunier and Reppen, 2015), teachers' role in material evaluation, adaptation and development should also be changed considering the changes in teaching application coming along corpus integration into language pedagogy.

For that reason, the present study aims to design and conduct a corpus literacy course for undergraduate students in the language teacher education program of the ELT department at Cukurova University. The course aims to introduce future language

teachers what corpora and corpus applications in foreign language teaching are, to raise their awareness in many directions, to teach them how to evaluate teaching materials using corpora and to produce corpus-informed materials.

2.7. Chapter Summary

In this chapter, the related literature to the study has been introduced. Firstly, the corpus revolution and then the relationship between corpus linguistics and language education has been explained. Then, the uses of corpora, direct and indirect application, have been elaborately expressed. Third, the use of corpora in foreign language teacher education, corpus literacy, and the positive outcomes of corpus applications' integration into language teacher education have been respectively introduced.

CHAPTER III

METHODOLOGY

3.1. Introduction

In this chapter, firstly research paradigm and research design of the study will be introduced. Then in-depth information about participants and sampling, research context, data collection tools, procedures, data analysis tools, and data analysis process will be given. Lastly, trustworthiness and ethical considerations will be presented.

3.2. Research Paradigm

A paradigm can be seen as a set of basic beliefs that reflect how we perceive the world. It represents an individual's worldview, the nature of the world, the place of people in it, and several possible relationships to this world and its parts (Guba & Lincoln, 1994). Similarly, Schwandt (2001) defines a paradigm as a shared worldview that suggests the beliefs and values in an area and that shows how problems are eliminated. Guba and Lincoln (1994) state that we can define paradigms according to the responses given to three questions (ontological, epistemological, and methodological), and as all the cases are emerging from human beings, paradigms are human constructs. However, Patton (2002, cited in Chilisa and Kawulich, 2012) asserts that a paradigm consists of answers about the nature of the social reality (ontology – what do we believe about the nature of the reality?), ways of knowing (epistemology – how do we know what we know?), ethics and value systems (axiology – what do we believe is true?), and then it directs us to question and utilize appropriate approaches to systemic inquiry (known as methodology – how should we study the world?).

As specific paradigms could be linked to certain methodologies, deciding on the research paradigm is a crucial step while conducting a study. This dissertation pursues the constructivist/interpretative paradigm as a guide as the answers given the questions above could be met the most conveniently with it. This paradigm suggests that there are multiple socially constructed realities, and realities are mind-dependent (ontological assumptions). As reality is mind-dependent and socially constructed, the knowledge is subjective; the truth emerges with human experience (Chilisa and Kawulich, 2012). As a

result, true or false is culture-bound and context-depended (epistemological assumptions). It is also accepted that values are indispensable parts of life, and no groups' values are wrong, solely different. It is put forward that social inquiry is value-laden, and the researcher should accept the nature of the study and report his/her values and biases (axiological assumptions) (Chilisa and Kawulich, 2012). This paradigm has been chosen as the guide since this study accepts that there is no one true idea, and knowledge is subjective. As a result, all the results from the data are equally important, and they cannot be generalized to the universe.

Accepting the interpretative paradigm as a guide, this study aims to interpret the collected data thoroughly to understand whether the corpus literacy course affects participants' views on material evaluation, adaptation, and development, whether the designed course increases their language and pedagogical awareness. Besides, the study also aims to investigate what the efficacious parts of the course were for the participants, also what the difficulties were, and lastly what kind of improvements were suggested by them. Finally, another objective of the study is to understand teacher's/researcher's views on the efficacious aspects, difficulties, and suggestions for improving the course.

3.3. Research Design

Each research paradigm favors a certain research design, and the constructivist/interpretative paradigm's principles match with qualitative research the best as this kind of research is an approach to discover and interpret the meaning people are devoting to a social or human problem (Creswell, 2014). It also requires the researcher to conduct the study in the field where the participants experience the phenomena or problem. Another characteristic of qualitative research is about data collection which is not done by taking the participants in a lab but talking to them, observing them in the natural setting, and seeing them behaving in their natural context (Creswell, 2014).

In line with the characteristics stated above, the present study was conducted as qualitative research since the nature of it is investigating the process, implementation, participants, results, and environment; and asking the questions "how" and "why" at the beginning, during, and at the end of the study.

The researcher is also a part of the study as both the researcher and the teacher of the course. The elective course was designed by the researcher to evaluate the participants' pre-knowledge in corpus linguistics, introduce corpus literacy in teacher education aiming to raise language and pedagogic knowledge awareness of the participants by

making them users and interpreters of corpora; in addition, as the researcher, I introduced ways of using corpora to develop language teaching materials supporting them to be producers of materials rather than consumers of them. In the end, their views about the course were investigated, and a reflection was made on the process to find out the effective sides, problematic parts; and the suggestions to make the process more efficacious in the following years were collected. As qualitative research's premises suggest, the data were collected directly from the participants in their natural context, and a deep investigation was conducted through surveys, interviews, logs, observations, reflection papers, and minute papers.

This is a descriptive multiple case study seeking answers by elaborately examining all the data collected during the course of the study from more than one participant/case to describe the experiences they gained through the "Corpus Literacy in Foreign Language Teaching" course. The questions "what, how, and why" were used to interpret the data collected through the data collection tools such as interviews, open-ended surveys, minute papers, reflection papers, observations, and teacher journal. As a research strategy, a case study is used to provide detailed information of "individual, social, political or related phenomena" (Yin, 2003, p.1), and the need for a case study emerges from the need for understanding complex social phenomena and the characteristics of real-life situations. That is the reason why the case study was chosen as the aim of the study is to investigate the whole process (pre-course, during the course, and after the course processes) in detail to answer the research questions. Similar to Yin (2003), Creswell (2007) sees case study research as a qualitative research component to investigate a complex system in a course of time in-depth through various data collection tools. Following these statements, this study explores the phenomena of integrating a corpus literacy course into the English Language Teacher Education Program of Cukurova University.

3.4. Participants and Sampling Method

The participants of this study were chosen using criterion purposeful sampling. As criterion purposeful sampling is utilized when the researcher has the judgment that those participants would give the data she needs. While choosing the participants, the researcher has background information and uses that information during the sampling process to collect the necessary data (Fraenkel, Wallen, and Hyun, 2011). In parallel with this

statement, junior students studying at the ELT Department of Cukurova University were decided on as the participants of the study. The criteria for sampling can be listed as:

1. They were required to have pre-knowledge about language teaching methodology as the course "Corpus Literacy in Foreign Language Teaching" introduced them how to exploit corpora for teaching purposes.
2. They were required to have pre-knowledge about teaching skills as they were thought about using corpora and corpora tools to teach skills.
3. They were required to take "Instructional Technology and Material Development" parallel to "Corpus Literacy in Foreign Language Teaching" at that semester as they were instructed to use corpora and corpora tools to evaluate, adapt, and develop language teaching materials.
4. As the participants would be in real teaching context during their senior year, practicum schools, it would be of value to introduce them corpus literacy for the semester ahead. It was thought that the participants would be able to transfer what they learned to real-life situations easier. Besides, after practicing what they learned from the course at practicum schools, they could implement what they experienced in their classes after they graduated.
5. The participants were the students who chose the "Corpus Literacy in Foreign Language Teaching" course as an elective course in their 6th semester.

The elective course was designed for the 6th semester of the ELT Department and proposed to the department committee. After the review, it was accepted to be placed in the course list of the department. As it was an elective course, there was a quota that I had to determine before the students registered for the course. After having the expert opinion, the class size was decided to be 20 as the course had hands-on parts, the number should be limited to make teacher-student and student-student interaction as high as possible. In addition, as the course was new to the program, it was thought that it would be easier to control any unexpected problem with a smaller size.

After the participants were selected using the criterion purposeful sampling method, demographic data were collected as it is shown in Table 1 below:

Table 1

The Demographic Data of the Participants

Number of Students (N)	**Gender**		**Age**	
	Female	**Male**	**Range**	**Average**
20	13	7	20-38	23,4

As is seen in Table 1, there were 20 participants consisting of 13 were female and 7 male students. The age range was 20-38, and the age average was 23,4. As this study does not take gender and age as a variable, gender, and age information is not provided per student.

3.5. Research Context

The study was conducted at the Department of English Language Teaching at Cukurova University, Turkey. The university is in Adana, Turkey, and it was founded in 1973. The Faculty of Education was established in 1982, and the Department of English Language Teaching is a part of it. The students are accepted to the department if they are successful at the national university entrance exam. After they register, they are required to take an English proficiency exam administered by the Preparation School of Cukurova University. If students score 80 or higher, they are exempt from the preparation class, and they are allowed to start at the department. If they fail, they are obliged to study at preparation school until they get 80 or higher. In order to graduate from the department, students need to complete eight semesters (except for preparation class).

In this study, the participants were junior students in the 6th semester at the department. For the dissertation, as a teacher/researcher, I designed an elective course for the 6th semester, and the participants attended that course as a part of their university education. As the course was elective, they preferred the "YIS338 Corpus Literacy in Foreign Language Teaching" course among three elective courses. Detailed information about the course is provided in the following section.

As it is stated in the participants and sampling method (see 3.4.), there were 20 students who preferred the elective course offered by the researcher. The quota was determined by the researcher thinking that small size would be easier to handle, more interaction would occur. Besides, as it was a new course, I wanted to see if it would work

or what kind of difficulties I would face.

The course was conducted in a regular classroom of the English Language Teaching Department. As some of the students did not have personal computers, the students were required to form their groups of 2-4 people so that each group could have at least one computer that they could work together. The groups were formed by the students not by the researcher. 8 groups were formed, and each group was informed that from time to time they would bring one computer for their group to practice the topic they covered.

3.5.1. "Corpus Literacy in Foreign Language Teaching" Course

Corpus linguistics is gaining more importance all around the world in the last decades, and its applications are also getting emphasized to have a broader effect in the language teaching context. Callies (2019) states that corpus literacy should be integrated into teacher education programs since student teachers should be empowered pedagogically so that they could use the practical information that they get during their university education. Starting from this point, the course plans of English Language Teaching Departments in Turkey were elaborately investigated to see if there were corpus literacy integration into language teacher education programs. The course was given in the 2017-2018 academic year, spring semester, and the design of the course took place in 2016. At that time, there was only one course suggested at the undergraduate level in Turkey, at another state university (Ozbay, 2017). It was also an elective course named "Introduction to Corpus Linguistics" which focused on introducing the use of corpora to make searches for lexicogrammar purposes via different concordancers, and the students carried out different research through the tutorial with their instructors. Although that course and the new course designed for this study have common points, the present study not only includes introducing corpus linguistics terms and making searches to check lexicogrammar properties but also use of corpora in English Language Teaching with a specific focus on material evaluation, adaptation, and development to equip future EFL teachers with corpus literacy.

Taking these into consideration, the corpus literacy course was designed to cover various topics and lasted 16 weeks (one semester). The course was 2 hours per week, and the syllabus of the course is presented in Table 2 on the next pages:

Table 2

The Syllabus of the "Corpus Literacy in Foreign Language Teaching" Course

WEEK	TOPIC
Week 1	• Introducing Content and Lesson Plan • Corpus Linguistics, Corpora, Use of Corpora in Language Education, and Corpora Types
Week 2	• Student Presentations (Different Corpora) • Introducing more Corpora
Week 3	• Corpus Analysis Tools • Concordancers and Concordancer Types
Week 4	• Use of Corpora in Language Teaching and Advantages and Its Advantages • Concordancer Practice
Week 5	• Student Presentations with Concordancer Practice
Week 6	• Corpora and Register Differences • Register Variation Practice
Week 7	• Midterm Exams – Reflection Paper
Week 8	• Writing an Argumentative Essay • Computer-Aided Error Analysis vs Traditional Error Analysis • Examples from Cambridge Learner Corpus
Week 9	• Error Tagging Practice • Computer-Aided Error Analysis Practice
Week 10	• Corpus-Informed Material Evaluation, Adaptation, and Development • Material Evaluation and Adaptation Practice (Comparing examples from Touchstone Series vs MoNE books)
Week 11	• Material Evaluation and Adaptation Practice (Comparing examples from Touchstone Series vs MoNE books)
Week 12	• Corpus-Informed Material Development • Introducing Touchstone Series as Corpus-Informed Materials • Comparing Touchstone Series and MoNE books

	• Introducing an Example Corpus-Informed Material
Week 13	• Take-home Assignment
Week 14	• Student Presentations on Language Teaching Materials They Prepared by Using Corpora Data
Week 15	• Final Exams
Week 16	• Final Exams

After presenting the course syllabus in Table 2, detailed information is provided to explain the flow of the course week by week:

3.5.1.1. Week 1

In the first week of the course, before starting the lecture, the students were informed about the research conducted through that course. They were informed that they were required to complete all the assignments and other contributions to the course as it was a part of English Language Teaching (ELT) Department; however, they were free to decide on participating in the study or not as only the volunteers would take part in it. After informing the students, I handed the consent forms and pre-course survey respectively. Using the pre-course survey, I evaluated the current pre-knowledge of the students about corpus linguistics terms. Another function of the survey was to determine the students' perceptions about the role of the teacher in terms of material evaluation, adaptation, and development as one of the research questions seek an answer to the question whether the suggested course would have resulted in any changes in the students' perceptions in terms of teachers' role in material evaluation, adaptation, and development.

After completion of the questionnaire, the students were informed that during the semester, a Moodle page (cucorpusliteracy.gnomio.com), designed and prepared by the researcher, would be used to host the course online. More detailed information about the Moodle page will be provided in the following sections. The students were informed that that would be a paperless and environmentally friendly course; for that reason, all the resources would be shared on that platform. In addition, all the assignments and other documents would be uploaded through the Moodle page of the course. With this initiation, no one needed to print any documents, and it was a considerable contribution to the environment. After the Moodle notice, I added that the students would work in groups and each group would bring a PC when it is required to practice in the class. In some

minutes, the students decided on their group members. In the end, there were 8 groups in total, and group sizes varied between 2 to 4. After the procedural part, we had a break.

In the second part of the session, I introduced the content through the presentation I had prepared. I covered topics such as what a corpus was, what corpus linguistics was, how we could use corpora, and shortly the types of corpora with examples. I showed some concordance lines, too. At the end of the class, I told them I would upload a list of corpora that they would prepare a mini presentation as a group choosing one of the corpora listed. The rationale behind the assignment was to make them search for information themselves and get familiar with the most popular corpora. They were asked to use the Moodle page to download the list of corpora and upload their PPT before the course that I could check before the following class. I also added that 2nd week's reading would be uploaded that they were supposed to read those documents before they came to the class.

In the end, they were asked to fill in the minute papers to evaluate the first class of the "Corpus Literacy in Foreign Language Teaching" course.

3.5.1.2. Week 2

In the second session, I elaborated on the types of corpora and introduced several well-known corpora. I not only gave information about the corpora but also showed the interfaces online. The corpora introduced by the researcher are:

1. BNC – British National Corpus
2. COCA – Corpus of Contemporary American English
3. ENPC English – Norwegian Parallel Corpus
4. ICLE – International Corpus of Learner English
5. Air Traffic Control Speech Corpus
6. TCSE - TED Corpus Search Engine
7. SACODEYL - System Aided Compilation and Open Distribution of European Youth Language

In the second part of the class, the students firstly made mini-presentations as groups introducing corpora types. Each group also shortly introduced one corpus they chose from the list suggested by the researcher. As they had already uploaded them on Moodle, I had the chance of reviewing them before the class. Still, some of the students had problems with registering for the course on Moodle; however, during the break times, we solved that problem. The corpora presented by the students are:

8. ICLE – International Corpus of Learner English
9. ENPC – English – Norwegian Parallel Corpus
10. ATCOSIM – Air Traffic Control Simulation Speech Corpus
11. MICASE – Michigan Corpus of Academic Spoken English
12. OANC – The Open American National Corpus
13. CHILDES – Child Language Data Exchange System
14. CALLFRIEND – American English – Southern Dialect

After the mini presentations, the minute papers were handed out. In the end, I informed them that I would introduce concordancers in the following week, and the readings for it would be on the Moodle page that they could download and read.

3.5.1.3. Week 3

In the third week of the course, I introduced the topic of the week, Corpus Analysis Tools/Concordancers. I based my presentation on the reading documents I uploaded on the Moodle page. Different generations of concordancers were introduced, and also two concordancers were practiced in the class to make the students grasp how it worked. The concordancers used in the class were:

1. AntConc (Third Generation)
2. BYU - https://corpus.byu.edu/overview.asp (Fourth Generation)

I chose these concordancers as they were freely accessible. In addition, AntConc (Anthony, 2014) has a simple interface, which is important for novice corpus users. As a result, I thought that it would be a better first step for the students as it was the first time they interacted with corpora and concordancers nearly for all the students. Furthermore, access to all the corpora on corpus.byu.edu is all free, and anyone who has an internet connection can use the corpora.

At the end of the class, the students filled in the minute papers. Then I informed them about the following week's content and readings. I asked them to bring one computer for each group, and they were also required to download AntConc before coming to the class. I uploaded the link on our Moodle page so that they could download AntConc without a problem, and I also showed them how to download and set up before they left the class. They were also informed that following week I would upload 8 different texts on the Moodle page that each group would download one text, convert it to plain text format (.txt) and make searches on AntConc.

3.5.1.4. Week 4

In the fourth week's session, I started the class with a presentation on "Use of Corpora in Language Teaching and Advantages and Its Advantages", and we discussed the topic with the students relating it to our teaching contexts. After this theoretical part, we gave a break and then moved to the practice part.

For the AntConc practice, I had uploaded 9 different texts on Moodle that each group could choose one and make searches on AntConc using the texts. One of the texts was extra that I would use it to show them how they would progress. The topics of the texts were:

1. Issues and Problems in Teacher Education
2. The Effects of Climate Change
3. Refugees - Risks and Challenges
4. Over Seventy Years of Fashion History
5. Human Rights
6. Effects of Smoking on Your Health
7. Corpora and Language Teaching
8. Brain and Language Learning
9. 6 Ways Social Media Changed the Way We Communicate

Before the students started to make searches on AntConc using the text they chose from the list (each group worked on a different text), I showed them how to upload the text on AntConc and how to make searches to have word lists, frequencies, and collocations. After this part, I introduced them to the AntConc Analysis Report that they would fill in based on the results they had out of the searches they made on AntConc. The report is presented in Appendices (Appendix C). Moreover, a report written by one of the groups is displayed in Appendix D. Depending on the questions on the report, I conducted various searches answering them, and made sure that students had a grasp of making similar searches. After my exemplary AntConc presentation, the groups started to work on their own texts answering the questions on the report. During this part, I walked around the class for troubleshooting. They had many questions about the use of the concordancer and making searches on it as it was their first time that they had hands-on activities. However, after some time they got accustomed to using the tool effectively and wrote the

reports, and they uploaded their group's report on the Moodle page.

After the practice with AntConc, I showed a list of concordancers to the students stating that each group would choose one concordancer from the list (each group would choose a different concordancer so that they could be familiar with a variety of different concordancers, and there would not be any overlaps). They were asked to prepare a short presentation on the concordancer they chose, and they would show us how to make searches on that particular concordancer. In addition, they would fill in the "Concordancer Tool Practice Assignment" sheet which was uploaded on Moodle by the researcher. "Concordancer Tool Practice Assignment" is presented in Appendix E, and an assignment completed by one of the groups is also shown in Appendix F. Taking the information into consideration, each group chose one concordancer to get prepared for the following week. At the end, the students filled in the minute paper.

3.5.1.5. Week 5

In the previous week's class, the students were asked to choose one concordancer and present it in the class and make exemplary searches to show how the tool was used. The list of the concordancers suggested to the students is given below. On the Moodle page, the links to reach the concordancers were also provided to make the process easier for the students:

1. Just the Word
2. MonoConc
3. AWL Highlighter
4. Skell
5. TextSTAT
6. WordSmith
7. MICASE
8. WebCorp

The students were well-prepared and made successful presentations with exemplary searches. Most of the groups did not have any problems using concordancers, yet, some of the groups asked for help before and during their presentations.

After 8 groups' presentations, the students filled in the minute papers, and they were informed about the following week's course content, register variation, and corpora, and again the researcher added that reading documents were uploaded already on the

Moodle page that they could download and read.

3.5.1.6. Week 6

This week, I introduced the topic "Corpora and Register Differences" basing it on the documents shared on the Moodle page. I covered the headlines such as the definition of register, corpora and register, giving example corpora names such as MICASE (Michigan Corpus of Academic Spoken English), ICLE (International Corpus of Learner English), BAWE (British Academic Written English), and BASE (British Academic Spoken Corpus). I also provided the students with the examples reached with corpora searches showing the register differences.

In the second phase of the class, I made some searches on COCA (Corpus of Contemporary American English) to show register differences. During my searches, I tried to be as clear as possible keeping in my mind that that course was their first experience with corpora and concordancers. After my practice part, the students were asked to download the practice sheet prepared by the researcher before the class. After they downloaded the practice sheet on "Register Variation and Corpora", they were asked to complete the exercises on the sheet. The practice sheet is presented in Appendix G in Appendices, and a practice sheet completed by a group is also shown in Appendix H. During the practice, I walked around the class to solve any problem students could face, and most of the students agreed that that was good to practice with teacher's support. As time was limited, the students could not share the results they reached; however, they uploaded the practice sheets on the Moodle page that the researcher could evaluate as a part of the course.

At the end of the class, the students filled in the minute papers, and the researcher informed them that there would not be a sit-down exam as stated in the course syllabus. Still, they were informed that they would write a reflection paper. They wanted to write the reflection papers at home and upload them on the Moodle page. The reflection paper template is presented in Appendix I, and a reflection paper written by one of the students is also shown in Appendix J.

3.5.1.7. Week 7

As this week was the midterm exams week, there was no class. However, the students wrote the reflections papers and uploaded them on the Moodle page of the

course.

3.5.1.8. Week 8

In the eighth week of the course, I introduced the topic “Computer-Aided Error Analysis” mentioning both computer-aided error analysis and traditional error analysis. In addition to these two topics, error tagging was also touched upon showing its steps, how it was conducted.

After the theoretical part of the class, I gave a list of topics suggested while collecting the texts for ICLE, and I asked the students to pick one of those topics to write argumentative essays. The list of essay topics is presented below:

1. Crime does not pay.
2. The prison system is outdated. No civilized society should punish its criminals: it should rehabilitate them.
3. Most university degrees are theoretical and do not prepare students for the real world. They are therefore of very little value.
4. A man/woman's financial reward should be commensurate with their contribution to the society they live in.
5. The role of censorship in Western society.
6. Marx once said that religion was the opium of the masses. If he was alive at the end of the 20th century, he would replace religion with television.
7. All armies should consist entirely of professional soldiers: there is no value in a system of military service.
8. The Gulf War has shown us that it is still a great thing to fight for one's country.
9. Feminists have done more harm to the cause of women than good.
10. In his novel Animal Farm, George Orwell wrote: "All men are equal: but some are more equal than others". How true is this today?
11. In the words of the old song "Money is the root of all evil".
12. Europe.
13. In the 19th century, Victor Hugo said: "How sad it is to think that nature is calling out but humanity refuses to pay heed. "Do you think it is still true nowadays?
14. Some people say that in our modern world, dominated by science technology and industrialization, there is no longer a place for dreaming and

imagination. What is your opinion?

Each student chose one of the topics on the list above, and they wrote argumentative essays. They were not informed that I would randomly distribute the essays in the following week that they would tag the errors in the essays using Specific Error Tagging Code (Bennett, 2010) following week (Appendix K). After they wrote the essays, I had a presentation using Cambridge Learner Corpus data, and I showed them the most common errors made by Turkish EFL learners. They were surprised by the results, and they agreed on them as the results showed that the most common error was punctuation errors and incorrect tenses.

At the end of the session, the students filled in the minute papers.

3.5.1.9. Week 9

This week I started the class introducing the error tag set (Bennett, 2010), p.79) I uploaded on our Moodle page of the course. “The Specific Error Tagging Code” is presented in Appendix K. After introducing the tag set, I showed the students one of the essays that I tagged before the class. Also, I showed them how to tag the errors using the error tagging code. After these steps, I gave one essay to each group randomly, and I asked them to tag the essay using the code. The students started to tag the errors in the essays, and I walked around the classroom to help them with their problems. From time to time, as well as technical problems they faced problems that they could not decide on the errors. In the end, they were truly surprised by the errors made by themselves. The practice obviously increased their awareness about the use of English as prospective language teachers. One of the tagged essays is presented in Appendix L.

After they finished tagging the essays, I asked each group to upload the tagged essays onto the Moodle page that each group could download all the essays and compile a small learner corpus using AntConc. As they had learned how to use AntConc beforehand, they did not have any difficulty in this process. Then I asked them to download the “Computer-Aided Error Analysis Results Report” (see Appendix M), and then they were asked to make searches to answer the questions on the practice sheet. During that part, I walked around the class and helped them when they encountered any problems. The practice was not over when the class finished, as a result, they finished the report at home and uploaded it on the Moodle page. A report written by one of the groups

is presented in Appendix N. Before they left the classroom, they were asked to fill in the minute papers.

3.5.1.10. Week 10

Starting from the tenth week on, the course focused more on corpora and material evaluation, adaptation, and development. Based on the booklet prepared by McCarthy (2004), I introduced the topic "Corpus-Informed Material Evaluation, Adaptation, and Development" first, and I provided the students with examples from Touchstone series (McCarthy, McCarten, and Sandiford, 2005) as the series was an example of corpus-informed materials (the book series was based on Cambridge International Corpus (CIC)). Comparing them to corpus-informed materials, also English language textbooks prepared by the Ministry of National Education of Turkey (MoNE) were introduced (Barut, 2017; Gezmis Ceyhan and Ozmen, 2017; Habiboglu and Ozbay, 2017). Furthermore, some exercise examples which had errors in them were also shown to the students to make them aware of the possible errors which could be found in textbooks. After presenting exercises that had some errors on it, proof from the corpus (COCA) was provided to check those errors and correct them.

In addition to the topic "Corpus-Informed Material Evaluation, Adaptation, and Development", we discussed the role of the teacher in material evaluation adaptation, and development to increase the awareness of the students on their role.

After the theoretical part and the examples, I asked the students to download the practice sheet from the course's Moodle page cucorpusliteracy.gnomio.com (see Appendix M). In the practice sheet, there were activity extracts from MoNE English language textbooks. They were asked to decide if there were any errors or not, and then they supported their claim with proof from COCA making related searches. After the proof, they would adapt the activity accordingly. I explained to them the activity; they started to do the practice in groups. As I did before, I walked around the class to help them when they faced any problems. As they could not finish it in the classroom, they continued it at home (see Appendix O for a report prepared by a group). At the end of the session, they filled in the minute papers.

3.5.1.11. Week 11

In Week 11, the students asked me to complete the practice in the class as they

had some questions about some points. For that reason, the groups worked on their practice sheets to finalize the assignment. Again, I walked around the classroom to help them with their problems and facilitated the process. At the end of the class, each group uploaded their assignment on the Moodle page of the course, and we reviewed the exercises in the practice sheets evaluating the errors and adaptation process. Lastly, they filled in the minute papers.

3.5.1.12. Week 12

In the twelfth week, we continued the topic we covered the previous week. In the previous week, we focused more on material evaluation adaptation. In the twelfth week, the focus moved to the comparison of corpus-informed materials to traditional ones. I had a presentation using the exercises in the Touchstone series (TouchStone 1,2,3) (McCarthy, McCarten, and Sandiford, 2005). I told the students that those books were based on the data from Cambridge International Corpus, and we checked the design of the books and the activities in it. After corpus-informed material excerpts, the students were also introduced examples from MoNE books in detail in terms of. Then we shortly compared them concerning our modest observation during the class.

Before the class, I had already uploaded the TouchStone series (McCarthy, McCarten, and Sandiford, 2005) and MoNE English language textbooks on the Moodle platform of the course. In addition to the books, I uploaded a checklist for textbook evaluation (Mukundan, Nimehchisalem, & Hajimohammadi, 2011). I asked the students to download the checklist, and we talked about the items on the list so that they would be able to evaluate the textbooks and compare them accordingly.

In the second phase of the class, we moved to the material development topic. As they already saw examples throughout the course, the theoretical part did not last long. I showed the students an example of corpus-informed material (Appendix P) that I had prepared before the class. I asked them to download it from the Moodle page, and we examined the example together. After this step, they download the practice sheet of the week (see Appendix Q); I explained to them how they would proceed.

In addition to this take-home assignment, the students were asked to compare one book they chose from the Touchstone series as corpus-informed material to one traditional book that they would choose among the MoNE's English language textbooks. They were asked to use the checklist (Mukundan et al., 2011) they were introduced to

compare two books. They were asked to upload the assignments on the Moodle page before the deadline. At the end of the class, they filled in the minute papers.

3.5.1.13. Week 13

The students had a one-week break for the assignments they were required to complete.

3.5.1.14. Week 14

This was the last session of the course. In the last session, the students presented the corpus-informed exercises they prepared. Each group presented their exercises, and the groups made comments on the exercise. In addition, as the teacher, I also commented on the presentations. In the end, we evaluated the course in general. Then I informed them about the semi-structured interviews we would conduct in the following weeks.

3.5.1.15. Week 15 and Week 16

In these weeks, final exams were held. However, as I had already told my students, they would not have any final exams. I took all the assignments they completed in the course of the semester to evaluate their performance.

After introducing the flow of the course, in the next section, I will introduce the Moodle page of the course.

3.5.2. Moodle

As the teacher of the course, I designed a Moodle page (www.cucorpusliteracy.com). Each student registered to my course on the page and reached the whole content. For each week, I prepared separate sections, and I uploaded the necessary documents that the students were required to read. In addition to these, I could upload the assignments, and they could download them and upload them back when they completed them. This was an undeniable advantage both for the teacher and the students as it was decreasing the time limit. Whenever and wherever you were, you could upload or download the documents. A screenshot of the platform is seen in Figure 1 on the next page:

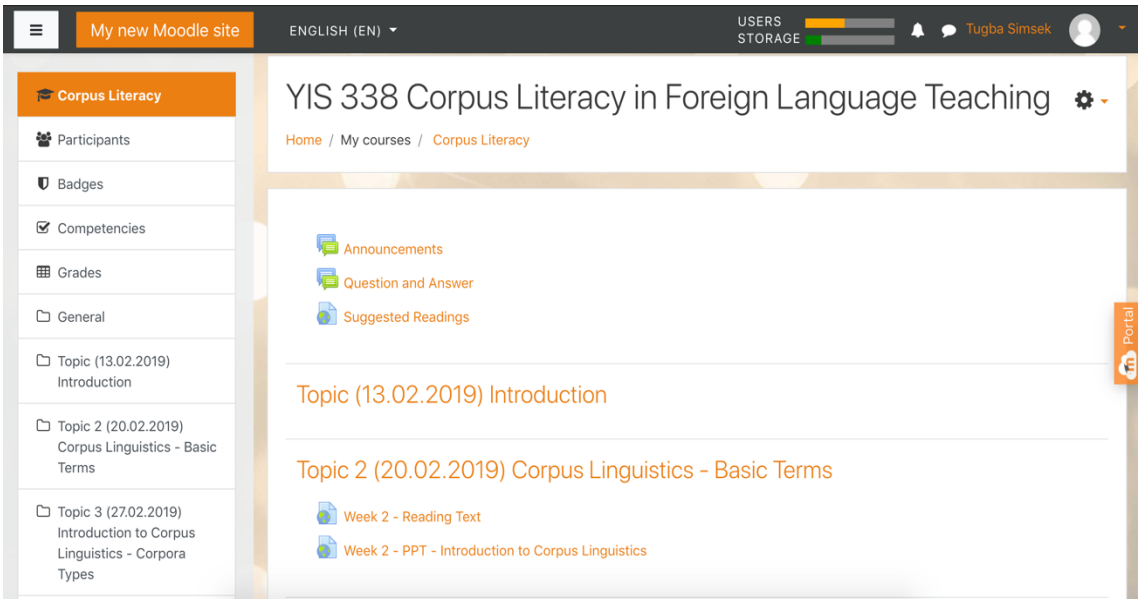


Figure 1. The online teaching platform, Moodle, used in the course

In addition to the advantages above, the students did not need to print out any documents. They could download and upload the documents, and this helped them financially. Furthermore, it was an environmentally friendly course as we did not waste any paper. This was also a model for the students' future carrier.

Thanks to the Moodle page, the students interacted with such a tool, and they improved their computer skills considerably. As the students were prospective English language teachers, the course equipped them with computer skills that they could make use of in their future carrier.

Another advantage of the Moodle page was that you could see each login of each student. It made the teacher observe the interest of the students in the course, and I could check how active they were. Taking all these advantages into consideration, the Moodle page was a highly vital contribution to the course as the course is including technology itself. After giving details of the Moodle page of the course, information about the data collection tools utilized in the study will be stated below.

3.6. Data Collection Tools

For data collection, more than two tools were used to ensure with-in-method triangulation. As data for the research were collected more than one time, data triangulation was also ensured to have a more reliable and valid study. The data collection tools used before, during, and after the study are listed in the following pages:

3.6.1. Pre-Course Questionnaire

In the first week of the course, the students were required to fill in the pre-course survey before the lecture. The survey was adapted from Leńko-Szymańska (2014) who conducted a corpus literacy course for graduate students in Poland. Surveys are vastly used data collection tools across qualitative and quantitative research. In this study, a survey with open-ended questions was preferred considering the purposes of the study. Besides, as this is a qualitative study, open-ended questions would provide more frank and personal comments from the participants (Cohen, Mannion, and Morrison, 2007). In addition, open-ended surveys frame the topic that the participants can stay in the line instead of writing unrelated comments (Cohen, Mannion, and Morrison, 2007).

The purpose of using the survey used was to learn the pre-knowledge of the students in corpus linguistics and their perspectives on the role and importance of language teachers in material evaluation, adaptation, and development. It consisted of 5 questions; the first four questions sought an answer for the first research question of the study, and the fifth question explored participants' perspectives for the second research question:

1. Asking if they are familiar with the term *corpus,* and their familiarity level,
2. Asking them to define the term corpus,
3. Asking them to define term concordance,
4. Asking them to define the term concordance,
5. Asking them to define the role and importance of language teachers in terms of material evaluation, adaptation, and development.

3.6.2. Minute Papers

As the present study is a qualitative one, it aims to explore all the phases and details before, during, and after the course. Taking this into consideration, minute papers were used to make the students evaluate each class immediately after the class. As Angelo and Cross (1993) state this quick feedback provides more than one advantage. It does not only provide feedback about the class but also it lets the students reflect on the course not by mere recall but by thinking elaborately on the session.

The purpose of using minute papers in this study was to be able to learn the efficacious and ineffective parts of the course; in addition, the students wrote their suggestions for each class to improvise it for future classes. Each minute paper consisted

of three questions. Although the wording was mostly different, the main propositions of the questions were similar. The students were required to write:

1. Efficacious parts - what they learned,
2. Ineffective, problematic part,
3. Suggestions for any inefficient part.

Minute papers had been collected for 10 weeks depending on the convenience of the week's content and course construct, and each of the minute papers was analyzed to evaluate the perspectives of the participants on the efficacious and ineffective aspects of the course, and their suggestions to improve the course. This data collection tool was used to find answers to research question 4. Samples of minute papers from Week 3 and Week 8 are presented in Appendix T.

3.6.3. Student Reflection Papers

As it has been stated before, this study aims to investigate the case of designing and conducting a corpus literary course in an ELT program in depth. As a result, it implements triangulation to obtain a comprehensive collection of data. By doing so, a broad picture of the phenomena is aimed to reach. Regarding this, the students were required to write a reflection paper on the corpus literacy course in the mid-term exam week. The researcher aimed to collect a set of data after the first half of the semester had finished evaluating the flow of the course from the students' perspectives.

Reflection papers were analyzed to understand the students' perception of the course to answer research question 4. However, they not only wrote about effective and ineffective sides of the course but also what they learned during the course, how they could apply what they learned here in their teaching career in the future, etc.

3.6.4. Teacher Journal

One of the aims of this study is to evaluate the designed corpus literacy course to reveal its effective and problematic sides and improve it for the related future classes. While evaluating the course, the participants (student teachers) continuously reported on the course to evaluate it in elaborately. The purpose was to make the data more reliable as within method triangulation requires the researcher to collect data at various stages of the research with various data sources. In line with these purposes, data were not only collected from the participants but also from the researcher/teacher. The researcher kept

a journal keeping the notes on reflections for each session right after the class. The purpose was to evaluate the class not only from one point of view (student) but also from the teacher's/researcher's view. Moreover, she proposed some suggestions to solve the problems in future versions of this particular course. With the data collected, answers to research question 6, which explores the teacher's evaluations of the course, were sought.

3.6.5. Teacher Classroom Observation

As stated in the Teacher Journal part (3.6.5.), the study focused on gathering the collection of data to understand the case in a comprehensive manner. For this purpose, teacher classroom observation was also used as part of the data collection to examine the classroom time not to overlook any details which might be helpful in the interpretation of the process. As Cohen, Manion and Morrison (2007) suggest, observation as a data collection tool has a special feature that it permits the researcher to collect data from the live situation, not from a second person or medium. So, it provides more reliable and authentic data for the purpose of the research.

Thanks to classroom observation, the researcher could take instantaneous notes during the sessions, and she could elaborate on them while writing the teacher journal later on. Furthermore, observation helped her not to miss any crucial points that required particular and immediate attention. Moreover, she could have the chance to determine the matching and distinguishing issues between the observation of the researcher and the minute papers written by the participants. The data obtained in this respect also contributed to seeking answers to the research question 6 investigating the teacher's/researcher's evaluation of the effectiveness of the course.

3.6.6. Semi-Structured Interviews

As Kvale (1996, cited in Cohen, Manion & Morrison, 2007) suggests an interview as a way of interchanging the ideas of two or more people on a topic. The interview does not see data as somehow external to individuals. Yet, it claims that data come from exchanging ideas through the conversation between humans. As a result, it is claimed that the interview data do not derive from life, but it is the life itself as the interviewers or interviewees discuss their interpretations of the world in which they live, and express how they regard situations from their own point of view (Kvale, 1996, cited in Cohen, Manion & Morrison, 2007). Parallel with the aim of this study, interviews provide data from real-

life and in the form of a conversation between two people. As the purpose of this study is to conduct qualitative research that explores the phenomenon elaborately, a semi-structured interview was preferred as a data collection tool.

After the semester finished, the students were interviewed individually. These semi-structured interview sessions were recorded and transcribed after the interviews. During the sessions, a semi-structured interview form (see Appendix S) was used to allow the researcher flexibility during the interview as she might need to add supplementary questions when needed or the participant could add any more detail or propose a different perspective.

Questions were used to elicit student teachers' perspectives on the course in general. When the course was over, they provided more detailed accounts about the course's effective and ineffective sides. In addition, they proposed the researcher rather solid suggestions related with the conducted course for further improvements. This data collection tool was utilized to answer question 4 which aims to outline participants' evaluation of the course. After all, 20 participants were interviewed, the recordings were transcribed and analyzed by the researcher.

3.6.7. Focus Group Discussions

Strengthening the reliability of the research results, another data collection tool was used at the end of the course to get the students' thoughts on the course in general. Focus group discussion was favored as a data collection tool in the form of a group interview. The distinctive feature of it is that the participants can discuss the topic among themselves instead of having a discussion where there are only two ways of communication between the interviewer to and from the group (Cohen, Manion & Morrison, 2007). As a result, an interactive discussion platform is created which results in a collective emergence of data directly from the participants, and the predominance of the investigator is lessened this way. Using this tool, triangulation is strengthened.

After the semi-structured interviews were completed, the students were divided into two groups of 10 each. Both of the groups were posed the same questions (see Appendix S) which were asked during the semi-structured interviews. However, as the interviews were semi-structured, some minor modifications were introduced regarding the flow of the discussion. Nevertheless, all the questions were directed to elicit their thoughts on the course in general enabling them to reflect on the whole semester in terms of the evaluation

of the positive and required-to-improve components of the course. Furthermore, they suggested some changes to implement in the future versions of course to contribute its efficiency. Complementary to the semi-structured interviews, focus group discussions also provided data to answer research question 4.

3.7. Procedure

The present study' aims are multiple, firstly it aims to identify whether there is a need for a corpus literacy course, and then design one according to the needs of pre-service foreign language teachers. In addition, it also seeks answers to the questions about whether the proposed course design and its contents had any effect on the participants' language awareness and perspectives on the role of the language teachers in material development. The study also investigates the evaluations made by the participants of the study and the course teacher to determine the effective and problematic aspects of the course as well as the suggestions made to improve the course for future semesters.

Regarding these aims, first of all, the course syllabus was prepared after examining the corpus literacy courses' syllabi shared in the previous research. Not only the existing syllabi were checked to prepare the syllabus, but also related literature was closely investigated to understand what parts were relevant to the present study and what were missing. Besides, the current situation in Turkey regarding the corpus linguistics courses suggested was also taken into consideration as mostly more theoretical courses are conducted in graduate studies. In the end, the first draft of the syllabus for one semester was designed, then the opinions of three experts in language teacher education field were taken during the thesis development report presentation, and it was redesigned. The second draft of the syllabus was introduced some minor modifications after one expert examined it in terms of the topics to be covered and their sequencing, and then the finalized version was created.

Based on the prepared syllabus, the researcher started to prepare activities and the content of the course. Similar to the design of the course, the prepared activities and the course content were checked by an expert in the field. Even during the semester, if needed, expert opinion was requested. After having the finalized activities and readings for the course, the researcher started to prepare the online teaching platform on Moodle. All the course content was shared week by week with the students along with the online assignments, and all the other documents. This touch facilitated the course process and enhanced technology integration into teaching.

Preparing the syllabus, the course content, and the online teaching platform Moodle, the course started in the spring semester of 2017-2018 academic year. Firstly, the students were informed about the course during the first class, and their consent was taken. After that step, they were asked to fill in the pre-course survey to determine their familiarity with corpus linguistics asking them about very basic terms in corpus linguistics. In addition, an open-ended question, "*Define in your own words what the role and importance of language teacher in terms of material evaluation, adaptation and development is,* was asked to gather data on their perspectives on the role of the language teachers in material evaluation, adaptation, and production. Thus, the first set of data was collected in the very first session. Throughout the semester, after each class, they were asked to write minute papers to evaluate that class activities. This helped to monitor each week in detail. In addition to the students' evaluations, the teacher also wrote down her own observations each week and she kept a journal evaluating the course weekly. In the 8th week, the students were requested to write a reflection paper again evaluating the first half of the course. They wrote about what they learned, how they could utilize them in the other courses in the department, how they can use them in the future as language teachers, the effective aspects of the course, and the ineffective aspects of the course; in addition, they contributed with their suggestions to increase the effectiveness of the course.

As in the first half of the course, the students learned more about corpora and how to use them, in the second half of the semester, they learned how to make use of corpora in material evaluation, adaptation, and production. They continued to evaluate the classes each week filling in the minute papers. At the end of the semester, the students were interviewed one by one at different time slots. After all the participants were interviewed, two focus group discussions were conducted dividing the participants into two 10-people groups.

Collecting the last set of data through the focus group discussions, the data collection phase was over. After this step, all the collected data were transcribed by the researcher and computerized to move onto the coding phase. Before starting to use the computer content analysis program UAM Corpus Tool, the data sets were read several times by the researcher to get familiar with the data and have some general understanding of them. Then the first cycle of coding started, and the categories emerged inductively as they were not pre-determined, the recurrent codes were grouped, and the categories emerged from those groups of codes. After the first coding, the expert opinion was taken to examine whether the labels for the categories were meaningful and whether there were overlapping

categories, and then the recoding was conducted. When the second coding cycle was completed, another expert opinion to determine the final labels for the categories was taken, and the finalized categories were determined at the end.

3.8. Data Analysis

The present study aims to investigate the participants' pre-knowledge in corpus linguistics, the phenomenon of introducing a corpus literacy course into an English Language Teaching, and the possibility of raising language and pedagogical awareness of the participants through the course. In addition, another purpose of it is exploring whether the course results in any changes in the students' perspectives on the teacher's role and importance in material evaluation, adaptation, and development. Finally, the study gathers the participants' and researcher's evaluations of the course to outline effective and ineffective sides of the course, and suggestions to improve the course in future research. Taking the qualitative nature of the study, the aims of it, and the parallel data collection tools, content analysis was conducted to analyze the collected data.

Krippendorff (2004, p. 18) defines content analysis as "a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use". It is claimed in his work that as a research technique, the content analysis provides the researcher with new perspectives and improves her comprehension of specific phenomena by informing her practical actions. In this study, the content analysis provided the researcher with invaluable insights to grasp the details of the phenomena of conducting a corpus literacy course and investigating the effects of it and make inferences.

With content analysis, a systematic and strict procedure is followed to examine and verify the content of the data to be analyzed (Cohen, Manion, & Morrison, 2007). It gets the text, examines, verifies, and summarizes it through pre-determined categories and emergent themes. While realizing these, it uses "a systematic, replicable, observable and rule-governed analysis for the application of those categories" (Cohen et al., 2007, p.476). It is clear that content analysis follows a scientific and reliable procedure while analyzing the data. However, it should be also noted that the texts suggest subjective interpretations; it means that they do not reveal any objective reader-independent outcomes. Instead, it provides multiple meanings (Krippendorff, 2004). In this study, the researcher also followed a set of steps proposed in Krippendorff (2004, p. 476-483):

1. Defining the research questions to conduct content analysis,

2. Define the population,
3. Define the sample to be included,
4. Define the context of the generation of the document,
5. Define the units of analysis,
6. Decide the codes,
7. Construct the categories for analysis,
8. Conduct the coding and categorizing of the data,
9. Conduct the data analysis,
10. Summarizing,
11. Making inferences.

Table 3 summarizes the data collection and data analysis information for each research question:

Table 3

The Data Collection Tools and Data Analysis Plan per Research Question

Research Questions	Data Collection Tools	Data Analysis
1. Are pre-service English teachers familiar with corpus linguistics? If yes, to what extent?	Pre-course survey	Descriptive Analysis
2. Does a corpus literacy course in language teacher education affect ELT pre-service teachers' perspectives on teacher role in terms of material evaluation, adaptation, and development? If so, how?	Pre-course survey, Semi-structured Interviews at the end of the course, Focus Group Discussions	Computer Content Analysis – UAM Corpus Tool 3
3. Does a corpus literacy course in language teacher education raise ELT pre-service teachers' language awareness? If yes, how?	Reflection papers, Semi-structured Interviews at the end of the course, Focus Group Discussions	Computer Content Analysis – UAM Corpus Tool 3

4. What is the overall evaluation of ELT pre-service teachers about the corpus literacy course in their language teacher education program? 4.a. What are the efficacious aspects of the course? 4.b. What are the difficulties that pre-service teachers faced during the course? 4.c. What kind of improvements are suggested to increase the effectiveness of the course?	Minute Papers, Reflection papers, Semi-structured Interviews at the end of the course, Focus Group Discussions	Computer Content Analysis – UAM Corpus Tool 3
5. What is the overall evaluation of the teacher/the researcher about the corpus literacy course in language teacher education problem? 5.a. What are the efficacious aspects of the course? 5.b. What are the difficulties the teacher/the researcher faced about the course? 5.c. What kind of improvements does she suggest to increase the effectiveness of the course?	Teacher Journal, Classroom Observation	Manual Content Analysis

As presented in Table 3, for the first research question “pre-course survey” was used to identify participants’ knowledge in corpus linguistics. Descriptive analysis was conducted to obtain the results.

For the second question, which questions the effect of the course on the students’ perspectives on teacher role in material evaluation, adaptation, and development, three data collection instruments were utilized: pre-course survey, semi-structured interviews, and focus group discussions. The collected data were analyzed through UAM CorpusTool.

For the third research question, which aims at revealing whether the course raises participants' language awareness, reflection papers, semi-structured interviews, and focus group discussions were administered to collect the data.

For the fourth research question, which examines participants' evaluations of the corpus literacy course, minute papers, reflection papers, semi-structured interviews, and focus group discussions were employed, and UAM CorpusTool was utilized to analyze the data.

Finally, for the last research question focusing on the teacher's/researcher's evaluation of the corpus literacy course, teacher journals and classroom observation notes were used.

3.9. Data Annotation and Analysis Tool

In this study, data analysis was carried out by the means of UAM CorpusTool 3.0 (http://www.corpustool.com/index.html). The tool has been developed by O'Donnell (2008) of Universidad Autónoma de Madrid, Spain. The reasons for deciding on this tool could be listed as:

a. It is free.
b. It has a simple and user-friendly interface.

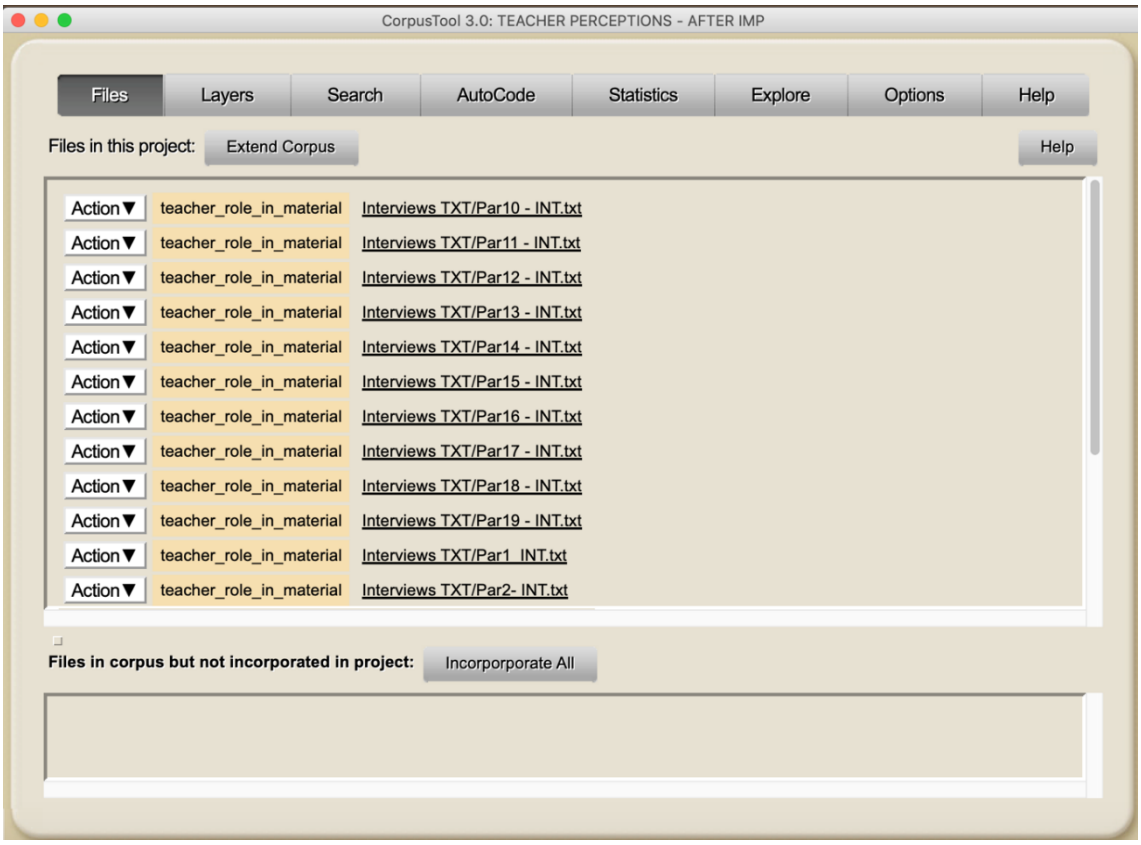


Figure 2. The interface of UAM corpus tool 3.0

c. It works both on both DOS and OS operating systems allowing a certain flexibility for the researchers.

d. It gives the possibility of annotating multiple texts within the same annotation scheme designed by the researcher. The schemes can be modified during the annotation process. Below in Figure 3 there is an exemplary scheme for research question 2:

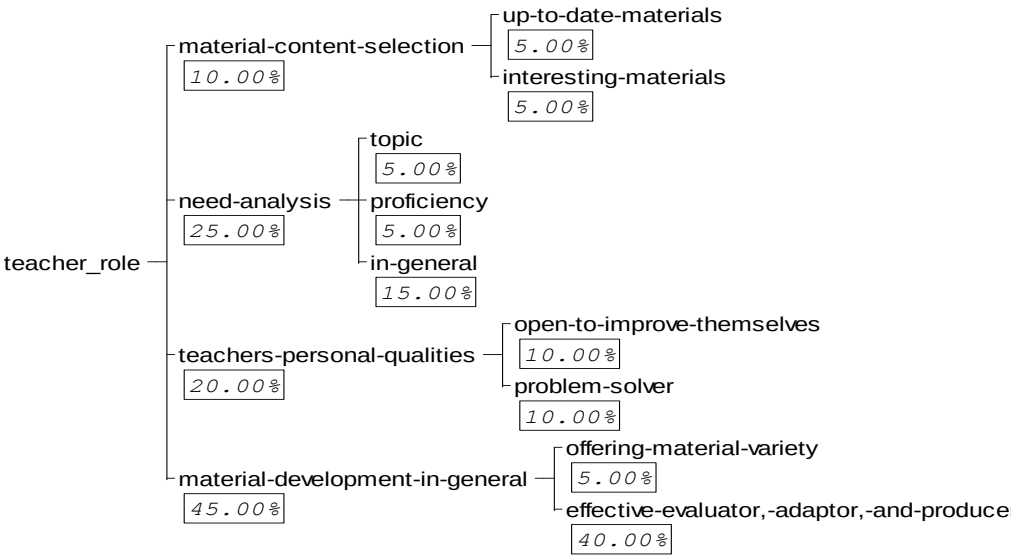


Figure 3. An exemplary annotation scheme designed by the researcher

The annotation scheme was created after the collected data were first annotated for the teacher roles in material evaluation, adaptation, and development processes. After this step, all the annotations were entered to the software. Completing the multiple careful checks of the codes, data-driven categories emerged (material content selection, need analysis, teachers' personal qualities, material development in general). In order to place annotations under these categories, they were recoded. After that step, another evaluation was done to confirm the sub-categories and the related annotations were inserted in an orderly manner.

This process allowed the researcher to reevaluate the categorization continuously as the categories emerged inductively, they were not pre-determined but data-driven. In other words, the coding process was not completed in one step; instead, annotations were repetitively evaluated and modified to be consistent throughout the analysis process. UAM CorpusTool 3.0 allows the researchers:

e. to annotate a text at multiple levels (e.g. Noun phrase, clause, sentence, paragraph, or whole document);
f. to create multiple layers while annotating one text to answer different questions;
g. to access the statistical calculations which makes the results more reliable decreasing the human error saving the researcher's time tremendously;
h. to take notes for each annotation. Thus, the researcher can take notes and reconsider those codes;
i. to mark the annotations to be used as excerpts in the findings sections;

Taking these advantages into consideration, UAM CorpusTool 3.0 was selected as the data analysis tool for this study.

3.10. Trustworthiness

It is highly important in research to demonstrate the true value of the study to persuade the target audience that the results of the study are significant to pay attention to, and they are also reliable (Lincoln and Guba, 1985). In order to achieve that, in qualitative studies, four criteria should be met: credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985, p. 301). These criteria were met following the guidelines given by Lincoln and Guba (1985).

Credibility: In this study, the credibility was provided firstly by the prolonged

engagement that the researcher stayed in the field during the semester as the researcher was also the teacher. It provided her with the chance of doing “persistent observations”. As a result, all the possible distortions such as technical problems were detected and removed. Besides, these also helped the researcher not to have biases on the research data as all the process was observed by her. Furthermore, triangulation was also secured as data triangulation, with-in-method triangulation, and investigator triangulation were provided. For data triangulation, the data were collected before the course, during the course, and at the end of the course both from the students and the course teacher. For with-in-method triangulation, different data collection tools were utilized such as a pre-course survey, minute papers, reflection papers, semi-structured interviews, focus group discussions, teacher journals, and classroom observations. Finally, for investigator triangulation, the data coding and categorization was monitored by three researchers to ensure reliability at different phases. Another factor ensuring credibility was “peer debriefing” that there was a discussion with the colleagues continuously over the research which also provided different perspectives. Considering all these steps, the researcher of the study aimed to make the findings of the study credible.

Transferability: The trustworthiness of the study can be strengthened by making it transferable, in other words, generalizable. However, qualitative studies do not aim to have generalizable results; instead, they focus on their cases in specific contexts. As a result, the findings reached at a time in a context might not be reached at another time in another context. Still, a “thick description” (Lincoln ang Guba, 1985, p. 316) of the context might be helpful for the other researchers. In this study, all the details were explained elaborately to enlighten all the steps for other researchers, which might allow them to make judgments on the transferability. Moreover, purposive sampling was applied instead of random sampling so that the range of the data to be collected was maximized by purposefully choosing the context and the participants. Following these steps, transferability was intended to be achieved.

Dependability: A trustworthy study should be replicable that if it is repeated with the same or similar participants in the same or similar context, the same results should be obtained. As the present study’s credibility was secured by supporting it with three different kinds of triangulation, this also supports dependability so that the other researchers who want to replicate the study could manage it easily following the transparent steps.

Confirmability: A study should consist of objectively documented findings instead of

the biases of the researcher to confirm its results. In order to provide that the "prolonged engagement" was prioritized that the researcher was always in the field so that the biases could be minimized as much as possible. Moreover, three different triangulation methods were utilized to decrease the subjectivity and the biases of the researcher that the data were collected at different times both from the students and the course teacher, seven different data collection tools were used during the study, and experts were counseled during data analysis. Taking all these into consideration, the confirmability of the study was intended to be achieved.

Following the particular steps to meet the four criteria of trustworthiness, the study is assumed to be credible, transferable, dependable, and confirmable.

3.11. Ethical Considerations

Working with humans brings certain responsibilities for the researcher that the research does not harm the participants in any possible way and ensures them about *confidentiality, privacy, anonymity, intrusiveness, inappropriate behavior,* and *justice*. This study also followed these criteria not to violate any ethical rule. First of all, the informed consent of the participants was taken before the study started and the one who did not volunteer to take part in the study were excluded from the data. In addition, they were informed about the outcomes of the study and the process stating that there would be no harm to the participants, and all the data would be kept and presented in the study anonymously; moreover, confidentiality would be ensured that the collected data would not be given to anyone else. It was also shared that there would be neither inappropriate behavior during the study nor intrusive actions that would abuse the time and space of the participants.

Getting their informed consent, providing confidentiality, privacy, and anonymity, and informing the participants about the intrusiveness, inappropriate behavior, the ethical considerations were prioritized in this study.

3.12. Chapter Summary

This chapter introduced the research paradigm, the design of the study, data collection tools, the corpus literacy course, its content and structure, the data analysis tool, and the data analysis process. Moreover, it also presented how it secures trustworthiness and prioritizes the ethical considerations. In the following chapter, the findings of the study will be presented.

CHAPTER IV

FINDINGS

4.1. Introduction

In this chapter, the results of the data analysis for each research question will be presented in detail. The results gathered through different data collections tools have been presented under separate sections to elaborate on data. The data were obtained at different points of the semester as the timing of the data collection was highly important for this study to monitor the newly introduced course throughout the semester. Moreover, at the end of each question, an overall summary has been presented.

4.2. Results for the Research Question 1

Are pre-service English teachers familiar with corpus linguistics? If yes, to what extent?

The first research question of this study aims to investigate whether pre-service English teachers are familiar with corpus linguistics and its basic terms or not. For this very reason, a pre-course survey was performed at the first session of the course in which participants had to write about the basic terms in corpus linguistics. The results of the obtained data are clarified in the following section.

After the students registered to the course, a pre-course questionnaire was given to the students to collect information about their pre-course knowledge about corpora and related concepts (corpus, concordance, and concordance). The purpose of collecting these data was to have an idea about the profile of the students and their familiarity with corpus linguistics. As only 18 students were present in the first class, the answers could not be collected from all 20 participants. Initially, the familiarity of the students with corpus linguistics terms was questioned. The results are presented in Table 4:

Table 4

The Familiarity of Students with Corpus Linguistics Terms

Familiarity with corpus	**N**	**%**
I have never heard the term corpus before.	6	33.3
I have heard the term corpus before, but I have no idea what it is.	7	38.9
I have heard the term corpus before, and I have a rough idea of what it is.	4	22.2
I am familiar with corpus linguistics, but I have never done any practical work with corpora.	0	0
I have already done some work with corpora.	1	5.6
Total	**18**	**100**

n:18

It is seen in Table 4 that 7 students (38.9%) stated to be familiar with the term *corpus* before; however, they had no clear idea what it was. Yet, 6 (33.3%) students declared that they did not hear the term corpus before. Among 18 students, only one of them (5.6%) did some work with corpora before the course. In addition to these questions, in the 2nd part of the questionnaire, the students were asked about the definitions of some terms in corpus linguistics to check whether they were conversant with the basic concepts in the field or not. The first term asked was *corpus*. The answers given by the students are displayed in Table 5:

Table 5

"Corpus" Definitions Written by the Students

Definitions	**N**	**%**
A part of the brain	5	33.3
A computer program	2	13.3
Something useful to teach technology	1	6.7
The smallest part of an object	1	6.7
Any kind of set of information about teaching a language for pre-service teachers	1	6.7
Something about how to read and write	1	6.7
Something about etymology	1	6.7
Writing an essay and publishing it online	1	6.7
With a corpus, we do not need a native speaker to ask about appropriate structure, chants, etc.	1	6.7
It is the collection of written or spoken texts in the language.	1	6.7
Total	**15**	100

n**:** 18

Table 5 shows that out of 18 students, 15 of them could write some sort of definition for the term *corpus* in their answers, the other 3 could not give a definition. However, among the 15 students, only 2 students had a clear idea about corpus; 1 of them (6.7%) wrote the definition considerably well stating *"a collection of written or spoken texts in a language"*, and 1 other student (6.7%) could not define it but wrote an advantage of using corpora stating, *"We do not need a native speaker to ask about appropriate structures".* Apart from these 2 answers, 13 (86.7%) more answers were given. Yet, they did not approximate the correct definition. The most frequently (N=5, 33.3%) given answer was "a part of the brain". Most probable reason for that is the participants confused it with *corpus callosum*.

Another question asked in the pre-course survey was about the definition of *concordance*. To measure the familiarity of the students with corpus linguistics terms, they were also asked to define *concordance*. The definitions suggested by the students are presented in Table 6:

Table 6

"Concordance" Definitions Written by the Students

Definitions	**N**	**%**
Collecting something	1	14.3
An airline company	1	14.3
An index in the language	1	14.3
Relating and using suitable things together	1	14.3
Appropriateness	1	14.3
Harmony	1	14.3
Adaptation	1	14.3
Total	**7**	100

n:18

As is seen in Table 6, only 7 students (39%) out of 18 tried to define *concordance*; and none of the answers were correct. Each answer stated something different; besides, they were not related to each other. Although 2 students could write correctly about *corpus*, none of the students could define *concordance* correctly. This indicates parallelism with the results presented in Table 4 revealing that most of the students had no prior idea about *corpus* and only few of them had a rough idea about it. Only 1 student stated that he/she worked with corpora before. Namely, although there were some correct answers for *corpus*, there was no correct answer for *concordance*.

The last question about definitions to investigate the students' familiarity with corpus linguistics was the term *concordancer*. The students were asked to write the definition of for this in their own words. The results are displayed in Table 7:

Table 7

"Concordancer" Definitions Written by the Students

Definitions	**N**	**%**
Somebody who collects something	1	25
A plane name	1	25
The person who uses the related materials	1	25
The thing or person that adapts to the situation	1	25
Total	**4**	100

n:18

Table 7 shows that only 4 students (22.2%) out of 18 could write a definition for *concordancer*. None of the definitions written were correct. 4 answers were different from each other and irrelevant. However, the answers provided were related to the answers

given for *concordance*. For example, a student defined it as *"collecting something"* while defining *concordancer* as *"somebody who collects something".*

We can infer from the results of the pre-course survey that most of the students did not have prior information about corpus linguistics and related terminology. Consequently, this denotes that a new course on *Corpus Literacy in Foreign Language Teaching* would introduce new and innovative content as a part of their education.

4.3. Results for the Research Question 2

Does a corpus literacy course in language teacher education affect ELT pre-service teachers' perspectives on teacher role in terms of material evaluation, adaptation, and development? If so, how?

For this research question, three different data collection tools were employed: *pre-course questionnaire*, *semi-structured interviews*, and finally, *focus group discussions*. In this vein, the pre-course survey was designed to determine the participants' perspectives on the teacher's role in material evaluation, adaptation, and production. At the end of the course, semi-structured interviews and focus group discussions were held to compare the results to the questionnaire results to see whether the course had any effect on the students' perspectives on teacher role in material evaluation, adaptation, and production. The results from the pre-course survey, semi-structured interviews, and focus group discussion will be presented below respectively.

The descriptive results for the rest of the study are presented in a format that both the number of the participants who provided answers for a specific category and the percentage information are provided in the tables. The "Total N" value in the tables and "n" value (e.g. n:18). under the tables indicate the total number of participants from whom the data were collected.

4.3.1. Results of the Pre-course Survey

One of the reasons to use the pre-course survey was to determine the students' *perspectives on teacher role in material evaluation, adaptation,* and *development*. The questionnaire included an open-ended question:

> *"Define in your own words what the role and importance of language teacher in terms of material evaluation, adaptation, and production are."*

15 students (out of 20) answered the question pointing out the importance of teacher

role in material evaluation, adaptation, and development. The overall coding scheme might be depicted as follows in Figure 4:

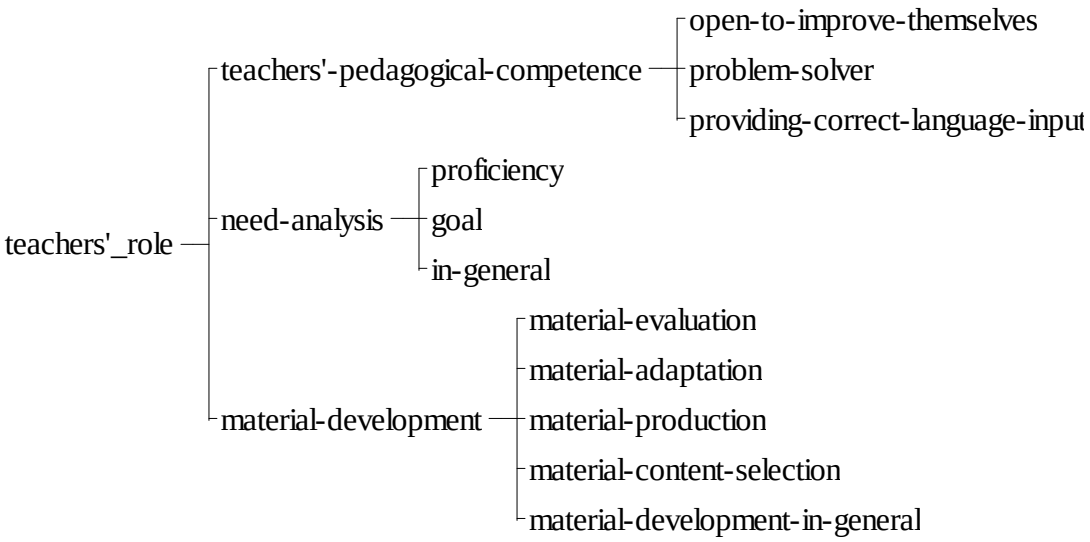


Figure 4. Overall coding scheme of pre-course questionnaire results for teacher role in material evaluation, adaptation, and development

The figure shows the overall picture of student perspectives on teacher role in material evaluation, adaptation, and development. Three main categories are emerging from the content analysis: teachers' pedagogical competence, need analysis, and material development. Each category has also sub-categories to reflect the participants' perspectives better. In the tables below the findings will be presented in detail. Table 8 shows the overall results concerning teacher role in material evaluation, adaptation, and production:

Table 8

Overall Results of the Pre-course Survey regarding Teacher Role in Material Evaluation, Adaptation, and Development

Teacher Role in Material Evaluation, Adaptation, and Production		
	N	**%**
Teachers' Pedagogical Competence	3	16.7
Need Analysis	3	16.7
Material Development	13	72.2
Total N	18	

n:18

18 students were distributed the pre-course survey to learn their perspective on

teacher role in material evaluation, adaptation, and production. Out of 18, 15 participants answered the questions. However, the codes and the categories emerged from 13 participants' answers. 2 of the participants did not have clear answers; Participant 20's statement can be shown as an example:

Excerpt 1:

"If the teacher adapts and learns easily the development evaluations, it will be beneficial for his job, and it will be more effective."

The results show that the students pointed out three different areas out which affect the effective material development process. The most frequently used item was "Material Development", which was mentioned by 13 different participants (72.2%). The students answered the question simply stating that teachers should be able to evaluate, adapt, and produce materials instead of giving a detailed answer. The other two categories were highlighted by the same number of participants. The codes for the categories *Need Analysis* and *Teachers' Pedagogical Competence* were stated by 3 participants only (16.7%) out of 18 participants. The students asserted that a teacher should be able to analyze the needs of the learners that material development could be more successful. In the category "Teachers' Pedagogical Competence", the students highlighted that teachers should have good pedagogical qualifications to have pedagogical competence and to be able to be effective in material evaluation, adaptation, and production. These results show that the participants had some general ideas about teachers' role and importance in material evaluation, adaptation, and production.

After introducing the overall results, each category will be detailed below for better interpretation. Although the frequency is not high, it was acknowledged that teachers' pedagogical qualifications are highly significant for better material development, 3 students (16.7%) out of 18 stated that teachers' pedagogical competence is important for material evaluation, adaptation, and production. The detailed results are shown in Table 9:

Table 9

Results of Pre-course Survey for "Teachers' Pedagogical Competence" Category

Teachers' Pedagogical Competence		
	N	**%₁**
Open to improve themselves	2	11.1
Problem solver	1	5.6
Providing correct language input	1	5.6
Total N	18	

n:18

As is seen in Table 9, the participants had the perspective that teachers should have pedagogical competence; however, neither the number of the students nor the frequency of the utterances is high. They found three pedagogical qualifications important to be effective in material evaluation, adaptation, and production. First, 2 participants, who are 11.1% of the participants who were asked to answer this question, stated that the teachers should be *"be open to improve themselves"*. One example from Participant 5 is shown here in Excerpt 2:

Excerpt 2:

"Every teacher has his/her style in terms of teaching and teachers should improve themselves about everything in teaching. Materials and development of them are one of the things that they should give importance to."

The second pedagogical qualification to be a better teacher in material evaluation, adaptation, and production was *"being a problem solver".* Only 1 student (5.6%) out of 18 stated that the teacher should be a problem solver and get over the difficulties. The same student emphasized this qualification two times stating:

Excerpt 3:

"In terms of getting ready for all the difficulties in the teaching process, the role of the teachers is important. The teacher has the role of getting over the obstacles."

The second category emerged from the pre-course questionnaire answers was "Need Analysis". The participants' answers pointed out that they thought that teachers should conduct need analysis first to be able to evaluate, adapt, and produce materials more efficiently. The results are presented in Table 10:

Table 10

Results of Pre-course Survey for "Need Analysis" Category

Need Analysis		
	N	**%**
Proficiency	1	5.6
Topic	1	5.6
Need analysis in general	2	11.1
Total N	18	

n:18

Similar to the previous sub-category, the students gave broad answers in this category, too. The number of participants who emphasized the importance of need analysis in material evaluation, adaptation, and production was considerably low. It was stated by 1 student (5.6%) out of 18 that teachers should evaluate, adapt, and design the materials according to the proficiency levels of the students. The only statement was shared by Participant 18:

Excerpt 4:

"The teachers should create their materials according to students' and classrooms' needs, develop the materials according to their achievement."

Also, 1 student (5.6%) highlighted that the topics to be taught should be taken into consideration before developing the materials. However, the answers did not imply specifications. 2 students stated that the needs of the students should be taken into consideration in material evaluation, adaptation, and production process. The answers implied that at that time the students did not have clear and detailed ideas on the role of teachers in material evaluation, adaptation, and development. All in all, the points stated were considerably few.

The last main category that emerged from the collected data was *"Material Development"*. This broad label is used for this category as the answers from the students were significantly broad. Consequently, a need for a broad category name was necessitated. The sub-categories for this category, the frequencies and percentages are provided in Table 11:

Table 11

Results of Pre-course Survey for "Material Development" Category

Material Development		
	N	**%**
Material evaluation	3	16.7
Material adaptation	2	11.1
Material production	3	16.7
Material content selection	3	16.7
Material development in general	4	22.2
Total N	**18**	

n:18

As seen in Table 11, there are five sub-categories of the category *"Material Development"*. As it is stated above the statements provided by the participants were rather broad. Only 3 students (16.7%) out of 18 stated that teachers should evaluate the materials effectively. Similarly, solely 2 students overtly (11.1%) said that teachers should adapt their materials to serve better. In addition, 3 students (16.7% of the students asked to answer the question) said that teachers should produce materials themselves. One other sub-category was *"Material content selection"*. 3 students (16.7%) added that teachers should choose material content carefully. For example, Participant 8 emphasized that the material should be interesting:

Excerpt 5:

"The material content and teaching variety are key in teaching; it should be in a way that creates curiosity in students which makes them more interested in the lesson."

As it is seen in Excerpt 5, the student finds using interesting material content is key to teach more effectively and make the learning process better for the students.

The last category, which was stated the most frequently, was *"Material development in general".* This fact shows that the participants did not have clear and to the point opinions about the role of the teacher in material evaluation, adaptation, and production. Otherwise, they could have stated more detailed and sophisticated answers. Although this was the category that had the highest number of students answered, only 4 students (22.2%) out of 18 stated that teachers should be able to develop materials for their teaching. This again shows that the other 11 students did not share any opinion about the role of the teacher in material development.

As seen in the tables, pre-course questionnaire results indicate that the participants had limited views in terms of teacher role in material evaluation, adaptation, and development. Not only the categories are few, but also the number of statements is rather limited.

As the purpose of this question is to determine whether there is a difference between the perspectives of participants before and after the course in terms of teacher role in material evaluation, adaptation, and production; the pre-course survey results are compared to semi-structured interview results and focus group discussion results. In the following section, the results gathered from semi-structured interviews are presented in detail comparing them to pre-course survey results.

4.3.2. Results of Semi-Structure Interviews

The results of the pre-course survey have been presented in the previous part, and in this section, the results of semi-structured interviews will be given in detail to see whether any changes have been in the perspectives of the participants in terms of the role of the teacher in material evaluation, adaptation, and production. The interviews were conducted after the course face to face with each participant. In addition, the questions which was directed to the participants was *Do you think this course (Corpus Literacy in Foreign Language Teaching) affected the way you perceive the role of the teacher in material evaluation, adaptation, and production? After this course, what is the role of the teacher in material development for you?* The aim of the formulation of the question was to eliminate or diminish the effect of other courses or their other experiences they had during their academic year on their answer. In Figure 5, the overall scheme of the semi-structured interview results is shown:

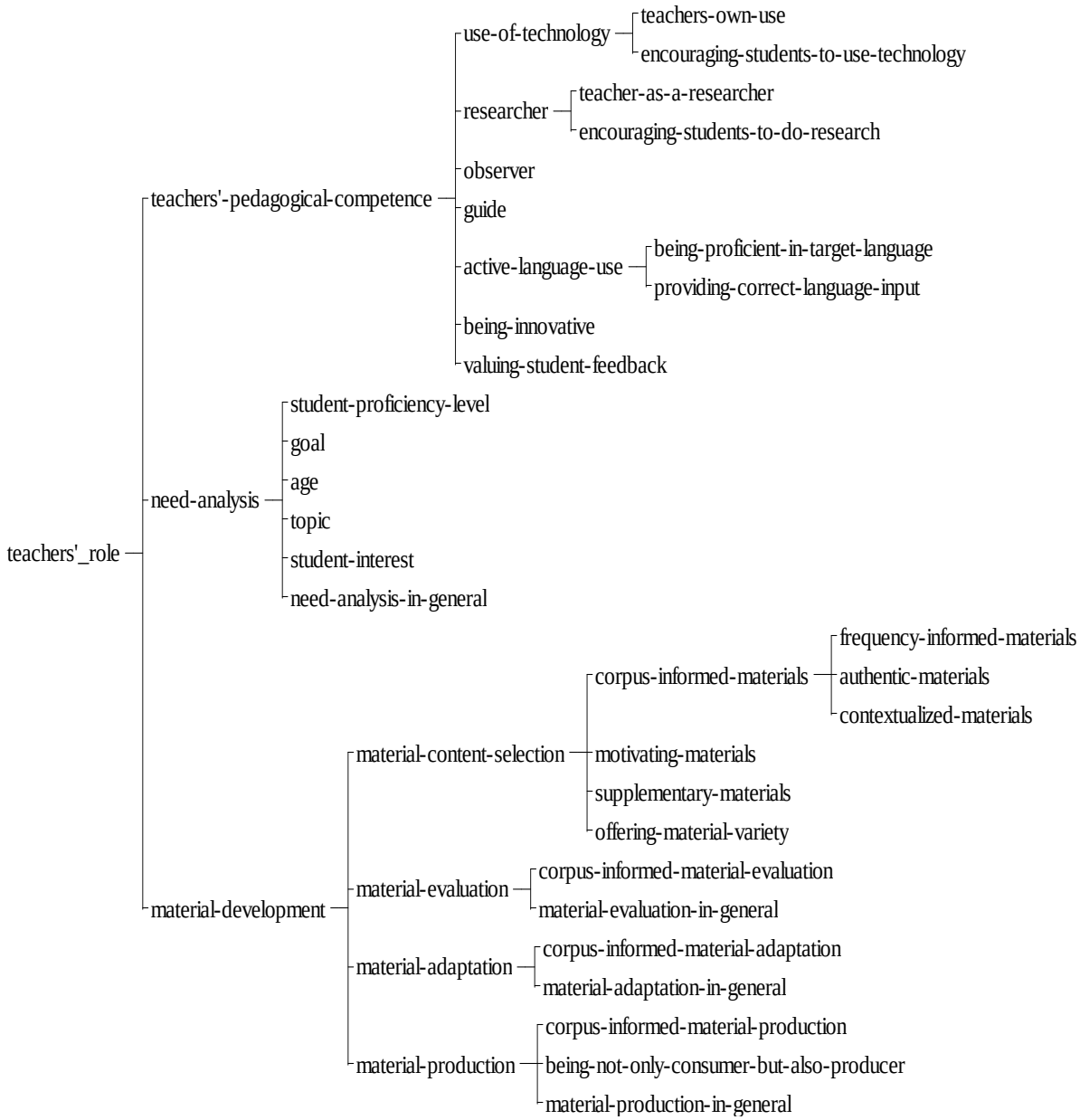


Figure 5. Overall coding scheme of semi-structured interview results for teacher role in material evaluation, adaptation, and development

The scheme of the semi-structured interview results indicates that the participants had different kinds of descriptions of teacher role in material evaluation, adaptation, and production at the end of the course as the number of sub-categories increased considerably compared to the pre-course questionnaire. The results will be detailed in the following tables starting with the general categories emerged from the content analysis. The main categories follow a pedagogically meaningful order instead of the frequency order. However, the sub-categories are listed taking the frequency into consideration as the number of sub-categories is high in number. Table 12 presents the general categories:

Table 12

Overall Results of Semi-structured Interviews regarding Teacher Role in Material Evaluation, Adaptation, and Development

Teacher Role in Material Evaluation, Adaptation, and Production		
	N	**%**
Teachers' pedagogical competence	20	100
Need analysis	9	45
Material development	20	100
Total N	**20**	

n:20

The overall results from the semi-structured interviews show that compared to the pre-course survey results, the frequencies of the codes and the number of the students who highlighted the importance of the role of the teacher in material evaluation, adaptation, and production increased significantly after the "Corpus Literacy in Foreign Language Teaching Course". The three categories created after the content analysis of the pre-course survey emerged again after the content analysis of the semi-structured interviews. However, the number of sub-categories expanded considerably.

The first category was *"Teachers' Pedagogical Competence".* Only 3 (16.7%) participants stated the importance of teachers' pedagogical competence in the pre-course survey; however, after the corpus literacy course, all the students (N=20) stated that teachers should have pedagogical competence and hold some qualifications to be more efficient in material evaluation, adaptation, and production.

The second main category that emerged from the content analysis was *"Need Analysis"*. Before the corpus literacy course, 4 students (16.7%) stated that teachers analyze the needs of the students before material development. Yet, after the corpus literacy course, 9 participants (45%) emphasized that the teachers should do need analysis before evaluating, adapting, or producing materials.

The last main category that emerged from the content analysis was *"Material Development"*. This category includes all the sub-categories reflecting the codes from the student answers which directly meant the material development process. The number of the students who stressed this category and the frequencies of the code regarding this category was the highest compared to the other two main categories *(teachers' pedagogical competence and need analysis)* both in pre-course survey and semi-structured interview content analysis. Becoming more representative, in semi-structured interviews, all the 20 participants agreed that the teacher plays an important role in the

material development process (material evaluation, adaptation, and production). Although in the pre-course survey 13 students (72.2%) stated that teachers had an important role in material development, after the course, all the students agreed that teachers had a significant role in material development.

In the following paragraphs, each category will be explained in detail. Some of the categories also include some sub-categories; those will also be included in the tables to make the explanations unite. The first category that emerged from the coding of the semi-structured interviews is "Teachers' Pedagogical Competence". The participants stated that teachers should have pedagogical competence to be effective in material evaluation, adaptation, and production. The results showing the qualifications to be pedagogically competent are displayed in Table 13:

Table 13

Results of Semi-structured Interviews for "Teachers' Pedagogical Competence" Category

Teachers' Pedagogical Competence		
	N	**%**
Active language use	13	65
a. being proficient in the target language	*12*	*60*
b. providing correct language input	*10*	*50*
Use of technology	11	55
a. teachers' own use	*11*	*55*
b. encouraging students to use technology	*3*	*15*
Researcher	5	25
a. teacher as a researcher	*4*	*20*
b. encouraging students to do research	*3*	*15*
Being innovative	6	30
Guide	4	20
Observer	2	10
Valuing student feedback	1	5
Total N	**20**	

n:20

As Table 13 shows the participants stressed various pedagogical qualifications that teachers should have for material evaluation, adaptation, and development. The evidence that the participants found this sub-category important was that 13 students,

which 65% of all the students, stated that teachers should be able to have an active language use. This sub-category was made up of two items "being proficient in the target language" (stated by 12 (60%) students) and "providing correct language input" (stated by 10 students (50%)). Participant 14's statement shows how corpus literacy course affected their perspective:

Excerpt 6:

"I have seen, while I am about to graduate, that actually I am learning English just now because this was not the English, they taught us at school. English was always something artificial for us. Now I have learned how to reach the authentic language, from now on I can reflect this to my future students."

Excerpt 6 shows that the students realized that their English might not be good enough or not be reflecting the authentic language. As a result, it might affect the content they teach to their students. In order to prevent this, the student thought that corpora could be a beneficial tool to learn English authentically and to teach real-life language to their students.

The most frequently stated second pedagogical qualification was the "use of technology". This category was stated 20 times (23% of all the codes) by 11 students (55% of all the students). This category also consisted of two items "teachers' own use" and "encouraging the students to use technology". 11 students (55%) stressed that teachers should be able to use technology effectively while developing materials. While teachers' own technology use was emphasized more, 3 students (15%) also stated that the teacher should also encourage students to use technology to reach more varied and interesting materials. Participant 18's statement clearly shows how the corpus literacy course affected their perspective:

Excerpt 7:

"A teacher should definitely be able to use the computer. In addition, she should be able to discover and employ various teaching tools, corpora, and websites to use in material development."

Another participant, Participant 2, also added that:

Excerpt 8:

"After this course, I have thought that the teacher should know how to use technology and also teach the students how to use it."

Excerpt 7 and 8 indicated that the conducted course helped the students to see the importance of knowing how to use technology in language teaching. In addition, it also contributed to the fact that the students should also be encouraged to use technology while learning English.

Some other sub-categories of the main category "teachers' pedagogical competence" were "being a researcher" (teacher as a researcher and encouraging students to do research), "being innovative", "being a guide", "being an observer", and "valuing student feedback".

The sub-category "researcher" here means that the teachers are supposed to research on language use to show the authentic and in-context language. In addition to evaluate, adapt, and produce materials. All these point out that the teachers should be able to use corpora in material development. One of the statements from Participant 7 reflects their perspective very well:

Excerpt 9:

"As this course provokes doing research, I benefited from it. We had to make searches on concordancers and come to some conclusion. For that reason, it also triggered critical thinking as we had to choose some items shown in the corpus. It contributed to our knowledge."

Participant 19 stated that teachers can also encourage their students to do research while learning:

Excerpt 10:

"Corpora can be useful tools to guide my students as their teacher. As it is very easy to use, they can make use of it easily when I show them."

As it is seen in Excerpt 9 and 10, the students find corpora provoking the teachers and students to do research. Besides, teachers are supposed to have the qualifications of being a researcher to teach English better and teach students how to do research to learn the target language better.

Taking the student answers into consideration, the sub-category "being innovative" emerged after the students learned more about technology in general, the use of corpora in language teaching, evaluation of traditional course books, and corpus-informed materials. The students realized that there are always new things produced and they

should be able to follow those updates. Participant 2 stated that:

Excerpt 11:

"Before this course, I was thinking that I could just use the textbooks given by the Ministry of National Education for teaching purposes. I was not aware that there could be errors in the book, or I would need to criticize my own language. Now I know that I need to evaluate the materials critically and always check language use in corpora if I have a question mark in my mind."

All these sub-categories show that the "Corpus Literacy in Foreign Language Teacher Education" course affected the participants' perspectives positively as there were only three sub-categories of the main category "teachers' pedagogical competence" in the pre-course survey results namely "open to improve themselves", "problem solver" and "providing correct language input". However, the number of sub-categories increased considerably in semi-structured interview results; also, the number of the students and the frequencies of the codes highlighting the importance of teachers' pedagogical competence ascended significantly.

The second main category of the teacher role in material evaluation, adaptation, and production was "need analysis". The participants stated that the teachers should do need analysis to be able to perform better in material related issues. Table 14 presents the sub-categories of this category including the number of the students, the frequencies of the codes, and their percentages:

Table 14

Results of Semi-structured Interviews for "Need Analysis" Category

Need Analysis		
	N	**%**
Student proficiency	6	30
Need analysis in general	6	30
Student interest	2	10
Topic	2	10
Goal	2	10
Age	2	10
Total N	**20**	

n:20

Table 14 demonstrates that the participants found different needs of the students important in the process of material evaluation, adaptation, and production. 6 different

sub-categories emerged. 6 students suggested that students' proficiency should be taken into consideration in the material development process. One of the statements of Participant 18 shows corpora can help to design teaching materials specific to student needs:

Excerpt 12:

"I believe that I can use corpora to see the errors made by my students while learning English and I can also the frequencies of those errors. As a result, I can observe my students' needs better and tailor the materials accordingly. I can adapt my materials according to the errors made by my students."

Excerpt 12 shows that the content of the conducted course affected the perspective of Participant 18 on teacher role in material evaluation, adaptation, and production as the statement indicates that she now prefers to base the materials on the evidence provided by learner corpora. Although 6 students out of 20 students stated that student proficiency is important in the material development process, the same number of participants, 6 participants out of 20, made quite broad statements saying that materials should be produced depending on the need analysis made by the language teachers. One of those statements were made by Participant 16:

Excerpt 13:

"The materials should be developed considering the need of the students."

As it is displayed in Excerpt 13, 6 participants stated that materials should be prepared to consider the need analysis; however, this term is highly broad. Along with "student proficiency" and "need analysis in general", 4 more sub-categories after the careful analysis of semi-structured interviews. Those categories were "student interest", "topic", "goal", and "age". The participants proposed that the teachers should give importance to student interest, the topics needed by the students, the goal of the activity, and the age of the target audience. The effect of the use of corpora in foreign language teaching can be traced in the statement made by Participant 15's in Excerpt 14 below:

Excerpt 14:

"Now as a teacher candidate, I think that I should design activities depending on my students' interests and in the way that they can understand better. The activities should not be artificial, they should not be in an artificial language. I should design activities that help students retain what they learn."

Excerpt 14 is an important indicator that Participant 14 sees corpora as effective tools to teach English in the future.

As stated before, the number of sub-categories increased significantly after the corpus literacy course. Furthermore, the content of the answers also became more detailed compared to the pre-course survey. This might imply that the course had a positive effect on the participants' perspectives on the role of the language teachers' in material evaluation, adaptation, and production.

The last main category that emerged from the content analysis of the semi-structured interviews was "material development". This is the main category which was stressed the most frequently by the participants. After the analysis, 4 sub-categories emerged. The sub-categories, frequencies, and percentages for each sub-category are presented in Table 15:

Table 15

Results of Semi-structured Interviews for "Material Development" Category

Material Development		
	N	**%**
Material content selection	16	80
Material evaluation	18	90
Material adaptation	12	60
Material production	13	65
Total N	**20**	

n:20

The results presented in Table 15 show that 4 sub-categories constitute the main category "material development". The participants suggested that teachers' role in material content selection, material evaluation, material adaptation, and material production is highly important for English language teaching. 80% of the students (N=16) stated that teachers should pay attention to material content selection, which was the most frequently emphasized sub-category. Similarly, 90% of the students (N=18) added that material evaluation is crucial. Two other sub-categories were material adaptation and material production. As the participants gave highly detailed answers, the sub-categories had also some further detailed categorization. As a result, each sub-category will be explained in the following tables below with excerpts to support the results. The first sub-category "material content selection" will be introduced in Table 16:

Table 16

Results of Semi-structured Interviews for "Material Content Selection" Sub-category

Material Content Selection		
	N	**%**
Corpus-informed materials	16	80
a. authentic materials	*13*	*65*
b. contextualized materials	*10*	*50*
c. frequency-informed materials	*8*	*40*
Supplementary materials	6	30
Motivating materials	5	25
Offering material variety	3	15
Total N	**20**	

n:20

During the semi-structured interviews, the participants stated that a language teacher has important responsibilities in material content selection as it affects the outcomes significantly. As it is shown in Table 16, 4 different sub-categories of the "material content selection" were determined after the analysis of the interviews. The most frequently uttered was "corpus-informed materials" which was emphasized by 80% of the participants (N=16). It shows that the corpus literacy course affected the way the participants perceive teacher role in material content selection as there were only 3 statements made in the pre-course survey pointing out the importance of the material content selection and it was made only by 3 participants (16.7%).

The participants highlighted 3 different important points about corpus-informed material content selection: authentic, contextualized, and frequency-informed. In this categorization, "authentic materials" refer to the materials which are developed with the real-life language used by the native speakers of the target language. "Contextualized materials" means choosing or creating materials that teach language in context, not with decontextualized language samples which cannot give any hint about the context. With the support of context, they can observe the use of particular language items (especially lexicogrammatical constructions). The last one, frequency-informed materials, refers to the fact that students have more chances of encountering the most frequently used language constructions. As a result, choosing those frequent constructions for the material content became important for the participants.

65% of the students (N=13) asserted that teachers should use content and suggest

authentic materials to their students to reflect real-life language use in authentic ways. Participant 14 stated that:

Excerpt 15:

"Until now, whenever we made a small mistake while using English we were harshly criticized. Now I see that native speakers also do not always follow strict grammar rules. This made me relieve, now I am aware of the fact that I should not be worried about these things and I can also tolerate my students."

Similar to this statement, Participant 15 also stated that:

Excerpt 16:

"We should teach students with real-life materials and examples that they can remember what they learned easily and also use them in real life, too."

Excerpt 15 and 16 show that English was taught to them with prescriptive rules instead of real use in society. It is clear that after the corpus literacy course, the participant became aware of the difference between real life language and prescriptive rule-based language instruction as a authentic language reflects the real-life language used by society. They emphasized the importance of the use of real-life language in materials. This might be reflecting an outcome of the corpus literacy course as during the course the importance of reflecting authentic language through corpus use was repeated numerous times.

In addition to authentic material content, contextualized material use was also emphasized by 50% of the participants (N=10). Participant 19 stressed the importance of selecting appropriate material content to prepare contextualized materials and added:

Excerpt 17:

"Normally, we were using the words anywhere we wanted; however, now I have learned that words can be context-specific. As a result, I would like to check the contexts of the words in corpora to see where they are frequently used."

This statement shows that the participant found it important to use corpus-informed materials in their teaching, especially for contextualized language teaching. During the corpus literacy course, the benefits of using corpora were frequently explained as corpora provide language in context which allows the learners to get the evidence of language use

from the first source (from native speakers).

Another sub-category that is also corpus-related is “frequency-informed materials”. After the corpus literacy course, 40% of the students (N=8) stated that they would like to introduce materials which include the language items that are used frequently by the native speakers, and there is a higher possibility of seeing those items in real life. Similar to real-life material use, this sub-category could also be a positive outcome of the course as the frequency is an indispensable part of corpus-informed teaching. The statement made by Participant 11 reflects the participants’ perspective on frequency-informed material content in language teaching material development:

Excerpt 18:

“Instead of forcing the learners to learn less frequent structures by heart, I believe that we should teach them the frequent language structures that they would see more in their daily life.”

Excerpt 18 clearly indicates that the corpus literacy course had a positive effect on the participants’ perspectives on teacher role in material evaluation, adaptation, and production as they did not make any statements similar to these in the pre-course survey.

In addition to these sub-categories, participants also added that teachers should choose material content which is supplementary that they should support their teaching with some extra materials; in addition, the material content should be motivating. Also, they asserted that the teachers should offer material variety which means that they should not provide the learners with similar activities all the time. Regarding “supplementary materials”, Participant 11 suggested that:

Excerpt 19:

“When I check the textbooks given by the ministry, now I think that it is not correct to follow just those books. In addition to them, I should prepare some extra materials as I know now that there might be some errors in those books. These errors might fossilize and result in fossilized errors in learners’ language use.”

Excerpt 19 shows that the participant became aware of the potential errors in the textbook since during the corpus literacy course many activities were held to evaluate the language use in the textbooks by means of corpora. In addition, corpus-informed books were compared to non-corpus-informed books. The results of those activities might have affected the perspectives of the participants in that sense. After all, the participant thought

that there is a need for supplementary materials along with the materials provided by the authorities.

Until this point, the "material content selection" sub-category has been introduced in detail. In the following part, "material evaluation" sub-category will be presented with its further 2 categories in Table 17:

Table 17

Results of Semi-structured Interviews for "Material Evaluation" Sub-category

Material Evaluation		
	N_1	**$\%_1$**
Corpus-informed material evaluation	12	60
Material-evaluation in general	11	55
Total N	**20**	

n:20

The importance of "material evaluation" was stated more frequently in semi-structured interviews. It should be noted that only 3 students (16.7%) emphasized the importance of "material evaluation" in the pre-course survey while it was stressed by 12 (60%) of the participants in semi-structured interviews. This is also another indicator of the positive effect of the course.

As seen in Table 17, 12 students (60%) stated that teachers should be able to evaluate materials using corpora. As in the corpus literacy course, they had the chance of corpus-informed material evaluation, they might have been affected by these practices. In the course, they spotted some problematic language uses in textbooks, and then they checked the use of language using authentic texts in corpora. The results indicate that more than half of the students find this as an important qualification of an English language teacher. Participant 16's statement shows in Excerpt 20 how corpora can be used as a guide for material evaluation:

Excerpt 20:

"While doing the practices during our class, we have learned how to evaluate the textbooks, and especially we have learned on what we should base our evaluations. There are the options of directly using the material or evaluating it; however, we did not know how to do it. Now, I know how to do it."

Excerpt 20 shows that the participant did not know how to evaluate the material

or use what to evaluate it. The results clearly show that corpora provided them the sources with which they can evaluate their materials, the language use in it. Also, Participant 14's statement in Excerpt 21 shows how corpora provide real-life language evidence instead of using intuition in material evaluation:

Excerpt 21:

"In the future, I might have some conflicts with my colleagues on language use in the materials. They might have some ideas different from mine, we might have conflicting views. Now I can say that I can be sure about what I claim after I do searches on corpora to provide evidence and to find the correct use."

Excerpt 21 shows how teachers feel secure about their decisions about language use in materials thanks to authentic language evidence from the corpora. It can be also understood that the teachers could use corpora instead of their intuitions while evaluating the materials objectively.

In addition to sub-category "corpus-informed material evaluation", 11 participants (55%) said that "material evaluation in general" is important. These students made broader statements such as Participant 17's in Excerpt 22:

Excerpt 22:

"I have learned that when we are supposed to use the textbooks given by the Ministry, we should not think that they are perfect. We should evaluate it critically; we should check if there are any errors."

Although the statement is rather broad in Excerpt 22, it is also promising to see that the participant is aware of the need for the critical evaluation of the materials given instead of using them directly. "Material evaluation" sub-category of the main category "material development" has been demonstrated. In the following paragraphs "material adaptation" sub-category will be presented. Table 18 displays its further 2 sub-categories with frequency and percentage information:

Table 18

Results of Semi-structured Interviews for "Material Adaptation" Sub-category

Material Adaptation		
	N	**%**
Corpus-informed material adaptation	10	50
Material adaptation in general	7	35
Total N	**20**	

n:20

As seen in Table 18, the importance of "material adaptation has been emphasized by 10 participants at least (50%). However, only 2 participants (11.1%) mentioned the role of the teacher in "material adaptation" in the pre-course survey. It might imply the fact that the corpus literacy course helped them to be aware of the role of a language teacher in the material adaptation as in the course the participants were asked to adapt some problematic materials, which had some incorrect language use, using corpora to reflect the authentic language. In a statement of Participant 6, it is seen that corpora provide language teachers with language evidence making them more secure about their decisions:

Excerpt 23:

"After this class, I can say that a teacher can approach material adaptation in a more confident way. If I do not know if that sentence construction is not correct, I can make searches on corpora, see whether there are mistakes or not, and then I can adapt the activity accordingly."

Excerpt 23 is quite parallel to the "material evaluation" sub-category showing that the corpus literacy course provided the participants with the idea that they have a tool that they can use confidently in material evaluation and adaption which makes them less dependent on their intuitions. To this point, three sub-categories of "material development" have been presented. In the following paragraphs, the last sub-category "material production" will be shared. Table 19 displays the further 2 sub-categories with frequency and percentage information:

Table 19. Results of Semi-structured Interviews for "Material Production" Sub-category

Material Production		
	N	**%**
Material production in general	11	55
Corpus-informed material production	4	20
Being not only consumer but also producer	3	15
Total N	**20**	

n:20

It is seen in Table 19 that the importance of teacher role in material production was stated by at least 11 participants (55%). The results show that three categories emerged under the sub-category "material production". However, it is seen that the participants emphasized here more "material production in general" than "corpus-informed material production" and "being not only consumer but also producer". The reason for that might be that the sub-category "material content selection" includes closely related categories such as "corpus-informed materials" and "supplementary materials" which were directly linked to the use of corpora in material content selection in general. As a result, the statements which directly implied material production were considerably broad as "material production in general". Nevertheless, the increased frequency of the statements and the number of the students who stressed the importance of teacher role in material production compared to pre-course survey results (3 participants (16.7%)) indicate that the course might have raised their awareness on material production. They implied that teachers should be able to produce their own materials, not relying on only textbooks. Participant 4 stated that:

Excerpt 24:

"A teacher should be able to produce extra materials to be more effective and she should be creative in it."

The second most frequently stated sub-category was "corpus-informed material production" stated by 4 students (20%). The results show that the corpus literacy course provided the participants with a tool that can be used to provide authentic materials. Participant 18's statement below in Excerpt 25 also highlights the richness of the corpora:

Excerpt 25:

"As a teacher, I believe that whatever the level of the learner is, until university, making use of corpora and making searches on them, we have a rich database to use in

material production. The scope of it is very broad."

Again, in Excerpt 25, it is understood that the participant was content about reaching a rich database reflecting the authentic language while producing materials. The participants also added that they should not be just consumers of ready-made materials, but they should also produce their own materials. Participant 3 asserted that:

Excerpt 26:

"The teacher should balance the material use; she should use ready-made materials and produce her own when it is necessary. We should be both producers and consumers, we should find the balance."

This is also another outcome of the course as it was covered many times that teachers should not only be the consumer of the materials; they should also produce materials.

All in all, the results of the semi-structured interviews show that after the corpus literacy course, some new thoughts arose in participants' minds. In addition, the corpus literacy course affected the way they perceived the role of the teacher in material evaluation, adaptation, and production. The content analysis clearly shows that after the course the sub-categories increased significantly as the answers given to the questions became much more detailed. This can be counted as another positive effect of the course on the participants as well.

The participants stated that, in terms of material content selection, they would use materials informed by corpora, they would consider the frequency while designing the material, and they would also pay special attention to the inclusion of real-life language use into teaching. In addition, they highlighted the use of technology in material design, not only used by the teacher but also by introducing it to the students. Furthermore, they would also use corpora while evaluating, adapting, and producing materials. All these show that the course "Corpus Literacy in Foreign Language Teaching" affected the participants' perspectives on teacher role in material evaluation, adaptation, and production positively.

In addition to the results of the pre-course survey and semi-structured interviews, the results of focus-group discussions will also be presented in the following part.

4.3.3. Results of Focus Group Discussions

In this section, the results of the two focus group discussions' content analysis will be presented. The discussions were held after the semi-structured interviews were completed with all the participants. As a result, considering that the number was excessive for one focus group discussion, 2 discussions were held in sequence with 10 participants in each. The aim of this tool was to support the data collected through semi-structured interviews. In addition, it also aimed to create a discussion atmosphere and encourage the participants to brainstorm to come up with new ideas. The scheme of the categories emerged from the content analysis is shown in Figure 6 below:

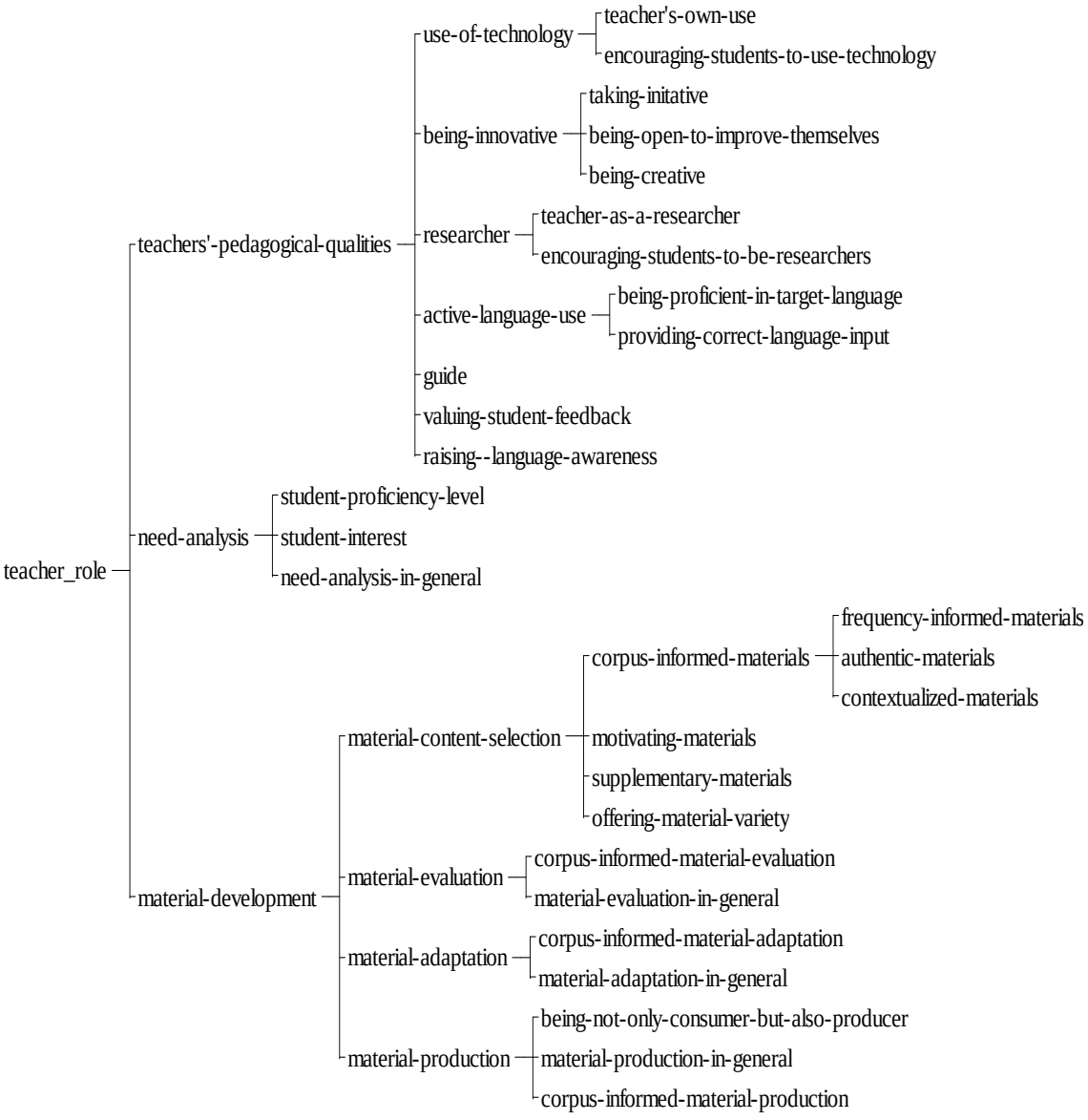


Figure 6. Overall coding scheme of focus group discussion results for teacher role in material evaluation, adaptation, and development

As it is seen in Figure 6, the overall scheme from the analysis of the focus group discussions is considerably like the scheme of the semi-structured interview results. The only difference is observed in the “teachers’ pedagogical competence” main category. Compared to the semi-structured interview results, the sub-category “being innovative” was emphasized significantly during the focus group discussions. As a result, three sub-categories emerged under “being innovative”. In addition, a new sub-category “raising language awareness” was added to the “teachers’ pedagogical competence” main category. Although some sub-categories were added, one, “observer”, was removed as the participants did not highlight those points during the focus group discussions.

The participants did not stress the role of the teacher in need analysis to be effective in material evaluation, adaptation, and production. In other words, they did not give detailed answers as they mostly focused on the “teachers” pedagogical competence” and “material development”. As a result, the sub-categories for “need analysis” main category decreased from 6 to 3.

Although some changes were observed in the first two categories, there were no changes observed in the “material development”. It might be an indicator that the participants were consistent with their perspectives on the role of the teacher in material development, and they agreed on the same categories.

The results of the focus group discussions’ analysis are presented in the tables below. The tables show the emerged categories and sub-categories clearly. The frequencies and the percentages are not calculated for the focus group discussion data collection tool since the participants were not overtly asked to state if they agreed with the other participants. As it is stated before, the purpose of this tool was to support the semi-structured interviews and support the students to interact and come up with new ideas. They were supposed to discover the role of the teacher in material evaluation, adaptation, and production as a group and enrich their perspectives.

The results of the focus group discussion analysis will be presented in the following pages. The overall results are shown in Table 20:

Table 20

Overall Results of Focus Group Discussions for Teacher Role in Material Evaluation, Adaptation, and Development

Teacher Role in Material Evaluation, Adaptation, and Production
Teachers' pedagogical competence
Need analysis
Material development

Table 20 shows that the same three main categories shown in semi-structured interviews' analysis arose in focus group discussions. The participants stated that "teachers' pedagogical competence", "need analysis" and "material development" are three important issues to be highlighted in terms of teacher role in material evaluation, adaptation, and production.

The first sub-category "teachers' pedagogical competence" is demonstrated in Table 21. As it is written above, there are some new sub-categories emerged during the focus group discussions, and also one sub-category was removed compared to semi-structured interviews. As the other sub-categories are the same, they will not be explained in detail to avoid repetition. Instead, the new category emerging will be emphasized:

Table 21

Results of Focus Group Discussions for "Teachers' Pedagogical Competence" Category

Teachers' Pedagogical Competence
Active language use
a. being proficient in the target language
b. providing correct language input
Use of technology
a. teachers' own use
b. encouraging students to use technology
Researcher
a. teacher as a researcher
b. encouraging students to do research
Being innovative
a. taking initiative
b. being open to improve themselves
c. being creative
Guide
Valuing student feedback
Raising language awareness

Table 21 shows that the participants highlighted the importance of "active language use" in which they said that the teachers should be proficient in the target language, and they are also supposed to provide correct language input to the language learners. Especially some participants stated that they became aware of the fact that they need to improve their language skills first, then they should teach their students in the future the authentic language. They stressed that they could do it with the help of corpora as corpora provide them with authentic language.

The participants also added that the teachers should be able to use technology to be more effective in material development. They noted that the teachers should not only learn how to use technology to teach better but also teach their students how to use it to learn the language better. The participants stated that thanks to corpora, they could search the genuine language uses and be sure about the language constructions used in real life. In addition to these, being a researcher and encouraging students to do research were also

emphasized. This is in a way connected to the use of technology. The participants meant the use of corpora and searching for correct or authentic language uses to improve the material or their own language use. They also emphasized that if the students are also encouraged to use corpora, they would be autonomous learners. Participant 18' statement supports this view strongly:

Excerpt 27:

"Maybe it is not possible for primary school level students to make searches on corpora. However, from some point on we can develop that awareness in the students that they can learn how to learn. We can make them discover the language by themselves."

This excerpt clearly shows that the participant believes that future students can be encouraged to use corpora by themselves to learn language by themselves as well.

It was stated before that during the focus group discussions, the importance of the qualification "being innovative" in material evaluation, adaptation, and production was repeatedly stressed by the participants. Under this sub-category, they especially emphasized that the teachers should improve themselves and always attempt to increase the effectiveness of the materials. In addition, they also highlighted that the teachers should not only use the materials given by the official institutions but also be able to modify them creatively taking initiatives. They stated that the teachers should "be open to improve themselves". Again Participant 18's statement shows how important it was:

Excerpt 28:

"This course made us aware of the researcher identity as a teacher. I have learned that we should not just think that we know everything for we are a teacher; we do not know everything. There is no limit to learning."

This excerpt shows that they should also improve their language skills, they should not blindly follow the same track for years thinking that they have enough knowledge of the target language. Another two sub-categories of "being innovative" were "taking initiative" and "being creative". As it is shown in Excerpt 29 below, the participants stated that the teachers should be active, not passive, and change things when necessary:

Excerpt 29:

"In terms of being creative, the teacher should be able to change her applications in the classroom. She can modify the materials; she can write to the ministry about the points she complains about."

In this statement, Participant 19 referred to the teachers being active and creative to change applications to be more effective in material related issues. The statement shows that the participants became more aware of the importance of evaluating the materials and adapting them creatively. They strongly emphasized that the teacher should take the initiative and change the materials accordingly.

Similar to semi-structured results, the participants underlined the teacher role as a guide in the classroom for effective material use. In addition, they stated that the teachers should get feedback from students and shape their materials accordingly. One new sub-category that emerged in focus group discussions analysis was "raising language awareness". The participants suggested that the teachers should make students aware of the authentic language use using the materials effectively. They especially highlighted that thanks to the use of corpora as materials or sources of materials, students can be provided with real-life language. In this way, students can also discover the authentic language and language in context. Participant 14's statement exemplifies this sub-category well:

Excerpt 30:

"I believe that it is very nice and important to provide students with a new perspective of knowing that there is a language there; it is something alive not something artificial. It is very important for me to make them aware of it. All these can be made through the use of corpora as they reach the authentic language with them."

This statement clearly reflects the perspective of the participant that the teacher should be able to raise the learners' awareness about the language, about the nature of the language. Until now, "teachers' pedagogical competence" the main category has been introduced in detailed; in the following part the "need analysis" the main category will be presented with its sub-categories:

Table 22

Results of Focus Group Discussions for "Need Analysis" Category

Need Analysis
Student proficiency
Student interest
Need analysis in general

The categories in Table 22 are the same with the categories emerged from the semi-structured. However, there were 3 more sub-categories in semi-structured interviews' analysis: "topic", "goal", and "age". During the focus group discussions, the "need analysis" main category was not stressed strongly. Only some general statements were made by the participants involving "student proficiency", "student interest", and "need analysis in general". As the names of the sub-categories suggest, the participants stated that the teachers should take student proficiency and student interest into consideration during the material evaluation, adaptation, and production process. In addition to these, some other participants again said that learners' needs should be cared in the process while they did not give detailed clarifications for the term "need".

The last main category "material development" will be presented in Table 23. This category was the one that had no changes after the semi-structured interviews. During the focus group discussions, the participants gave answers which directly fits to the categories that emerged from the interviews. One reason behind this might be that all the participants had similar perspectives towards material development in language teaching at the end of the corpus literacy course. As a result, some new categories did not appear.

Table 23

Results of Focus Group Discussions for "Material Development" Category

Material Development	
Material content selection	
	1. *frequency-informed materials*
a. *corpus-informed materials*	2. *authentic materials*
	3. *contextualized materials*
b. *motivating materials*	
c. *supplementary materials*	
d. *offering material variety*	
Material evaluation	
a. *corpus-informed material evaluation*	
b. *material evaluation in general*	
Material adaptation	
a. *corpus-informed material adaptation*	
b. *material adaptation in general*	
Material production	
a. *being not only consumer but also a producer*	
b. *material production in general*	
c. *corpus-informed material production*	

As it is displayed in Table 23, there were 4 sub-categories under the main category of "material development": "material content selection", "material evaluation", material adaptation", and finally "material production". As stated, before all the sub-categories were the same as the ones in interviews' results.

Similar to the answers given during the semi-structured interviews, the participants stated that "material content selection" is an important task for a language teacher to introduce more effective materials. "Corpus-informed materials" were highly supported by the participants as they found "frequency-informed materials", "authentic materials", and "contextualized materials". As stated before, during the course they used corpora to evaluate, adapt, and produce; as a result, this might be the reason behind these statements. Participant 12's statement on the "authentic materials" shows the perspective of the participants:

Excerpt 31:

"For example, I would like to show my students that the frequency adverbs can be used in different positions, not just in one position, between the subject and the verb.

We can teach them that the language is not just about the strict rules written in the books; there might be several possibilities used by the native speakers. In this way, I believe that the students will feel more confident and will not be scared of making mistakes."

As the statement suggests the corpus literacy course demonstrated the participants the importance of real-life language instead of learning it from prescriptive rules. Excerpt 31 also indicates that the participants can relate the importance of the material content selection, here specifically authentic materials, to the pedagogical outcomes such as making students more confident in language use and decreasing their anxiety.

About the "material evaluation", "material adaptation", and "material production", the participants again emphasized the importance of using corpora as a reference to reflect the real-life language in the materials and to present the language in context. All the participants agreed that they should not accept and use the materials they were given directly. Instead, they should evaluate them critically first. They said that using corpora they could be sure about the language use in the materials as they sometimes did not feel secure about it; they stated that basing the choices on their intuitions might mislead them. As a result, they found the use of corpora in material evaluation very essential. Participant 12's statement on this issue reflect the participants' perspective very well:

Excerpt 32:

"After spotting the errors in the textbooks given by the Ministry of Education, now we look at them suspiciously. After this course, we are now able to check the language uses asking "Is this correct?". First, we search for the correct uses, then we teach our students."

The excerpt above is a good example of the statements about the importance of material evaluation for language teachers, and how corpora can support this process constructively. Similar to "material evaluation", the students also highlighted the significance of "material adaptation". They also stated that corpora supported their adaptation process with authentic language use and evidence with frequency information. They could adapt the materials they had objectively instead of depending on their intuition.

The last sub-category emerged from the content analysis of the focus group

discussions was “material production”. In this category, the participants stressed the importance of producing “corpus-informed materials” and “being not only consumers but also a producer.” They also made some general statements underlining the need for producing materials in general. Participant 12’s statement on corpus-informed activities displays how helpful they can be:

Excerpt 33:

“For example, we did tagging, computer error analysis; that was a great activity. It was an ordinary activity such as fill in the blanks. We can apply this in our classrooms. They can also tag the errors they did in their writing; they will have that proficiency; besides, this will be more fun for them. They will be more enthusiastic as they will work on their language production. They can both see the errors they make while enjoying the activity and make progress as they can evaluate their errors. Also, the progress they make can motivate them to learn more and improve their language skills.”

This statement points out the possible positive outcomes of corpus-informed materials or activities. As the participant stated, learner corpora can motivate the learners they interact with their own language output, and they can also observe the progress they make. Moreover, it makes them also more autonomous as they can evaluate their progress themselves and determine the skills or topics they should improve more. This example also supports the idea of not only being consumers but also a producer. In other words, the teachers can use the materials they are provided, yet, it should not be the only source they use. Instead, they should be able to produce their own materials and supply students with material variety as shown in Excerpt 33.

The results of the data analysis of the focus group discussions have been presented to this point. The results will be discussed in the discussion chapter in detail. With these paragraphs, the presentation of the results for the second research question has finished. In the following section, the results for the third research question will be introduced.

4.4. Results for the Research Question 3

Does a corpus literacy course in language teacher education raise ELT pre-service teachers’ language awareness? If yes, how?

The third research question of this study investigates whether the corpus literacy course can raise language awareness of prospective English language teachers. In order to determine the effect of the course and reach the results, three different data collection tools were employed: reflection papers, semi-structured interviews, and finally, focus group discussions.

Reflection papers were collected in the middle of the semester (8th week of 16-weeks semester) to see the developmental pattern in terms of awareness-raising effect of the course. Each participant was required to write a reflection paper on the effects of the course and evaluating its positive and negative aspects as well as giving suggestions. In addition, they also answered how they could use the things they learned during the first 7 weeks in their future teaching.

Semi-structured interviews were carried out after the course with each participant at a different time slot. After the semi-structured interviews were completed, focus group discussions were conducted dividing 20 participants into two groups.

The collected data through the data collection tools mentioned above were analyzed using the computer content analysis tool. It was an inductive content analysis process as all the categories and sub-categories emerged from the data.

The question of whether the course raised participants' language awareness will be shown in the following part.

4.4.1. Results of the Reflection Papers

As stated above, three tools were employed to collect the data to be able to answer the research question. To begin with, the results gathered from the reflection papers will be demonstrated.

The reflections were collected from all 20 participants and the analysis of the reflection papers shows that the corpus literacy course could raise the awareness of the students in some important ways. The overall scheme emerged from the collected data inductively is shown in Figure 7:

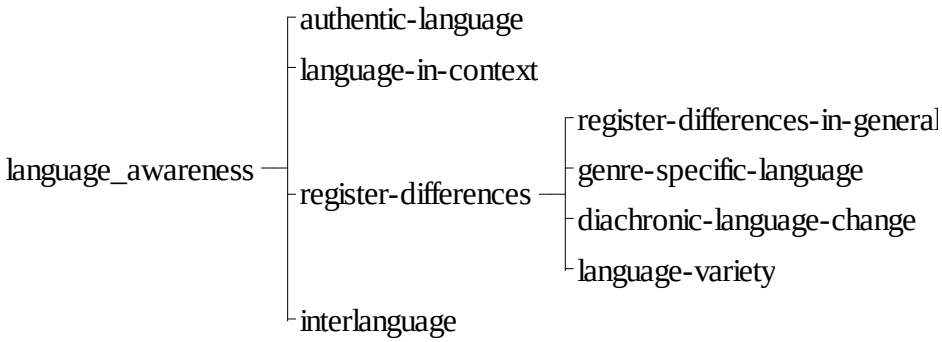


Figure 7. Overall coding scheme of the reflection papers' results for raising language awareness

As seen in Figure 7, 4 different categories emerged from the data. The participants stated that they became aware of the "authentic language", "language in context", "register differences", and "interlanguage". The main category "register differences" had 4 sub-categories as well, which shows that they had various points to highlight. The frequencies of the statements, the percentages, the number of students who highlighted the awareness-raising effect of the course are presented in Table 24:

Table 24

Overall Results of Reflections Papers regarding Language Awareness Raising Effect of the Corpus Literacy Course

Raising Language Awareness		
	N	**%**
Authentic language	9	45
Language in context	11	55
Register differences	10	50
a. register differences in general	*5*	*25*
b. genre-specific language	*4*	*20*
c. diachronic language change	*2*	*10*
d. language variety	*1*	*5*
Interlanguage	1	5
Total N	**20**	

n:20

As written in Table 24, the participants stated that the corpus literacy course supported them in raising their language awareness. 9 participants (45%) said that thanks to this course they became aware of the importance of authentic language use as they could see the importance of real-life language use while doing practices using corpora. The statements made by the participants also showed how prescriptive language rules affect language learning negatively. The statement made by Participant 12 can be seen in Excerpt 34:

Excerpt 34:

"Throughout my student life, I have learned vocabulary by heart. I have not criticized uses of them. For example, I learned the vocabulary of 'popular' always used with 'for'. However, it can be used with other prepositions. I didn't have the chance of seeing other options."

The statement of Participant 12 shows the effect of the course on the perspective of the participant. It is obvious that English was taught to her with strict rules written in books instead of presenting the language used in real life. It could be understood that instead of focusing on authentic language, prescriptive language rules were utilized in the teaching process.

Similar to being aware of "authentic language" use, the participants also added that thanks to this course they learned about the importance of "language in context". 11 participants (55%) stated that they became aware of how language units' meanings change from context to context. They also noted that they realized how language use might vary in different texts. Participant 3 stressed the importance of the use of corpora in finding specific words for specific contexts:

Excerpt 35:

"For example, in linguistics, some words might have different meanings apart from the dictionary meaning. So, by using a corpus, I can study these kinds of words."

As Excerpt 35 indicates, the participant thought that corpora could serve better than dictionaries presenting the words in context instead of giving isolated sentences. This was one of the points they highlighted as in dictionaries there are only some isolated sentences, it might be difficult for them to make an inference. However, with the help of corpora, they could see words in the context which provided considerable support for them.

In addition to "authentic language" and "language in context", 10 participants of the study (50%) asserted that they became more aware of the "register differences" after starting this course. It can be inferred from the results that they became aware of "register differences in general" such as differences between spoken and written language, "genre-specific language" such as differences among essays, articles, news columns, "diachronic language change" such as the differences observed in a language in time, and "language variety" such as the differences among British English and American English. Participant

19's statement shows how the course helped in raising their awareness of register differences in general:

Excerpt 36:

"We searched some words, conjunctions, and suffixes via COCA and realized that some words (conjunctions and suffixes) were used more often in some areas such as academic language, spoken language, etc."

It can be understood from the excerpt that the activities completed during the corpus literacy course helped them to see the different uses of language units in different registers. The reason behind this might be especially the one session that covered register differences and the use of corpora to identify them. At the end of that class, the students were asked to complete some assignments which showed different uses of different conjunctions in different registers.

One last category emerged was being aware of their "interlanguage". 1 participant (5%) stated that after starting this course and learning more about the authentic language they reached through the searches they made on corpora, she became more aware of her own language use and especially L1 interference (Turkish in this case) into her L2.

The results of the reflection papers' content analysis have been presented in this part. It is seen that even in the first 7 weeks of the corpus literacy course, their language awareness was raised to an extent and in different directions. It shows that introducing a corpus literacy course to pre-service English teachers might be an effective way of increasing their language awareness. and the second data collection tool's, semi-structured interviews', results will be presented below.

4.4.2. Results of the Semi-structured Interviews

The analysis of the semi-structures showed that the same main categories that appeared after the analysis of reflections papers emerged. The only difference was that under the main category "register differences", the sub-category "language variety" was not highlighted during the interviews by the participants. In the interviews, the participants were directed the question of whether the course affected the way they see language or their thoughts on language use. The answers were analyzed, and it resulted in the scheme below in Figure 8:

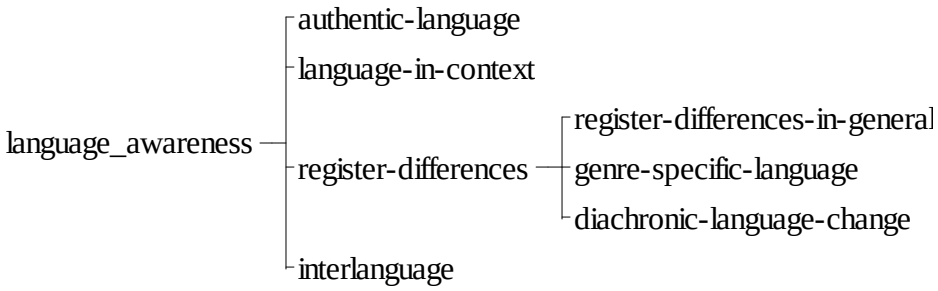


Figure 8. Overall coding scheme of the semi-structured interviews' results for raising language awareness

As the categories the same as the categories of emerged for reflection papers' analysis, the same information will not be repeated in this part. It is seen that after the interviews with all 20 participants, 4 main categories emerged. The descriptive results will be shown in Table 25 below:

Table 25

Overall Results of the Semi-structured Interviews for Language Awareness Raising Effect of the Corpus Literacy Course

Raising Language Awareness		
	N	**%**
Authentic language	10	50
Language in context	14	70
Register differences	10	50
e. register differences in general	*8*	*40*
f. genre-specific language	*2*	*10*
g. diachronic language change	*1*	*5*
Interlanguage	11	55
Total N	**20**	

n:20

As seen in Table 25, the number of participants who stated that their language awareness was at least 11 (50%). It shows that the course continued to affect the participants' views on language in the second half of the semester. Especially the classes on computer error analysis and learner corpora raised their awareness of their language use. The results are also parallel with this claim as 11 participants (55%) stated that they became more aware of their language use after this course.

The statements of the participants clearly demonstrate how the course helped them to realize authentic language use in contrast to the prescriptive rules they were imposed throughout their language education. 10 students (50%) stated 25 times that after this

course they realized that the rules they were imposed to made them anxious during their classes; however, they saw that the real-life language was not always that strict. Participant 12's statement exemplifies this category well:

Excerpt 37:

"For example, we have seen the example of 'sometimes'. It is not about memorizing that it can be placed before or after the verb, we have learned now that it can even be used at the beginning of the sentence. This course is very useful for the translation course as well. It shows us that there is not only one correct option in language. It is not like math with strict rules, it is something alive."

Excerpt 37 shows that after introducing an authentic language approach instead of a prescriptively defined language approach, the students see the nature of the language better. They see that language is something alive and used for communication. One another important point shows that the use of prescriptive language use results in some affective problems such as anxiety. It can be inferred from the excerpt that the participants' awareness of "authentic language" was raised through the practices employed throughout the corpus literacy course.

Similar to the results reached through reflection papers, during the semi-structured interviews, 14 participants (70%) stated that thanks to this course they became more aware of the importance of "language in context". They said that by the means of the practices done in the classroom, they realized that synonyms could be used in different contexts although the dictionaries stated that they had the same meanings. Participant 13's statement reflects this category very well:

Excerpt 38:

"We do not know the use of language well. For example, we know two synonym words, but their uses are different in different contexts. We can see that using corpora. For instance, we can examine how collocations are used, in which words are used with some specific verbs."

As it is seen in Excerpt 38, corpora were a great help for participants to recognize how important context is for language. Again, the participants highlighted that the course increased their awareness of register differences as 10 of them (50%) stated that after this course they became more aware of the language use in different registers. They also emphasized that they realized better the nature of language as it changes in time, and

language use differs from genre to genre.

The main category whose frequency highly increased in semi-structured interviews was “interlanguage”. 11 participants (55%) stated that after this course they became more aware of their language use. They added that they realized how L1 interference affects their L2 use, how much more they need to learn, and how wrong they were thinking that they knew everything. These might be results of some specific practices conducted during the corpus literacy course. In the second half of the semester, the participants were informed about learner corpora and computer error analysis. After this presentation, the researcher demonstrated to them which errors Turkish learners do in their English. They saw that it was the use of punctuation, especially comma. Then they wrote essays and coded their peers’ errors and created a learner corpus, and then they analyzed the frequencies of their own errors as a class. They found again that comma was the most common error made by the class members. This was one of the activities which raised their awareness of their interlanguage. Participant 19’s statement reflects this very well:

Excerpt 39:

“I have not heard about this before that we make mistakes the most in the use of the comma. I thought that comma or full stop was very easy to use like in Turkish. However, I learned that we make the most mistakes in using it. It was so strange for me to learn that. It was one of the easiest things for me, I would never think of it.”

Excerpt 39 implies that the participant was not even aware of their comma use and the errors they make in L2. It should be also noted that they were transferring their L1 knowledge into L2 and using them incorrectly. It can be inferred from this statement that the corpus literacy course raised the participant's awareness of their interlanguage and also their L1 interference into their L2. Another statement made by Participant 1 also displays how they became aware of their language use and L1 interference:

Excerpt 40:

“We might assume that we use lots of language units correctly; however, we might be wrong. It might be because we translate from Turkish.”

This excerpt also shows how the participant is aware of their language use and possible L1 interference. Many statements like this were made by the participants, and the frequency (N=35) of the statements shows that the course had a strong impact on their

awareness of language use and L1 interference.

In this part, the results gathered from the semi-structured interviews have been presented. It has been shown that the categories emerged were almost the same as the ones in reflection papers' results while the number of students who suggested that their language awareness was raised through this corpus literacy course and the frequencies of the statements increased significantly. The reason behind this might be that as the reflection papers were written in the 8th week of the semester, and the semi-structured interviews were conducted at the end of the semester. As a result, the participants learned more about language in 16 weeks. That might be why more frequencies of the codes appeared at the end of the semester. Another reason might be that reflection papers were in written form while interviews were held face to face in spoken format.

In the following section, the results from focus group discussions will be displayed in detail.

4.4.3. Results of the Focus Group Discussions

As stated before, the focus group discussions were held in two groups considering that 20 participants would be too many that each participant might not have the chance to talk. As a result, two discussions were organized after the competition of the semi-structured interviews. The participants answered the question of whether during the course their thoughts on language and language use were affected. However, not only the answer to this question was taken as a response to this research question but also all the other statements made by the participants were analyzed to gather results inductively. The results will be presented without frequency information as some participants might not have the change of stating direct agreement or disagreement. The categories emerged from the focus group discussions are shown in Figure 9 below:

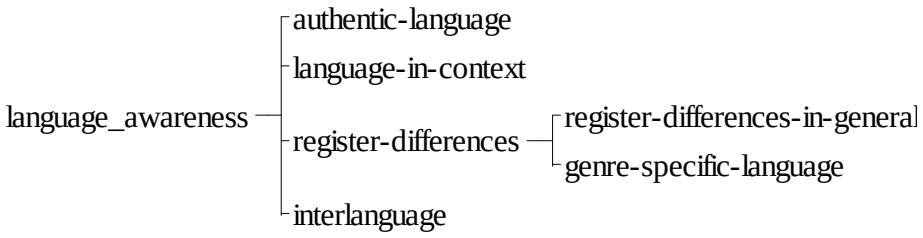


Figure 9. Overall coding scheme of the focus group discussions' results for raising language awareness

The analysis of the focus group discussion data showed that the categories

emerged were the same as the ones emerging from reflection papers and semi-structured interviews. However, two of the sub-categories of the "register differences" were not detected during the focus group discussions, namely "diachronic language change" and "language variety". The participants stressed that this course helped them be aware of the "authentic language", "language in context", "register differences", and "interlanguage". For the main category "register differences", two sub-categories were formed: "register differences in general" and "genre-specific language".

Similar to the data collected through reflection papers and semi-structured interviews, the students emphasized the authentic language use that they learned about real-life language, and they saw that language is not something artificial but something alive used for communication. Participant 14's statement reflects this point of view successfully:

Excerpt 41:

"Until this course, we were always taught as if English was something abstract and artificial."

This excerpt might be an implication of how language was taught to the participants. It could be inferred from the answers that they did not reach real-life language use frequently. Moreover, their statements indicated that they were not fully aware of its nature, they became more aware of the importance of the authenticity.

As the categories emerged from the data collected through three different tools are quite parallel, it can be inferred from the statements of the that the participants that their awareness of language and its use was raised in different aspects in different levels. It is clear that they became more aware of the importance of "authentic language", e.g. how language is used in real life, "language in context", e.g. how language units' use might differ from context to context, "register differences", e.g. how language use differs in different registers such as written and spoken, how it differs in different genres, how it changes in time, and how it differs in different Englishes, and finally their awareness of "interlanguage" was also raised through this course as they became more aware of their language use and possible L1 interference into their L2 use.

The third research question has been answered in this part, and in the following section, the results for the fourth research question will be presented in detail.

4.5. Results for the Research Question 4

4. What is the overall evaluation of ELT pre-service teachers about the corpus literacy course in their language teacher education program?

4.a. What are the efficacious aspects of the course?

4.b. What are the difficulties that pre-service teachers faced during the course?

4.c. What kind of improvements are suggested to increase the effectiveness of the course?

The fourth research question of the present study consists of three sub-questions. The questions examine the overall evaluation of the participants about the corpus literacy course. The sub-questions investigate respectively the effective aspects of the course, the problems the participants faced, and their suggestions to improve the effectiveness of the course for future English teachers.

For this research question, various data collection tools were employed to examine the whole process in detail and present an elaborate picture at the end. As a result, minute papers were collected at the end of sessions, reflection papers were written by the participants in the 8th week of the semester (mid-term exam week), semi-structured interviews, and focus group discussions were held after the course had been completed. Thus, the whole process could be evaluated by the participants at different stages of the course.

The results will be presented under three headings for three sub-questions. Also, for each sub-question, the results gathered from 4 data collection tools will be presented in a detailed manner.

4.5.1. The Efficacious Aspects of the Course

The efficacious aspects of the course stated in minute papers, reflection papers, semi-structured interviews, and focus group discussions have been identified through computer content analysis. After the content analysis, five main categories emerged as the efficacious aspects of the course:

- *supporting language learning,*
- *supporting language teaching,*
- *raising awareness,*
- *efficient course content and format,*
- *supporting academic career.*

Moreover, each category had several sub-categories. The overall scheme of the efficacious aspects of the course is displayed in Figure 10 below:

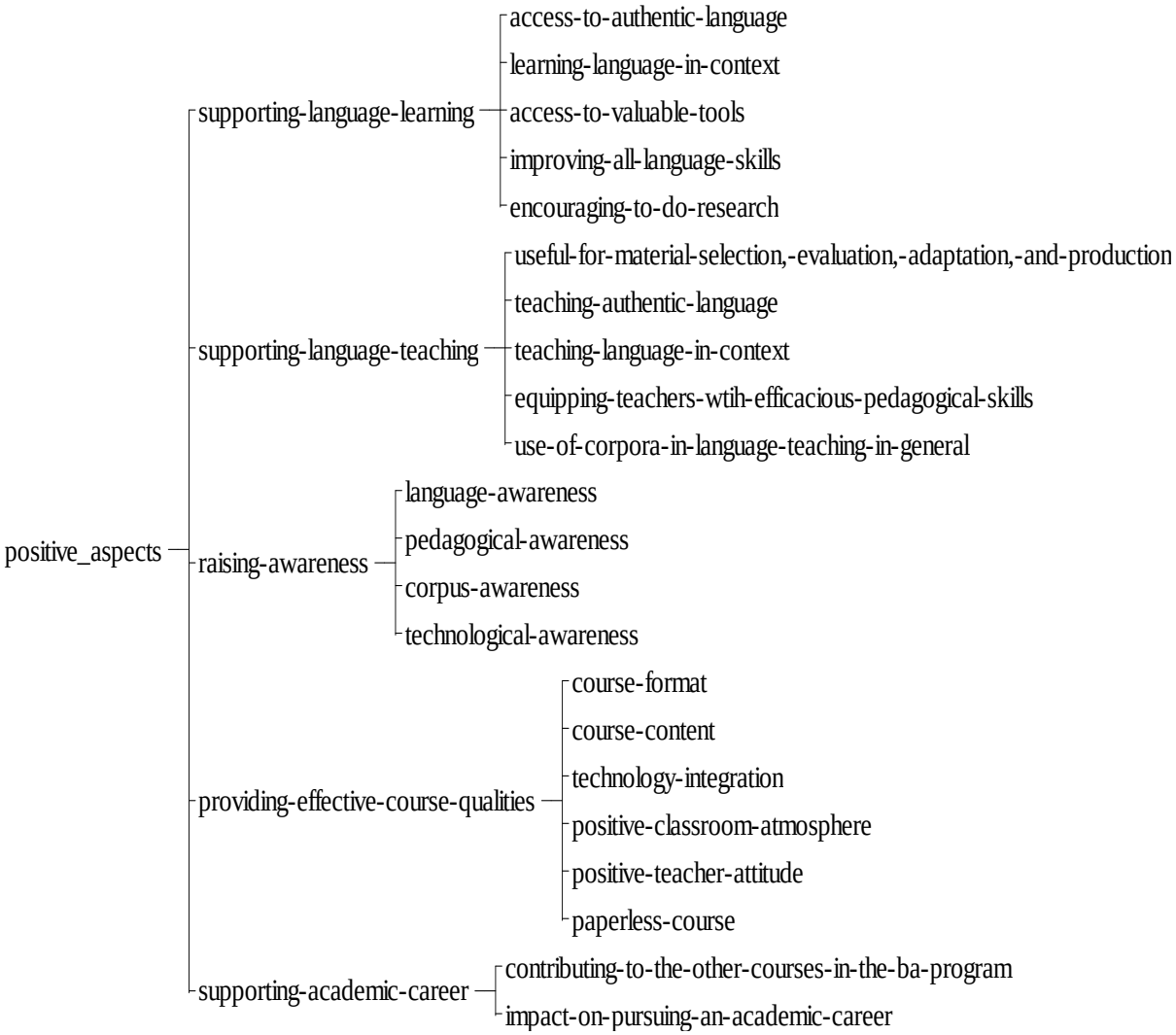


Figure 10. Overall coding scheme of the efficacious aspects of the course

Figure 10 shows an overall summary of all the main categories and sub-categories that emerged after the data analysis. The data collected from different tools gave similar results although there were slight sub-category differences. As the data were collected through 4 different tools, each tools' results will be presented for each category.

In the previous questions, the overall results from a specific data collection tool were presented, respectively. However, in this section for each category, the results from each data collection tools will be provided as there are many categories and sub-categories. It has been thought that giving the results from different data collection tools for each category could be a better method to compare the results.

The first category *"supporting language learning*" will be presented as the initial

category.

4.5.1.1. Supporting Language Learning

It has already been shown that a corpus literacy course provides prospective English teachers with various qualities as a language learner and teacher. In addition to the previous statements of the students about the material development and language awareness, the students were asked overtly about the fruitful aspects of the course. They were required to state anything they wanted about the course which they found positive. As stated above, the data were collected using 4 different tools to monitor the flow of the course, and an overall evaluation is presented at the end.

The first sub-category that emerged in all the data gathered through four different tools was "supporting language learning". The participants stated repeatedly that the corpus literacy was supportive of language learning in many ways which are listed respectively "access to authentic language", "learning language in context", "access to valuable tools", "improving all language skills", and lastly "encouraging to do research".

The findings extracted from the data obtained each data collection tool will be presented below. Initially, the results gathered through minute papers will be presented.

4.5.1.1.1. Results of the Minute Papers

After the classes, the participants were required to evaluate that specific class for its effective aspects, the difficulties they had, and they were also asked to write any suggestions they wanted to make to improve the course for the next classes and future students.

The minute papers were filled 10 times after 10 classes (The participants did not fill in the papers in the first week of the semester, the mid-term exams week, the final exams weeks, and for two more weeks). The collected data were analyzed using the UAM Corpus Tool. There was one problem with the minute papers. As the students generally commented directly on the content, the results gathered via minute papers were not as revealing as expected. For example, in the minute papers, the participants were required to write the best thing they liked about the course, and the majority of the answers were on the course content such as "I learned what corpus is", "I learned how to use AntConc", etc. neglecting the other aspects of the course. However, the results extracted presented that the participants could benefit from the course as language learners as well.

Under the main category labelled “supporting language learning”, five sub-categories emerged. The details are provided in Table 26 below:

Table 26

Results of the Minute Papers for “Supporting Language Learning” Category

Supporting Language Learning											
	Access to authentic language		**Learning language in context**		**Access to valuable tools**		**Improving language skills**		**Encouraging to do research**		**Total N**
Week Number	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	
1	5	31.3	1	6.3	1	6.3	0	0	0	0	16
2	0	0	0	0	1	7.1	0	0	0	0	14
3	1	6.7	1	6.7	7	46.7	0	0	1	6.7	15
4	3	15.8	2	10.5	3	15.8	2	10.5	2	10.5	19
5	0	0	0	0	13	81.3	0	0	0	0	16
6	3	33.3	0	0	0	0	0	0	0	0	9
8	0	0	0	0	0	0	0	0	0	0	17
9	0	0	0	0	0	0	0	0	1	6.3	16
10	2	11.8	0	0	2	11.8	0	0	1	5.9	17
11	0	0	0	0	0	0	0	0	0	0	17

Table 26 demonstrates that the course literacy course yielded five different advantages to the participants as English language learners although the percentages are not significantly high. Through the third to fifth weeks, the concordancers were introduced and practiced in the class. These activities affected the participants’ answers considerably. Especially in the first week, 31.3% of the students stated that the course provided them with authentic language which was important for language learners. This essential point was highlighted in 5 weeks out of 10 weeks in total. Another sub-category emerged was “learning language in context”. However, the statements about this category were written only in the first three weeks and made by few students. The most frequently emphasized category by the participants as language learners was “access to valuable tools”. Especially in the first 5 weeks, the participants underlined the advantage of accessing valuable tools as they had learned concordancers and how to use those tools in language learning and teaching. Participant 4’s statement in Week 4 reflects this category well in Excerpt 42 below:

Excerpt 42:

"The best thing in this session was 'AntConc'. The use of it attracts me a lot. I like that. I want to use with my future students. I think that it is so useful for both teacher and student."

As Excerpt 42 clearly shows the participant found the concordancers useful for language learners and language teachers as well. In the 5th week, 81.3% of the participants stated that learning about different concordancers were useful as language learners.

The fourth sub-category that emerged was "improving all language skills" even though only 2 participants (10.5%) stated that in Week 4 in total. The last category that emerged was "encouraging to do research". This sub-category was not emphasized by several participants; however, it was stated in four weeks. The participants stated that thanks to this course, they learned to do research using corpora and discover the authentic use of language in context and different registers.

As the results from the minute papers indicate, during the course the students touched upon some points about the advantages of corpora for language learners. Although the number of the categories emerged was diverse, the frequency of the students who highlighted those categories was not significantly high except for the category "access to valuable tools".

4.5.1.1.2. Results of the Reflection Papers

In the 8th week of the semester, the participants were required to evaluate the course and state the positive aspects of the course, the difficulties they faced, and the suggestions they would like to make to improve the effectiveness of the course. Similar to the results of the analysis of the data collected through the minute papers, one main category was "supporting language learners", and this category had the same 5 sub-categories as well. In Table 27 below, the sub-categories and the descriptive results are presented:

Table 27

Results of the Reflection Papers for "Supporting Language Learning" Category

Supporting Language Learning		
	N	**%**
Access to authentic language	17	85
Learning language in context	11	55
Access to valuable tools	16	80
Improving language skills	10	50
Encouraging to do research	11	55
Total N	**20**	

n:20

As Table 27 also shows, the sub-categories are identical to the ones emerged in minute papers data. Nevertheless, one distinction is that the number of students who stressed that the course was "supporting language learning" increased substantially. For each category, at least 50% of the students agreed that the course provided the participants with important benefits as language learners. The highest frequency of the statements for the sub-category "access to authentic language" as 85% of the participants stated that they could reach authentic language through corpora and it was beneficial for them. Participant 12's statement implies that using corpora provides them as language learners with authentic language:

Excerpt 43:

"While I am writing, I am confused about using some of the vocabularies. For example, while I am writing phrasal verbs, I cannot decide which preposition is suitable. If I can come across this situation, I can check phrasal verbs or vocabularies, and I can decide on the frequency of use. Furthermore, I can click on them and search its usage in other passages. It can contribute my vocabulary knowledge."

As Excerpt 43 vividly shows, through the corpus literacy course, the participants learned about tools that provide them with the access to authentic language, and corpora seem like potentials tools to improve vocabulary knowledge for the participants. Similar to the results reached through minute papers, 80% (N=16) of the participants stressed the advantage of having access to valuable tools such as concordancers as language learners since through these tools they can reach the authentic language in context.

One another sub-category that emerged from the data was "improving all language skills". 50% of the participants (N=10) stated that they could improve their language skills

using corpora and concordancers. Although all the skills were mentioned, especially the register differences between written and spoken language, the most frequently emphasized skill was writing. The participants stated that they could improve their writing using various tools they learned in this course. Participant 8's statement can be a good example:

Excerpt 44:

"Let's say I am writing a mid-term paper or an essay, and I have a trouble in choosing what word to use to give that specific meaning in mind or in what way I can use the word to serve my point, this is probably when I will take a look at a concordancer."

Excerpt 44 suggests that the participants can use corpora to improve their writing skills through learning suitable words for specific genres and topics. Many other students also emphasized that they could make use of corpora to improve their academic writing. In addition to these, 11 participants (55%) also added that the corpus literacy course was "encouraging to do research" and they could have the change of "learning language in context" thanks to corpora and corcondancers as language learners.

4.5.1.1.3. Results of the Semi-structured Interviews

Minute papers were employed to monitor the course throughout the semester and find out the efficacious aspects of each week, reflection papers were used to evaluate the first half of the week. In addition to these data collection tools, semi-structured interviews were conducted to gather the evaluations made by the participants at the end of the course. Thus, a broad picture of the course could be taken, and at all the stages of the course, evaluations were made. With each participant (N=20), a face-to-face semi-structured interview was conducted to learn about the positive aspects of the course for the participants. The first category for the semi-structured interview was also "supporting language learning" that the participants found the corpus literacy course was helpful for language learners for several reasons. The sub-categories that emerged were again identical to the ones found in minute papers and reflection papers. Table 28 displays the sub-categories and descriptive results elaborately:

Table 28

Results of the Semi-structured Interviews for "Supporting Language Learning" Category

Supporting Language Learning		
	N	**%**
Access to authentic language	18	90
Learning language in context	15	75
Access to valuable tools	17	85
Improving language skills	7	35
Encouraging to do research	13	65
Total N	**20**	

n:20

As can be seen in Table 28, for 4 sub-categories the percentages increased significantly. 90% of the students stated that language learners can reach authentic language through the tools learned in this course. Similarly, 85% of them asserted that they could reach valuable tools as language learners. Besides, 75% of the students added that thanks to the tools they learned in the course, they had the chance of "learning language in context". As the students could make searches of language units using concordancers, and discover the use of them in context, they found this beneficial for language learners. Thus, they could check the lexical units' use in a different context and the change in meaning depending on the context. Participant 19 highlighted the importance of context in language use in Excerpt 45:

Excerpt 45:

"While speaking or writing we have great difficulties. For example, we write the word "pencil" in the dictionary. We get 10 different results. When we look for a verb, we get several phrasal verbs. We examine the example sentence, but there is only one example sentence. For instance, in COCA we could check the uses in different contexts such as academic language or magazines. I like it a lot. I liked that we could choose specific words to write an academic piece or less formal writing."

It can be inferred from the excerpt that the use of corpora provides language learners with many advantages. In addition to the fact that they become more aware of the register differences, they also recognize that the use of words differs in different contexts. Also, corpora provide the language learners with a rich collection of example sentences that they can comprehend the meaning of the word better compared to a

dictionary. Furthermore, 13 participants (65%) added that the course encouraged them to research language use as language learners. As the participants were taught to make searches through concordancers and examine specific language uses, they found this as a useful trait for language learners. Participant 7's statement in Excerpt 46 represents this sub-category well:

Excerpt 46:

"This course is triggering to do research. We have to make searches on concordancers and come up with results. In that respect, it might be beneficial, and it can also improve critical thinking. We have to make choices among the results we get on the corpus from our searches. It improves our knowledge as well."

The excerpt evidently demonstrates that the corpus literacy course equipped the participants with research skills and also some other 21st century skills such as critical thinking. As the participants learned about discovering the language uses independently and learned how to learn, it might also have a positive impact on being more autonomous language learners with essential skills.

4.5.1.1.4. Results of the Focus Group Discussions

Similar to semi-structured interviews, two focus group discussions were held after the course was completed. The discussions were conducted after the interviews so that everyone had some ideas about the questions and that helped to trigger the students to discuss openly. The discussions were held in two groups with 10 students in each group. The results from the collected data gave similar results to the ones gathered through the previous three data collection tools. The sub-categories are presented in Table 29 below:

Table 29

Results of the Focus Group Discussions for "Supporting Language Learning" Category

Supporting Language Learning
Access to authentic language
Learning language in context
Access to valuable tools
Improving language skills
Encouraging to do research

The descriptive results are not provided in this table as it would not reflect the

reality correctly as some students highlighted some points and the other agreed, but it was not asked overtly if they agreed or not. As a result, the numbers gathered could be misleading. For that reason, only the sub-categories that emerged for the "supporting language learning" main category is displayed in Table 29. As stated in the previous sections, the participants found this course useful as they could reach authentic language, learn language in context, and have access to valuable tools as language learners. They also added that they could improve all language skills thanks to the use of corpora, and they were also encouraged to do research during this course, which helped them as language learners to discover the target language.

4.5.1.2. Supporting Language Teaching

The second efficacious aspect of the course for the participants was that the course was "supporting language teaching". This main category also emerged from the data collected from four tools previously mentioned: minute papers, reflection papers, semi-structured interviews, and focus group discussions. After the detailed analysis of the data, it was found that the corpus literacy course was useful for language teaching in five ways: "useful for material selection, evaluation, adaptation, and production", "teaching authentic knowledge", "teaching language in context", "equipping teachers with efficacious pedagogical skills", and "use of corpora in language teaching in general". The sub-categories were highlighted by the participants at different stages of the course. Some sub-categories were not found in the results of some data collection tools. Nevertheless, the results were rather similar across four data collection tools. The elaborate descriptive results will be presented for each tool below.

4.5.1.2.1. Results of the Minute Papers

As stated before, minute papers were collected 10 times during the semester and the students mostly wrote about the content of the course and they gave broad answers. However, for the "supporting language teaching" main category, the answers were more diverse and frequent. Under this category, four sub-categories were highlighted by the participants in minute papers filled in throughout the semester. The results are shown in Table 30

:

Table 30

Results of the Minute Papers for "Supporting Language Teaching" Category

Supporting Language Teaching									
	Useful for material selection, evaluation, adaptation, and production		**Teaching authentic language**		**Teaching language in context**		**Use of corpora in language teaching in general**		**Total N**
Week Number	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	
1	1	6.3	1	6.3	0	0	2	12.5	16
2	0	0	0	0	0	0	0	0	14
3	0	0	1	6.7	0	0	2	13.3	15
4	2	10.5	2	10.5	1	5.3	7	36.8	19
5	0	0	0	0	0	0	3	18.8	16
6	0	0	0	0	0	0	0	0	9
8	0	0	0	0	0	0	11	64.7	17
9	2	12.5	0	0	0	0	7	43.8	16
10	5	29.4	3	17.6	0	0	4	23.5	17
11	11	64.7	5	29.4	1	5.9	0	0	17

As seen in Table 30, the participants strongly emphasized that the course was "useful for material selection, evaluation, adaptation, and production" through the end of the semester. Especially in the last week, 64.7% of the students (N=11) mentioned the usefulness of corpora in the material development process. The reason behind this was that in the second half of the course, the students learned about corpus-informed materials and their development. As a result, they found this very useful for language teachers as they could compere those materials to traditional language teaching books. Especially, in the second half of the course, the number of students who emphasized this category increased significantly. Excerpt 47 shows how Participant 18 emphasized the use of corpora in material evaluation:

Excerpt 47:

"We can use corpora while we are evaluating a material, activity, or a coursebook to search about accuracy. In that way, we can hinder the fossilization of errors."

Excerpt 47 shows that the participant found corpora as helpful tools for language teachers in the material evaluation process. In addition to material evaluation, the participants found the content of the corpus literacy course beneficial for material production and activities to teach English. As the students learned about computer-aided error analysis, and how to apply it in the classroom, they thought it would be a good activity in language teaching. Participant 18's statement on this point is presented in Excerpt 48:

Excerpt 48:

"Checking my students' errors and preparing materials accordingly by using error tagging code is a useful way of observing students' process."

As can be observed in Except 48, the participant found computer-aided error analysis as a useful way of monitoring the students' language development.

Throughout the semester, the participants also stated that the course was helpful for "teaching authentic language" and "teaching in context". However, the frequency of these statements was very low and also not in many weeks. Especially, "teaching in context" sub-category was stressed in only two weeks by 1 participant (5%).

Although the first three categories were mentioned scarcely by the participants in few weeks, the last category was found in nearly all the weeks, 7 weeks (70%). The reason behind this was that the students made some broad statements such as "I would like to use corpora/concordancers in my teaching". It showed that the students could think that they could apply what they learned in the corpus literacy course into their future language teaching practices. However, they might not have had clear ideas about how to do it.

4.5.1.2.2. Results of Reflection Papers

The reflection papers were written by all the students (N=20) in the 8th week of the semester. The content analysis of the data collected through this tool also revealed that the participants found the corpus literacy course efficacious for language teaching. The results showed that all the 5 sub-categories emerged from this data, and compared to the minute paper results, the frequencies fluctuated. The details are provided in Table 31:

Table 31

Results of the Reflection Papers for "Supporting Language Teaching" Category

Supporting Language Teaching		
	N	**%**
Useful for material selection, evaluation, adaptation, and production	3	15
Teaching authentic language	17	85
Teaching language in context	7	35
Equipping teachers with efficacious pedagogical skills	5	25
Use of corpora in language teaching in general	8	40

n:20

As seen in Table 31, the frequency for the sub-category "useful for material selection, evaluation, adaptation, and production" decreased considerably. However, the frequencies increased considerably in the categories "teaching authentic language" and "language in context". The reason behind this might be that the students evaluated the first half of the semester as a whole, and they might have written the most striking points for them. The results showed that 17 students (85%) found the course beneficial as it helped them to teach authentic language. For example, Participant 20 found corpora very useful as a language teacher to provide authentic language:

Excerpt 49:

"Corpora make our job easier, and they give us the opportunity of learning to learn. As a result, we can be sure about the usage of the word and teach them correctly. Exact information from the exact source."

Excerpt 49 shows that Participant 20 found corpora as useful and reliable tools to teach language. In addition to "teaching authentic language", 7 participants (35%) also stated that thanks to corpora they could "teach in context". Participant 15's statement is a good example of this sub-category:

Excerpt 50:

"My students can learn new vocabulary in context, and they can easily select appropriate words in a given context. By doing so, they learn a language in context, not in isolation. This will help their grammatical and lexical competency increase."

Excerpt 50 shows that the participant found corpora useful for teaching a language

in context. She was also aware of the fact that future students could improve their both grammatical and lexical competency when they learn a language in context. In addition to these three sub-categories, two more sub-categories emerged. 5 participants (25%) stated that the course was "equipping teachers with efficacious pedagogical skills", and 8 participants added that the course was "useful in language teaching in general".

4.5.1.2.3. Results of Semi-structured Interviews

At the end of the course, the semi-structured interviews were conducted with each participant separately. They were required to state the effective aspects of the course, and the content analysis showed that four of the five sub-categories emerged for the "supporting for language teaching" main category also in the data gathered through interviews. The only missing sub-category was the "use of corpora in language teaching in general". It might be an indicator that the students were more focused on specific topics instead of giving too broad answers as "use of corpora in language teaching in general". Besides, the frequencies increased significantly compared to the minute papers' and reflection papers' results. The results can be seen in Table 32 for the descriptive statistics:

Table 32

Results of the Semi-structured Interviews for "Supporting Language Teaching" Category

Supporting Language Teaching		
	N	**%**
Useful for material selection, evaluation, adaptation, and production	20	100
Teaching authentic language	18	90
Teaching language in context	7	35
Equipping teachers with efficacious pedagogical skills	18	90
Total N	**20**	

n:20

Table 32 evidently demonstrates that all of the participants (N=20) agreed at the end of the course that the course was "useful for material selection, evaluation, adaptation, and production". Furthermore, it was also agreed by 90% of them that the course was helpful for "teaching authentic language". The number of participants who thought that the course was beneficial for language teachers for "teaching language in context" was lower compared to the other categories. 7 students (35%) agreed that it was useful to teach in context.

The last category that emerged was “equipping teachers with efficacious pedagogical skills”. 90% of the participants (N=18) thought at the end of the corpus literacy course that this course was equipping language teachers with effective pedagogical skills such as being autonomous, doing research, being innovative, improving themselves, etc. Participant 6’s statement shows that the course provided them with valuable skills:

Excerpt 51:

“First of all, we learned that we should be able to use technology effectively. We should take more responsibilities and not only use the ready-made materials. Instead, we should do some research, and work more.”

Excerpt 51 implies that the participants became aware of the use of technology in language teaching. In addition, they learned that they should not only be the consumers of the materials, but they should also evaluate the materials making some searches on corpora. If there were problems with the materials, they should be able to produce their own materials accordingly. This way they learned that the teachers should be responsible for the materials they use in the classroom. Participant 7 also added some more skills they could acquire through this course:

Excerpt 52:

“This course contributed me in many ways as this course triggers doing research. It might also be helpful to improve critical thinking. While searching language constructions on concordancers, we have to be critical about the results, and come to a conclusion.”

This excerpt shows that the participants found the corpus literacy course as a means for developing some valuable pedagogical skills such as doing research and thinking critically while developing materials. The results indicate that at the end of the semester, the participants had clearer ideas about the benefits of the corpus literacy course as future language teachers.

4.5.1.2.4. Results of Focus Group Discussions

After the semi-structured interviews were completed, the focus group discussions were held. The results gathered through this tool also showed that the same four sub-

categories emerged. Again, the only missing sub-category was the "use of corpora in language teaching in general" as in semi-structured interviews' results. This proved that at the end of the semester, the participants had more detailed and clearer ideas about the advantages of the corpus literacy course as pre-service language teachers. The results are shown in Table 33 below:

Table 33

Results of the Focus Group Discussions for "Supporting Language Teaching" Category

Supporting Language Teaching
Useful for material selection, evaluation, adaptation, and production
Teaching authentic language
Teaching language in context
Equipping teachers with efficacious pedagogical skills

As displayed in Table 33, the participants found the corpus literacy course "useful for material selection, evaluation, adaptation, and production". For example, Participant 13 emphasized the lack of authenticity in traditional textbooks:

Excerpt 53:

"We have recognized the deficiencies of the traditional textbooks used in the schools. We have seen that the content was not authentic enough."

Excerpt 53 shows that they could use corpora to evaluate the materials critically and check their authenticity. They also found the course supportive for "teaching authentic language" and "teaching language in context". For instance, for the authentic language point, Participant 12 touched upon a very important point:

Excerpt 54:

"For example, we can teach them that the frequency adverbs can be used in different positions as well, instead of giving strict rules as in the grammar books. If we become aware of this, we can teach this to the students, too. Then they do not be anxious and scared about making mistakes anymore."

The excerpt clearly shows that the participant became aware of the descriptive

language use and teaching authentic language. This was a frequently emphasized point as in their education they always learned the language with strict rules, and they were generally scared to make mistakes.

Finally, the participants added also that the course was “equipping teachers with efficacious pedagogical skills”. Similar to the answers given during the interviews, the participants highlighted that after this course they learned more about the importance of using technology as language teachers and doing research to reach authentic language and contribute to the material development process.

4.5.1.3. Raising Awareness

In the previous sections, it was presented that the participants found the corpus literacy course efficacious as they stated that the course was “supporting language learning”, and it was also “supporting language teaching”. The participant's answers in minute papers, reflection papers, semi-structured interviews, and focus group discussions revealed that the course was also described as to be “raising awareness”. The analysis of the collected data pointed out that the corpus literacy course raised the awareness of the participants in four ways: *language awareness*, *pedagogical awareness*, *corpus awareness*, and *technological awareness*. Although the sub-categories fluctuated in the previous categories across the collected data; in this category, raising awareness, all the data collected through four different tools gave the same results.

As stated before, the third question investigated whether the corpus literacy course could contribute to language awareness. The results vividly demonstrated that the course had an awareness-raising effect on the participants, and they stated that their awareness was raised in various ways. In addition to that sub-category, the students stated that they learned how to teach language better, e.g. using authentic language, using real language in the material development process, etc. In addition, they added that they had learned about something they had no idea, corpus. They added that they not only learned what a corpus was but also how to use it to learn/teach a language. Furthermore, it was also highlighted by the students that thanks to this course they could learn how to integrate technology into language learning/teaching. They stated that the teacher did not only instruct abstractly on how to use technology but also practiced it in the classroom with concrete examples as a guide. These all show that the course had a strong effect on raising the participants’ awareness in multiple ways.

In the following paragraphs, the results from different data collection tools will be presented. The results gathered through minute papers will be introduced first.

4.5.1.3.1. Results of Minute Papers

As stated above, the participants' statement in minute papers indicated that their awareness was raised in four different ways. The descriptive results are presented in Table 34:

Table 34

Results of the Minute Papers for "Raising Awareness" Category

Raising Awareness									
	Language Awareness		**Pedagogical Awareness**		**Corpus Awareness**		**Technology Awareness**		**Total N**
Week Number	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	
1	3	18.8	4	25	13	81.3	10	62.5	16
2	0	0	0	0	7	50	1	7.1	14
3	0	0	3	20	14	93.3	13	86.7	15
4	4	21.1	10	52.6	17	89.5	17	89.5	19
5	0	0	3	18.8	14	87.5	14	87.5	16
6	6	66.7	0	0	3	33.3	2	22.2	9
8	0	0	11	64.7	10	58.8	5	29.4	17
9	0	0	8	50	13	81.3	13	81.3	16
10	6	35.3	11	64.7	12	70.6	12	70.6	17
11	8	47.1	14	82.4	11	64.7	5	29.4	17

As shown in Table 34 above, the participants found the course effective as it increased their awareness in many ways. In the previous main categories "supporting language learning" and "supporting language teaching", it was stated that the participants generally wrote about the content of the course. The results indicated that they emphasized the awareness point more than the previous categories. As the language awareness topic was covered in the third research question, the results will not be repeated here. However, it should still be noted that the participants found the course effective as they became more aware of the registers, authentic language use, the interlanguage, and

use of language in context.

Although the number of participants highlighting "language awareness" was not too high and not stated in all the weeks, the high number of participants stressed that their pedagogical awareness was raised during the semester. It shows that they became more aware of how to teach language and improve the language teaching process. These results are parallel with the second category of the efficacious aspects of the course, "supporting language teaching". The participants stated that the course helped them to learn about the importance of teaching authentic language, teaching in context, improving themselves, evaluating and developing materials critically and objectively basing the information onto real language, not on intuitions. They said that they also learned about doing research and using technology effectively. It can be observed in Table 34 that especially through the end of the semester the percentages increased as they started to do more practice in the second half of the course, and they also learned about how to develop corpus-based materials. In the last week, 82.4% of the participants inserted that the course increased their pedagogical awareness. Participant 1's statement is a good example showing the awareness-raising effect of the course:

Excerpt 55:

"The most striking thing in this class for me was the importance of contemporary ways of teaching grammar. I think that is a way sensitive and often overlooked aspect of teaching English to non-native speakers. Awareness is the way to start things."

Excerpt 55 implies that in that session, the participant thought that grammar should be thought in more contemporary ways instead of a deductive method. This might be because in the course the use of corpora to teach language in context and using real-life examples instead of artificial sentences was highlighted frequently. Moreover, the participant herself emphasized the importance of awareness of this fact to improve grammar teaching.

In addition to language awareness and pedagogical awareness, the majority of the participants stated that the course raised their "corpus awareness" and "technological awareness" that they learned corpora and concordancers to learn/teach language. Besides, during the course, they also learned using Moodle and some other tools to make the course more efficient.

4.5.1.3.2. Results of Reflection Papers

Similar to minute papers' results, four sub-categories emerged from the reflection papers. The participants wrote on their reflection papers when the first half of the semester ended that the course increased their language awareness, pedagogical awareness, corpus awareness, and technological awareness. It can be observed in Table 35 below that the frequencies increased significantly compared to minute papers' results. The descriptive results are presented in detail in Table 35 below:

Table 35

Results of the Reflection Papers for "Raising Awareness" Category

Raising Awareness		
	N	**%**
Language awareness	16	80
Pedagogical awareness	20	100
Corpus awareness	20	100
Technological awareness	19	95
Total N	**20**	

n:20

As seen in Table 35, all of the participants agreed that the course increased their pedagogical awareness and corpus awareness that they learned something totally new to them. Participant 12 expresses her experience in Excerpt 55 very well:

Excerpt 55:

"When we started this course, I did not have any idea about even its name. In time, firstly, I have learned the meaning of 'corpus' and what its purpose is. Then I learned 'concordancer' and how it works. We practiced one that name is AntConc, and we learned how it works. Especially, we have learned how to implement these programs in our class and talked about its benefits."

The statement made by Participant 12 showed that the participants learned a new tool for language learning/teaching and practiced it substantially in the classroom. In addition to "corpus awareness", 80% of the (N=16) participants also expressed that their "language awareness" was raised. For example, the students became aware of different registers and differing language uses in those registers. Participant 1's statement could be a good example of this:

Excerpt 56:

"I can use corpora when I am writing an academic article or essay to find out what words are more suitable for the academic style."

Excerpt 56 suggests that the participant recognized that different words are used in different registers and she found corpora useful tools to identify those words or structures. In addition to the three sub-categories, 95% of the participants (N=19) also asserted that their "technological awareness" was raised as language learners and future language teachers thanks to the corpus literacy course.

4.5.1.3.3. Results of Semi-structured Interviews

In the previous part, it was shown that the frequencies increased in the 8th week compared to the weekly minute paper results. As the semi-structured interviews were held at the end of the semester, all the students agreed that their awareness was raised in four different ways. Table 36 below shows the results in detail below:

Table 36

Results of the Semi-structured Interviews for "Raising Awareness" Category

Raising Awareness		
	N	**%**
Language awareness	20	100
Pedagogical awareness	20	100
Corpus awareness	20	100
Technological awareness	20	100
Total N	**20**	

n:20

Table 36 shows that 100% of the participants affirmed that the corpus literacy course raised their language awareness, pedagogical awareness, corpus awareness, and technological awareness. It can be inferred from these results that the 16-week long course as a whole had a positive effect on the participants' perceptions' on the awareness-raising effect of the course as the number of students who declared that the course raised their awareness increased significantly compared to minute paper and reflection paper results. It might be an indicator that the second half of the course, which was more practical as in the first half more the terminology was introduced, affected their views considerably. It might be assumed that the more intense practice can bring more

awareness to the students.

About “technological awareness”, participant 13 expressed that with this course they could clearly see that they could really use technology in their classroom:

Excerpt 57:

“I think this course was a course where we could genuinely learn how to use technology in the classroom. For example, we used all those tools. In the other courses, we are always stressing the importance of technology integration into teaching. However, do we apply in those courses? No. As a result, we could see in this course that we can do it.”

Participant 13’s statement showed that this course could provide them with the exact idea of using technology in the classroom and how to do it as the technology was intertwined into the corpus literacy course throughout the semester. Similar to Participant 13, Participant 12 also asserted that learning about the use of technology and its application in their future teaching could be of great help in many ways:

Excerpt 58:

“Using technology can trigger students’ attention and provide a platform where the students will be active. Students will learn the language by using and discovering.”

It can be easily inferred from the statement of Participant 12 that she found the use of corpora and concordancers as technological language teaching tools beneficial in many ways. She stated that the students could be active so there would be a more student-centered classroom. Their attention could be caught, and they would be more interested in the classroom. Furthermore, maybe the most important, the learners could learn by discovering which could make the retainment easier and learning more efficient. Moreover, this could help to make the learners more autonomous and learn to learn.

4.5.1.3.4. Results of Focus Group Discussions

The results reached through semi-structured interviews showed that the corpus literacy course succeeded to raise all the participants’ awareness in four ways. The focus group discussions’ results were also in line with the previous results. The participants agreed in group discussions that their language awareness, pedagogical awareness, corpus awareness, and technological awareness were raised. The results are presented in Table 37:

Table 37

Results of the Focus Group Discussions for "Raising Awareness" Category

Raising Awareness
Language awareness
Pedagogical awareness
Corpus awareness
Technological awareness

The students strongly suggested that they became aware of the differences between spoken and written language. They stated that they were using any word they knew in any context. However, after the corpus literacy course, they became more aware of this issue, and they were happy to be able to reach authentic language through corpora and check the uses of the words across different registers. Participant 18' statement represents this very well:

Excerpt 59:

"We could research the words we could use in spoken language but not in written language. I can make use of this while writing essays. That provided us with this awareness of language use. We do not know some words which are suitable for a specific register. It might be okay in spoken language but not in academic language. It does not sound academic but using corpora we can choose different registers such as academic or spoken and choose the words."

These sentences again show that the corpus literacy course provided the participants with the information that raised their language awareness. In addition to register differences, they became more aware of their interlanguage process, they became more aware of their own language use.

Excerpt 60:

"I recognized as a future language teacher that firstly we should be proficient enough in the target language. Still, we have incorrect information, and we make mistakes. It is a cycle at the end, everyone teaches what they know. Firstly, we should learn the correct language use through corpora or concordancers, and then we should teach."

The statement made by Participant 19 demonstrated that the course made the

students aware of their own language use and of their proficiency in the target language. As an output of this specific course, they questioned their interlanguage, and reflected on it critically, which might be a good step to improve their proficiency as prospective language teachers.

All the results reached through the 4 data collection tools indicated that the corpus literacy course raised the participants' awareness significantly. The effect is not only important for them as language teachers also as language learners.

4.5.1.4. Providing Effective Course Qualities

The fourth efficacious aspect of the corpus literacy course was found to be its effective qualities as a course. The content analysis of the collected data showed that the participants found it important that the course provided effective course qualities. Under the fourth main category "providing effective course qualities", 6 different sub-categories emerged. These sub-categories were "course content", "course format", "technology integration", "positive classroom atmosphere", "positive teacher attitude", and "paperless course". While all these sub-categories emerged in the data collected through semi-structured interviews and focus group discussions, some of them did not appear in the data collected through the minute papers and focus group discussions.

The emergence of these specific sub-categories indicated that the participants were pleased with the content of the course and how it was designed. Especially the practice parts of the course and technology integration were praised frequently by the participants. In addition, it was also asserted that the number of students in the course, student-teacher interaction, student-centered activities, etc. were very satisfactory. Another highlighted point was that the participants were very content with the positive attitude of the teacher, which affected their attitude towards the course. Furthermore, although stated not frequently, some of the students stressed that it was good to see that this course did not use any papers, which was good for the environment and boosting the use of technology in many different ways.

The results reached after the analysis of the collected data will be presented below for each data collection separately starting from the minute papers.

4.5.1.4.1. Results of Minute Papers

As stated, a few times in the previous sections, the participants generally

highlighted the course content as the effective aspect of the course. The reason behind this might be that they were asked to evaluate the course each week, and that might be why they generally commented on the course content. Apart from the course content, in some weeks, they also commented on the course format positively praising the student-centered activities. As a result, only two sub-categories emerged from the data collected through the minute papers. The descriptive results are presented in Table 38:

Table 38

Results of the Minute Papers for "Providing Effective Course Qualities" Category

Providing Effective Course Qualities					
	Course Content		**Course Format**		**Total N**
Week Number	**N**	**%**	**N**	**%**	
1	16	100	0	0	16
2	5	35.7	6	42.9	14
3	14	93.3	0	0	15
4	19	100	2	10.5	19
5	14	87.5	1	6.3	16
6	8	88.9	1	11.1	9
8	13	76.5	0	0	17
9	12	75	0	0	16
10	15	88.2	0	0	17
11	14	82.4	0	0	17

Table 38 displays above that each week the participants stated that they found the content of the course effective. One of the reasons behind that might be that as it was a totally new topic for them, they were learning new things every week. As a result, they might find the newly introduced topic interesting and useful. Except for the second week, more than 75% of the participants stated that they found the course content beneficial. Especially in the first week and the fourth week, 100% of the participants highlighted the course content as an effective quality of the course. In the first week, they learned what a corpus is and its use in language teaching, and in the 4th week, they learned how to use different concordancers and they did hands-on practice in the classroom. These might be the possible reasons for those high frequencies.

The participants liked the course content for many reasons such as learning tools to learn about target structure better reaching authentic language, evaluating materials objectively, designing corpus-informed materials, learning how to use technology effectively in the classroom, being more motivated to do research, improving their own

proficiency in the target language, etc. One of the simple but summative statements was made by Participant 2:

Excerpt 61:

"The information that we got is really useful for being a teacher."

This statement is a brief but strong summary of the views of the participants on the content of the course. Participant 17 emphasized the course content's impact on material design:

Excerpt 62:

"I should use corpora in my teaching at the stage of material design because we are not native speakers. Corpora rely on real-life language."

It can be assumed from Excerpt 62 that the participant found the course content beneficial for material design as he discovered that corpora represent authentic language, and it is better to use authentic language objectively instead of relying on the intuitions.

In the first 6 weeks, the participants commented on the "course format" positively as well although they did not write about it after the 6th week. The reason behind this might be that they learned about the corpora and concordancers in the first half the course and they presented what they learned, they presented various concordancers as groups, and they used those concordancers in the classroom together. A good example representing the participants' view might be Participant 19's statement:

Excerpt 63:

"I liked this week making searches on corpora and presenting the results. The practice is useful for us."

This statement shows that the participant found the practice parts useful as students. The participants also liked that the instructor demonstrated how to use the tools step by step first, and then let them practice autonomously. When they needed any help, the instructor could help them immediately in the classroom. As a result, they could comprehend the use of the tools better.

4.5.1.4.2. Results of Reflection Papers

Similar to the results of the minute papers, the results gathered through reflection papers also showed that the participants found the "course content" and "course format" effective. In addition to these two, three more sub-categories emerged from the reflection papers data: "technology integration", "positive classroom atmosphere", and "positive teacher attitude". The descriptive results are presented in Table 39 below:

Table 39

Results of the Reflection Papers for "Providing Effective Course Qualities" Category

Providing Effective Course Qualities		
	N	**%**
Course content	20	100
Course format	13	65
Technology integration	10	50
Positive classroom atmosphere	15	75
Positive teacher attitude	13	65
Total N	**20**	

n:20

The results of the content analysis showed that in the first half of the course, all of the students found the course content efficacious. In addition, 13 (65%) participants suggested that the course format was also satisfactory as they could do enough practice to comprehend the content, they could work in groups, they were active as students in the classroom. Furthermore, it was also asserted by 10 participants (50%) that the technology was very well-integrated into the course. It was stressed that the course did not only teach how to use technology for language learning and teaching purposes but also used it in the course in various ways very effectively. Participant 15's statement might represent the views of the students well:

Excerpt 64:

"Our students have been using tablets since they were 4-5, and we cannot teach them English through the coursebooks of the 20th century. We, teachers, need to learn how to integrate technology into the teaching process. Therefore, this course is quite interesting and necessary for my professional development."

As the excerpt implies, the participants emphasized the use of technology in the language classroom in the 21st century, and they were glad to learn about learning how to

apply it in the future. In addition to technology integration, 75% of the participants stated that they found the classroom atmosphere positive. They emphasized the points that they were active in the classroom, the teacher-student, and student-student interaction was very good, they had the chance of evaluating the classes every week, it was a friendly atmosphere instead of the existence of authority. Participant 18's statement could be a good example of this sub-category:

Excerpt 65:

"The classroom atmosphere and the interaction between us and the teacher is relaxing, calm, and friendly."

Another statement made by Participant 13 also showed that the classroom atmosphere and format was motivating for the participants:

Excerpt 66:

"Classroom atmosphere is good in this course. Because, as a student, we get bored when we just read the coursebook then have an exam from that book. However, in this course, we do not use a coursebook. We search for information about our topic and sometimes we conduct presentation activity. Therefore, I think it increases students' motivation."

This excerpt clearly shows that the classroom atmosphere was found positive as the students were active and they were not following a mainstream classroom atmosphere that they had experienced previously. Besides, the participants also stressed their appreciation of "positive teacher attitude". They found the teacher attitude very important especially because the course content was new to them and sometimes challenging. As a result, they liked that the course teacher was well-prepared and well-organized, understanding, friendly, energetic, kind, and fun. They added that they could see the teacher's ardor to teach them well and it affected them positively. Another point was that they could reach the teacher easily outside of the classroom as well.

4.5.1.4.3. Results of Semi-structured Interviews

The semi-structured interviews also revealed that the participants agreed on the idea that the course provided effective course qualities. They found the "course content", "course format", "technology integration", "positive classroom atmosphere", "positive

teacher attitude", and "paperless course" qualities as important factors that increased the effectiveness of the corpus literacy course. In the previous results for this category, the first sub-categories had already emerged; however, a new category appeared in the analysis of the semi-structured interviews: "paperless course". The descriptive results of the semi-structured interviews' analysis are presented in Table 40 below:

Table 40

Results of the Semi-structured Interviews for "Providing Effective Course Qualities" Category

Providing Effective Course Qualities		
	N	**%**
Course content	20	100
Course format	18	90
Technology integration	15	75
Positive classroom atmosphere	11	55
Positive teacher attitude	11	55
Paperless course	2	10

n:20

As seen in Table 40, all the students agreed at the end of the course that the course content was effective, and 90% of them (N=18) also asserted that the "course format" was an efficacious quality of the course. As previously stated, the participants learned a new topic, corpora, and they also learned how to use in language teaching. In addition, they were also content with the course content as in the class, first, the topic was introduced by the lecturer and then immediately the practice part was conducted. They worked in groups and they had immediate support and feedback from the teacher in the classroom. They were very active in the class and the activities were student-centered.

Similar to the results of the minute papers and reflection papers, "technology integration" into the course was found to be an effective trait of the course by 75% of the participants (N=15). Besides, 55% of them (N=11) found the "positive classroom atmosphere" and "positive teacher attitude" as efficacious aspects of the course.

Finally, 2 participants (10%) mentioned a new positive aspect of the course that during the course they did not need to print things or use paper to follow this course at any point. It made the students aware of being environmentally friendly in any possible situation. Participant 18's statement showed that using technological tools to replace paper use affected the students positively:

Excerpt 67:

"Until now, only one teacher was making us aware of paper waste in the department. It was nice to in this class that we did not waste any paper. This is both environmentally better and also more practical. We might lose some documents or might not find you in your office, thanks to the platform we use and using e-mails, we can reach each other at any time."

This statement clearly shows that the participants found the use of Moodle very effective as they could reach all the documents online and they could submit their assignments online at any time they wanted. Besides, they did not need to print the documents, which saved, time, money, energy, and paper. It is an indicator that the integration of technology into the course brought some extra practicalities and advantages.

4.5.1.4.4. Results of Focus Group Discussions

The last data collection tool, focus group discussions, also demonstrated that the participants found 6 qualities of the course effective. These sub-categories are shown in Table 41:

Table 41

Results of the Focus Group Discussions for "Providing Effective Course Qualities" Category

Providing Effective Course Qualities
Course content
Course format
Technology integration
Positive classroom atmosphere
Positive teacher attitude
Paperless course

The importance of the focus group discussions is that they were held after the course and the semi-structured interviews were completed so that the participants had the chance of discussing the positive aspects of the course as a group. Thus, they could have the chance of exchanging their ideas. As the results indicate, in the end, the participants agreed that they found the course content and format effective. Moreover, they added that

technology integration into the course was one of the best qualities of the course. Participant 9's statement shows that they did not only learn how to use Moodle but also used it as a material in another course at the department:

Excerpt 68:

"I learned how to use Moodle and it was a nightmare for me when I was a freshman student. I was questioning why we had to use it but not print the assignments and hand in. However, in this course, I learned how to use Moodle and it was really easy to learn. I used it as a tool in the 'Material Design' course."

The statement shows that technology integration equipped the participants with important skills that they could also apply in other courses productively. In addition to technology integration, the participants highlighted that the positive teacher attitude also affected their perspective on the course.

Excerpt 69:

"You had a very positive attitude during the course, we should talk about this. You were always positive, supportive, and motivating."

This excerpt also shows that the attitude of the teacher is an important factor affecting the motivation levels of the students.

All these results gathered through the minute papers, reflection papers, semi-structured interviews, and focus group discussions showed that the participants found the course efficacious as it has effective course qualities.

4.5.1.5. Supporting Academic Career

The last main category of the efficacious aspects of the course was "supporting academic career". Although the frequencies were not significantly high in all the categories, some of the students stated that this course supported them "contributing to the other undergraduate courses", and it was also suggested that the course might have a positive "impact on pursuing an academic career".

All the participants found this course useful for the other courses they were taking in their program. The details will be given in the following sections. As corpora provide authentic language the participants found it very important as language learners and future language teachers. and this is a very important trait that corpora have.

The other sub-category emerged was that the course had an "impact on pursuing an academic career". It was asserted that this course could be helpful for the people pursuing an academic career, and it was suggested that they would like to work on corpus linguistics as they find the topic very interesting.

The data analysis results are presented in the following part for two different data collection tools since in minute papers and focus group discussions, the participants did not state that the course was useful for the other courses in the undergraduate program or it had an impact on following an academic career. The results from the reflection papers and semi-structured interviews are presented in detail below.

4.5.1.5.1. Results of Reflection Papers

When the first half of the semester completed, the participants wrote a reflection paper and they reflected on the positive aspects of the course. The results showed that the participants found the corpus literacy course effective as it was also "supporting academic career". The descriptive results from the reflection papers are demonstrated in Table 42 below:

Table 42

Results of the Reflection Papers for "Supporting Academic Career" Category

Supporting Academic Career		
	N	**%**
Contributing to the other BA courses	20	100
Impact on pursuing an academic career	1	5
Total N	**20**	

n:20

Table 42 shows that all of the participants thought that the course was helpful for the other undergraduate courses in the program. The students were required to write whether they found this course helpful for the other courses at the department, the results clearly implied that they found it useful for many other courses such as language skills classes (reading, writing, listening, and speaking), linguistics, literature, language teaching skills, material design, etc. For example, Participant 12 stated that it could be useful for writing classes:

Excerpt 70:

"When we are asked to write an essay, I am sometimes confused about vocabulary use. For example, when I want to use a phrasal verb, I cannot be sure of the preposition.

I can use a corpus to check the phrasal verb uses or vocabularies, and I can decide on them considering the frequency. Furthermore, I can click on them and search its usage in other passages."

It can be assumed from this statement evidently that the participant found what they learned in the corpus literacy course useful for their writing as well. In line with this statement, Participant 17 also asserted that they could apply what they learned in the corpus literacy course in many other courses at the department:

Excerpt 71:

"I can apply what I have learned in this course to other courses in my program. For example:

- *In the literature course, I can use the corpus in order to see the frequency of usage of old words and new words such as in Shakespeare's poem vs others.*
- *In the translation course, I can use the corpus to find the most appropriate word for the sentence.*
- *In the material design course, I can use the corpus to present as a material in my teaching."*

This detailed statement shows how productively corpora can be used for different courses in the undergraduate program. It can be referred from the statement that the participant found the frequency and authenticity as important parameters.

While all the participants found the course beneficial for the other courses in the undergraduate program, 1 of them (5%) also postulated that taking this course could be an advantage for the students who were thinking of an academic career:

Excerpt 72:

"Also a positive side of this course is that it is an advantage to take this course for those who are thinking to have an academic career. It is a really important experience."

As suggested in the excerpt, the participant found the course helpful for academic career pursuers. During the interviews, some of the students also stated that the course was sometimes too academic and might be more useful for the students who were already thinking of following an academic career. That might be a reason behind this view.

4.5.1.5.2. Results of Semi-structured Interviews

The results of the data analysis of semi-structured interviews also showed that the students mostly agreed on the idea that the corpus literacy course was "supporting academic career". The results are displayed in Table 43 below:

Table 43

Results of the Semi-structured Interviews for "Supporting Academic Career" Category

Supporting Academic Career		
	N	**%**
Contributing to the other BA courses	12	60
Impact on pursuing an academic career	4	20
Total N	**20**	

n:20

As shown in Table 43, 12 participants (60%) said that the course was contributing to the other undergraduate courses. The frequency decreased compared to the reflection papers. The reason might be that the participants were overtly required to write the possible effects of this course on the other undergraduate courses in the reflection papers. However, during the interviews, the participants were not directed such a question. Instead, they were asked to tell the positive aspects of the course. Participant 17's statement shows that the course was supporting the material design course very much:

Excerpt 73:

"I definitely think that this course was useful for our 'Material Design' course. We did not do practice that much there. I developed a new perspective on material development in this course. What can I use? How can I do it? In terms of material evaluation, as well. I benefited from this course in terms of evaluating the materials I designed."

As seen in Excerpt 73, the course was found to be helpful also for the material design course, especially in the material evaluation process. Another striking answer was given by Participant 17:

Excerpt 74:

"While I was preparing my homework or getting ready for a presentation, I was writing the possible language uses on Google. For example, I was writing 'do homework or do homework' and choosing the most commonly used one. With this course, I have seen that there was such a tool. Since I learned about corpora, I am checking the usages

on COCA. I am checking the frequencies and deciding on the correct use. In this sense, it really raised my awareness."

As the excerpt suggests, the student had problems with deciding on the correct language uses from time to time, and she had to use inaccurate ways of finding the correct usages. Learning about corpora and their applications in language learning and teaching provided her with a valuable tool to reach authentic language in context.

Finally, 4 participants (20%) stated that the course had a positive "impact on pursuing an academic career". Some students stated that the course would be considerably helpful if she followed an academic career. It could be also the topic of the research she would do:

Excerpt 75:

"If I were pursuing a master's degree after my bachelor's, this would be definitely my research topic."

Participant 14's statement above shows that the topic was found to be interesting for graduate studies. Some students also added that the data reached through corpora are highly valuable for researchers.

All in all, the results proved that the corpus literacy course had 6 main efficacious aspects: "supporting language learning", "supporting language teaching", "raising awareness", "providing effective course qualities", and finally "supporting academic career". It can be assumed from these categories that the course supported the participants in many different ways. The results for the first sub-question of the 4th research question have been presented in this part revealing the efficacious aspects of the course. In the following section, the difficulties faced by the participants during the course will be demonstrated.

4.5.2. The Difficulties that Pre-service Teachers Faced during the Course

One of the aims of the fourth research question of this study was to determine the difficulties that the participants faced during the "Corpus Literacy in Foreign Language Teaching" course. The purpose of this sub-question was to identify the potential problems and difficulties in this course so that its effectiveness could be improved for future students and it could be an exemplary course for other teachers as well.

The analysis of the data collected again through minute papers, reflection papers, semi-structured interviews, and focus group discussions showed that the participants faced difficulties in two different issues mainly. The overall scheme of the categories that emerged from the four data collection tools' results is shown in Figure 11 below:

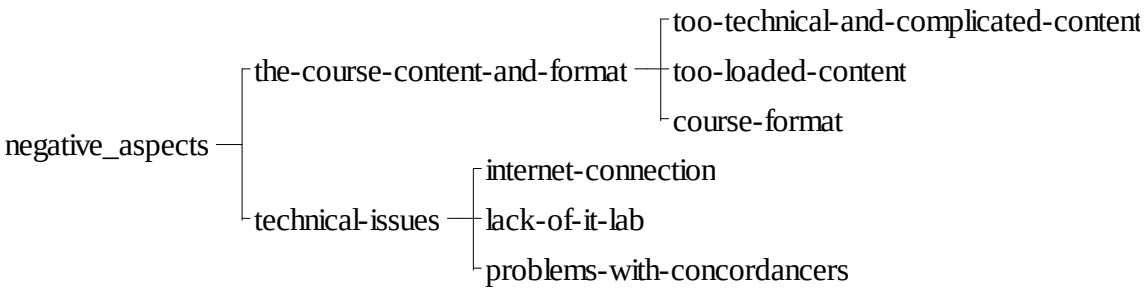


Figure 11. Overall coding scheme of the efficacious aspects of the course

As it is seen in Figure 11 above, the two categories emerged as the problematic issues were "the course content and format" and "technical issues". These categories had some sub-categories as well. Some of the participants stated that they found the course content too technical, complicated, or loaded with too much information. In addition, the course content was also criticized because they had to work in groups and some of the students found this problematic from time to time. They also added that more practice was needed to fully comprehend the use of corpora in language teaching.

Secondly, it was postulated by the participants that the problematic internet connection in the classroom and lack of an IT lab were affecting the flow of the course tremendously as this course would be much more effective in those circumstances. Moreover, it was also noted that some of the concordancers introduced in the class were not easy to use or too technical.

The results from four different data collection tools will be introduced below respectively.

4.5.2.1. Results of Minute Papers

The analysis of the data collected through the minute papers showed that after the sessions, the number of the students who stated the problematic points they experienced was not high in number. The results demonstrated that the participants highlighted the problems they faced with the course content and technical issues. The descriptive results are presented in Table 44:

Table 44

Overall Results of the Minute Papers for the Difficulties Faced by the Participants

The Difficulties Faced by the Participants									
									Total N
	Course Content		**Technical Issues**						
			Internet connection		***Lack of IT lab***		***Problems with concordancers***		
Week Number	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	
1	1	6.3	0	0	0	0	0	0	16
2	2	14.3	0	0	0	0	0	0	14
3	0	0	0	0	0	0	1	6.7	15
4	0	0	1	5.3	0	0	0	0	19
5	0	0	4	25	1	6.3	1	6.3	16
6	0	0	0	0	0	0	0	0	9
8	2	11.8	0	0	0	0	0	0	17
9	3	18.8	0	0	1	6.3	0	0	16
10	1	5.9	1	5.9	0	0	1	5.9	17
11	0	0	0	0	0	0	0	0	17

The results displayed in Table 44 above indicate that a few students found the course content complicated and too technical at the beginning of the semester and through the end. This might show that at the beginning they found it complicated as it was a new topic for them and through the end the activities became more complicated in the practices. Participant 5's statement shows that some terminology was difficult for them to understand.

Excerpt 76:

"Sometimes I can get confused in some terms."

This and similar statements showed that the new terms might be confusing for the students. The teacher should be aware of this fact while teaching and provide as many examples as possible and also try to make the term more concrete for the students. During the semester, the participants stated only a few times that they faced some technical problems such as internet connection, lack of IT lab, and some problems with the concordancers.

4.5.2.2. Results of Reflection Papers

Similar problems were identified in the data collected through the reflection papers as well. Parallel with the results from the minute papers, the number of students who faced difficulties was very few. The results are presented in Table 45 below with the frequency information:

Table 45

Overall Results of the Reflection Papers for the Difficulties Faced by the Participants

The Difficulties Faced by the Participants		
	N	**%**
The course content and format	*7*	35
a. too technical and complicated content	*4*	*20*
b. too loaded content	*4*	*20*
c. course format	*1*	*5*
Technical Issues	5	25
a. internet connection	*5*	*25*
b. lack of IT lab	*4*	*20*
Total N	**20**	

n:20

As demonstrated in Table 45 above, 7 students in total (35%) expressed that they had difficulties with the course content and course format. The main problems stated by 4 of the participants (20%) about the content were that it was sometimes too technical, complicated, or too loaded. It made understanding the topic a bit challenging. The only negative comment on the format of the course was about the group works as they had to work in a group during the semester:

Excerpt 77:

"We have groups in the course. Sometimes this can be a problem because the group members do not take equal responsibility."

It might be referred from this statement that working in groups was not always positive for the group members. However, while they were stating the positive aspects of the course, many participants informed the researcher that it was good to work as a group as they could support each other, they could get feedback from each other, and they also learned from each other. Similarly, all of the participants stated previously that they found the course content very important and necessary. This might imply that although the

general views were that the course content and format was effective, some of the participants had difficulties with them.

While 7 participants stated that the course content and the format were sometimes problematic, 5 students (25%) asserted that they faced with technological problems. As at the beginning of the semester, the internet connection was problematic 5 participants complained about it, and also, 4 participants noted that they were not pleased with working in a regular lecture classroom instead of an IT lab. They thought that it would be much easier and effective for them. Participant 19 stated that a stable internet connection was essential for the course:

Excerpt 78:

"We did not have some necessary things such as an internet connection."

The internet connection was a problem for the first 2-3 weeks; however, it could be solved afterwards. This affected the views of the participants and the course could be conducted better compared to those weeks.

4.5.2.3. Results of Semi-structured Interviews

The results of the semi-structured interviews showed that the problematic areas were similar to the ones expressed through minute papers and reflection papers. The descriptive results are presented in Table 46 below:

Table 46

Overall Results of the Semi-structured Interviews for the Difficulties Faced by the Participants

The Difficulties Faced by the Participants		
	N	**%**
The course content and format	15	75
a. too technical and complicated content	*8*	*40*
b. too loaded content	*2*	*10*
c. course format	*7*	*35*
Technical issues	13	65
a. internet connection	*10*	*50*
b. lack of IT lab	*9*	*45*
c. problems with concordancers	*3*	*15*
Total N	**20**	

n:20

The results presented in Table 46 show that the number of students who faced with problems throughout the course increased at the end of the course. The reason behind this might be that the semi-structured interviews were held at the end of the semester. As a result, the participants had the chance to evaluate the whole semester. It is seen in the table that 15 participants (75%) stated that the course content and format were sometimes problematic. 8 of them (40%) said that the content was sometimes too technical and complicated. Participant 19's statement below showed that especially the first weeks are very important to convey the subject clearly and in a simple way:

Excerpt 79:

"In the first class, we did not know anything. As a result, it looked too complicated for us. For three weeks, we could not understand clearly what we were doing, what corpora were, or what we would do in this course."

This statement shows that especially the first classes are very important to make students understand the topic thoroughly step by step with concrete examples. It was shown that the first weeks of the course confused the students as the topic was new to them, and the content was loaded even in the first weeks. In addition to course content, 7 participants added that they found some negative aspects of the course format. These complaints were again about working in groups and the necessity of more practice. Participant 14's statement can be a good example of this:

Excerpt 80:

"We have practiced the things we learned in this course. However, I feel like we needed more practice to retain it."

It can be assumed from the statement that practicing the learned topics more intensely and more frequently could help the participants.

It was also postulated by 65% of the participants (N=13) that they had problems with technical issues. 10 of them (50%) stated that a better internet connection would be better for the course, and 9 of them (45%) stated that this course would be more effective in an IT lab.

4.5.2.4. Results of Focus Group Discussions

The results from the focus group discussions revealed the same categories and

sub-categories as the previously presented data collection tools. The details are demonstrated in Table 47 below:

Table 47

Overall Results of the Semi-structured Interviews for the Difficulties Faced by the Participants

The Difficulties Faced by the Participants
The course content and format
a. too technical and complicated content
b. too loaded content
c. course format
Technical issues
a. internet connection
b. lack of IT lab

As seen in Table 47 above, the participants stated that they faced difficulties with the course content and the format as the content was too complicated at some points. In addition, regarding the course format, some students claimed that it was difficult to work in groups while the others added that they needed more practice to fully grasp the content.

Finally, it was also asserted they had problems with the internet connection. Furthermore, they felt the lack of an IT lab while having the class in a normal lecture room as they thought this course would be much more fruitful in an IT lab.

All in all, it was observed that the participants faced some difficulties from the beginning of the course to the end such as the course content, course format, and some technical issues. These points should be taken into consideration before conducting a similar course.

4.5.3. The Suggestions to Increase the Effectiveness of the Course

After the difficulties faced by the participants during the course were asked, the researcher asked them also for their suggestions which could improve the effectiveness of the course in the future semesters. The results showed that the majority of the suggestions were closely related to the negative aspects of the course. The main categories and their sub-categories that emerged from the analysis of the data collected through four tools are presented in Figure 12:

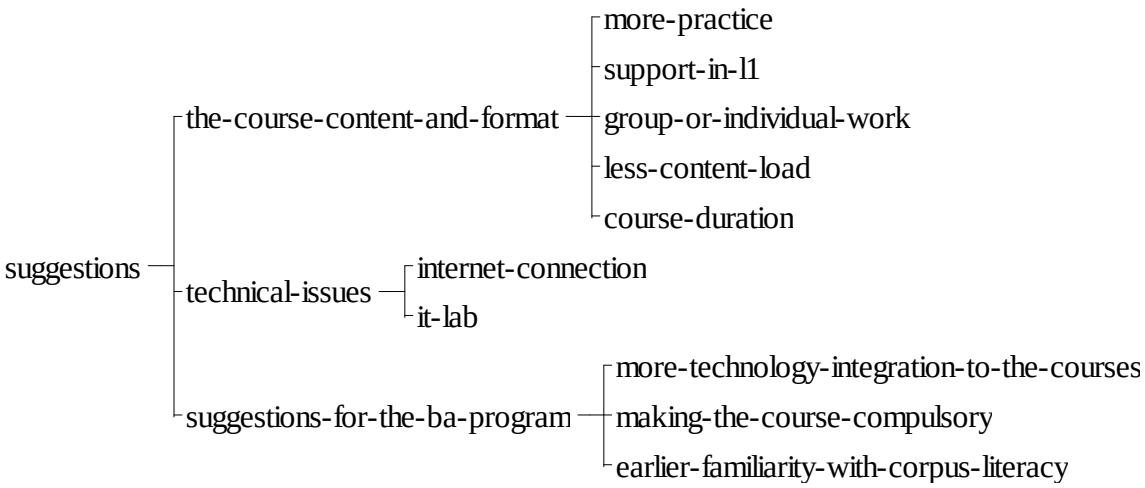


Figure 12. Overall coding scheme of the participants' suggestions to improve the effectiveness of the course

As seen in Figure 12, the suggestions were mostly about the course content/format and technical issues. In addition, the participants also made some suggestions for the undergraduate program. The detailed results will be presented in the following sections for each data collection tool.

4.5.3.1. Results of Minute Papers

The minute papers collected in 10 weeks showed that, throughout the course, the participants made suggestions about the course content and format, and the technical issues. However, as it is seen in Table 48, the number of suggestions was considerably low:

Table 48

Overall Results of the Minute Papers for the Participants' Suggestions to Improve the Effectiveness of the Course

The Suggested Improvements										
	The Course Content and Format						**Technical Issues**			**Total N**
	More practice		***Support in L1***		***Less content load***		***Internet connection***		***IT Lab***	
Week Number	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
1	0	0	0	0	0	0	0	0	0	0	16
2	0	0	0	0	0	0	0	0	0	0	14
3	2	13.3	0	0	0	0	0	0	0	0	15
4	1	5.3	0	0	1	5.3	1	5.3	0	0	19
5	1	6.3	0	0	0	0	4	25	1	6.3	16
6	2	22.2	1		0	0	0	0	0	0	9
8	1	5.9	0	0	0	0	0	0	0	0	17
9	0	0	0	0	0	0	0	0	1	6.3	16
10	1	5.9	0	0	0	0	0	0	0	0	17
11	0	0	0	0	0	0	0	0	0	0	17

Table 48 shows that the most frequently made suggestions were on doing more practice with corpora and concordancers. In 6 weeks out of 10, the participants stated that doing more practices in the classroom together with the teacher would help them to comprehend the use of the corpora better. Participant 18's statement in 6th week is an example of this category:

Excerpt 81:

"The practice is useful for us, maybe we can do more and compare the results among the other groups. We can argue the results according to the questions."

As the statement suggests, the students found the practice parts of the classes very useful, and they suggested to increase these parts. One of the students wanted to get support in their native language (Turkish) from time to time to summarize the important points that everyone could understand the content well. It also shows that the course content was sometimes too complicated or technical for the students that they needed some support in their L1. Similarly, one student suggested that the course content should be lessened.

The suggestions about the technological issues were very few. In two weeks, some students suggested having a better internet connection and an IT lab to conduct the course.

4.5.3.2. Results of Reflection Papers

The reflection papers written by the participants after the first half of the semester also showed that the participants suggested to do more practice, to have support in L1, and to have the chance of choosing to work in groups or individually. In addition, they made suggestions about technical issues as well. The details are demonstrated in Table 49:

Table 49

Overall Results of the Reflection Papers for the Participants' Suggestions to Improve the Effectiveness of the Course

The Suggested Improvements		
	N	**%**
The course content and format	6	30
a. more practice	*4*	*20*
b. support in L1	*2*	*10*
c. group or individual work	*1*	*5*
Technical issues	5	25
a. internet connection	*3*	*15*
b. IT lab	*2*	*10*
Suggestions for the BA program	1	5
Total N	**20**	

n:20

It can be seen in Table 49 that 6 participants (30%) made suggestions about the course content and the format as stated above. In addition, 5 students (25%) suggested that technical problems should be solved. Participant 3's statement represents this view well:

Excerpt 82:

"This course is mainly carried out through technological and online tools and also the internet. That's why while studying on this course, all of the equipment should be easy to reach."

As the statement explains very well, the course was conducted mainly through

technological tools. As a result, both the internet and the IT lab were an essential part of the course. Furthermore, one of the participants made a suggestion for the teacher education program:

Excerpt 83:

"I think this course should be taught in the first year of our ELT department. All first-year students should take this course at the beginning of their study. Because they can use corpus not only to learn English but also to learn the terms of linguistic knowledge. Students can use a corpus in other courses such as approach and literature courses."

It was expressed by Participant 13 above in Excerpt 83 that the course could be useful for the ELT Department students throughout their study for four years in different courses. As a result, it was suggested that the corpus literacy course could be given earlier in their study.

4.5.3.3. Results of Semi-structured Interviews

The data collected at the end of the semester through the semi-structured interviews indicated that the participants wanted the researcher to improve the course content and format, to solve the technical issues; in addition, they made some important suggestions for the teacher education program. The detailed results are presented in Table 50:

Table 50

Overall Results of the Semi-structured Interviews for the Participants' Suggestions to Improve the Effectiveness of the Course

The Suggested Improvements		
	N	%
The course content and format	12	60
a. more practice	6	30
b. support in L1	2	10
c. group or individual work	2	10
d. less content load	3	15
Technical Issues	6	30
a. internet connection	2	10
b. IT lab	5	25
Suggestions for the BA program	4	20
a. more technology integration to the courses	2	10
b. making the corpus literacy course compulsory	1	5
c. earlier familiarity with corpus literacy	1	5
Total N	**20**	

n:20

As shown in Table 50, 12 students (60%) suggested the researcher improve the course content and the format. 6 of them (30%) required more practice to understand the content better and make it easier to apply in their future teaching. 2 participants (10%) also recommended the researcher to support the students using their first language from time to time to simplify some points and also to make it clear. Parallel to this statement, 3 students (15%) added that less course content would be better for the students as they felt the content was too loaded. This might be one reason for the requirement of L1 support from time to time. As they also stated that they found the course content too technical or complicated from time to time, they suggested having less course content and summaries in their L1 sometimes. They also hinted that it would be better to have the option to work in groups or individually. Participant 9's statement reflects this view well:

Excerpt 84:

"The course content could be less loaded and more entertaining."

Similar to participant 9's statement, 3 students stated that it would be better to have less loaded content in this course as it was not always easy to comprehend all.

Along with the suggestions about the course content and format, some suggestions were made about the technical issues. 6 students (30%) stated in total that the technical problems should be solved to have better results from this course. 2 of them (10%) suggested that a better internet connection was significantly necessary for this course. Moreover, 5 students added that (25%) the course should be conducted in an IT lab.

Different from the results from the previous data collection tools, 4 participants (20%) made some more suggestions about the construct of the teacher education program and other courses in it. 2 of the participants (10%) recommended the directors of the ELT department that there should be more technology integration into the other courses in the program. The reason behind this was in this course they had to practice technological tools use in each class, and at the beginning, they had some problems. However, after some weeks they realized that they could achieve it. It made them aware that technology should be a part of contemporary teaching and the teachers should be able to use it effectively. Besides, they discovered that they had to practice to learn it and they were not given enough chances to have success in it. Participant 4's statement could exemplify this view:

Excerpt 85:

"Using the concordancers, for example, COCA, seemed difficult at first. I think the reason might that the other courses do not have much technology integration. I think there is an effect of this."

As the excerpt suggests, the participant was aware of the lack of technology integration into the other courses, and it affected their technological skills adversely.

1 of the students (5%) also postulated that the students at the department should become corpus literate earlier in their study, not in the 3rd year. Furthermore, it was also expressed that the course should be a compulsory course in ELT Department:

Excerpt 86:

"During the course, in that 2-hour-time, the information I got, the things we did were satisfactory. I believed that they would be useful for me. The course was always like this, and I believe that this course should go on. It should even be a compulsory course. I think we should know this as teachers. If we hadn't told our friends who took other elective courses, they would not have learned about corpora at all."

It can be inferred from Excerpt 86 that the participant found the corpus literacy

course highly useful for language teachers that she suggested that the course should be compulsory in the teacher education program so that all the prospective teachers could learn about corpora and their applications in language teaching.

4.5.3.4. Results of Focus Group Discussions

The last data collection tool which was utilized to determine the suggestions of the participants for the corpus literacy course was focus group discussions. The participants discussed about the efficiency of the course and they made some suggestions to improve it. The emerged categories and sub-categories were identical to the previous results gathered through the other data collection tools. The results are presented in Table 51:

Table 51

Overall Results of the Focus Group Discussions for the Participants' Suggestions to Improve the Effectiveness of the Course

The Suggested Improvements
The course content and format
a. more practice
b. support in l1
c. group or individual work
Technical issues
a. internet connection
b. IT lab
Suggestions for the BA program
a. making the corpus literacy course compulsory
b. earlier familiarity with corpus literacy

As shown in the Table 51, the participants stated again that the course would be more effective with more practice, L1 support, and less content. Moreover, without the technical problems and with an IT lab, the participants could benefit the course more.

The participants also highlighted that the language teacher education program could make some modifications to their curriculum. It was suggested that the course should be compulsory in the program. Besides, some students stated that the students should learn about corpus linguistics earlier in their study. Participant 13's statement is a good example of this suggestion:

Excerpt 87:

"We said previously that this course has two dimensions: first, it is useful for us as future English language teachers, second, it is also helpful to improve our English proficiency. As a result, I believe that this course should be taught in the first year of the study that it can be more beneficial in terms of improving our English."

As Excerpt 87 above clearly indicates the participant found the things learned in the course highly useful for language learners, and she suggested that it would be better to learn about the use of corpora so that they could apply at they learned in their other courses.

All in all, the suggestions made by the participants were naturally parallel to the difficulties they faced during the semester. As they thought the content was too complicated sometimes, they required less content and more practice. Besides, they recognized that a good internet connection and IT lab were essential to have the maximum outcome from this course. Furthermore, it was also postulated that the course could be compulsory in the curriculum and placed in the first year of the study. They also added that the other courses in the program should have more technology integration to equip future language teachers with this important skill.

4.6. Results for the Research Question 5

5. *What is the overall evaluation of the teacher/the researcher about the corpus literacy course in language teacher education program?*
   5.a. What are the efficacious aspects of the course?
   5.b. What are the difficulties the teacher/the researcher faced about the course?
   5.c. What kind of improvements does the teacher/the researcher suggest to increase the effectiveness of the course?

The 5th research question investigated the teacher's/the researcher's evaluation of the newly introduced corpus literacy course. In the previous research question, the evaluation made by the participants was explored. In order to have a broader view, the evaluation made by the teacher of the course was also included as a part of the study. The evaluation again was completed under three sections: the efficacious aspects of the course, the difficulties faced during the course, and the suggestions made to increase the effectiveness

of the course in the future semesters.

Two different data collection tools were utilized to gather the data for the evaluation of the course: classroom observation and teacher journal. In the classroom, the teacher took notes about any issue observing the classroom. Moreover, a journal was kept during the semester. After each class, the teacher wrote about the teaching session with details adding her comments. The content analysis of the collected data was completed separately, and the categories that emerged were brought together to represent the evaluation as a whole.

Three sub-questions of the research question 5 will be presented separately below introducing the positive aspects of the course, difficulties faced by the teacher throughout the semester, and the suggestions she made to increase the effectiveness of the course.

4.6.1. The Efficacious Aspects of the Course

The analysis of the data collected through the classroom observation notes and the teacher journal showed that the teacher found the course effective in many ways:

1. Innovative course content
2. Effective course format
3. Positive classroom atmosphere
4. Technology integration
5. Raising awareness of the students

These categories that emerged after the content analysis will be explained in detail below.

4.6.1.1. Innovative Course Content

One of the most important aspects of this course was teaching the students about something they had no clue about. As the first research question's results indicated, nearly none of the students knew about corpus, concordance, or concordancers. It implied that they did not have prior knowledge of corpus linguistics. After they learned about the topic and its uses, it was obvious that they were happy to learn about corpus applications in their language learning and also language teaching.

One another aspect was that the students could make use of corpora in other courses in the department. As stated in the 4th question's results, they could use corpora in some courses, and they also suggested that they could apply what they learned in

various courses. It was a strong indicator that the participants could benefit from corpora in different ways. They could use it in different courses, as well as improve their language skills. They learned that they could use different corpora to improve their language skills. As a result, it was obvious that they could learn about several tools that they could make use of improving their language skills.

It was also observed that the level of technology integration into the course was appreciated. The participants were content to see that the content was on technology and they were actually using technology. As a result, it was stated that the course was a good model for their future teaching that they could also teach their students how to use it.

Finally, the syllabus separated a large part of the semester for use of corpora in material development. This was also one important aspect of the course as the student could see how to use corpora in their teaching by applying what they learned. It can be assumed from the statements of the participants that the corpus literacy course equipped them with important skills in material development.

4.6.1.2. Effective Course Format

The format of the course was effective in many ways. First, the structure of giving the lecture first, then doing practice immediately after it worked very well. It was understood that lecturing only does not serve well for the purpose of this course since this was the first time, they heard of corpus linguistics. Besides, they are supposed to use the skills they got in this course in the future as language teachers. Consequently, it worked well that the teacher demonstrated how to use different tools, and then the participants did practice firstly in the classroom with the teacher. After the practice in the class, they were required to do their assignments to work without the assistance of the teacher to gain autonomy. Thanks to this approach, the teacher could give also immediate feedback so that the possible problems were prevented or solved immediately.

Theory and practice combination also served to encourage the students to research to investigate the authentic language in context. As they were asked to make searches during the semester, they got used to doing it although at the beginning of the semester they did not have any idea about it. As they got used to researching by themselves, they became more autonomous through the end of the semester. It indicates that the course format helped the participants to do more research and become more autonomous compared to the beginning of the semester. Thus, this created a student-centered

classroom resulting in more motivated and interested students. It was also affirmed by the participants that as they were active during the classes, they became more motivated and interested in the course. Otherwise, they would get bored if they just listened to some lectures.

4.6.1.3. Positive Classroom Atmosphere

Along with the innovative course content and the effective course format, the positive classroom atmosphere also contributed immensely to the corpus literacy course in general. As stated above, the course aimed to highlight the practice parts to let the students do hands-on activities and comprehend the use of different tools thoroughly. One of the advantages of this course format was creating a student-centered classroom environment, which affected the course outcomes positively as the students could not only learn the content better but also became more interested and motivated. Furthermore, as they worked in groups the student-student interaction was also promoted during the semester in addition to continuous teacher-student interaction. For the teacher were giving immediate feedback during the session, teacher-student interaction was also highly effective.

One other positive aspect of the course was that the students could evaluate each class and make comment on it so that the teacher could make necessary changes for the following classes. It was stated by the participants that they felt valued as their feedback was accepted and taken into consideration. It is believed that the inclusion of the students into the teaching process is essential as they feel they belong to the course, and they become more motivated. As this was a new course for them, and the content was complicated from time to time, I believe that it is important to make it as inclusive as possible to increase its effectiveness.

4.6.1.4. Technology Integration

The corpus literacy course provided the participants with essential skills as language learners and future language teachers as stressed above. In addition to these, it can also be postulated that the course supported the participants to acquire some skills in the use of technology. From the statements of the students, it could be assumed that they did not have much interaction with computers or some tools to use in language learning and teaching. It was obvious that they were not experienced in these. However, the course

required the students to actively use computers and specific tools on it. They had to do hands-on practices regularly, and they also had to use the teaching platform used for this class, Moodle. It was an exemplary application for the students for their future teaching. As understood from the statements, the participants used technology both in the classroom and outside of the classroom to follow it.

The course supported the students also for the other courses they take in the department. The statements of the students were also parallel to this observation. Some of them stated that they could use the corpora in some of the classes while some others said corpora had the potential to be useful in many classes from linguistics to literature. It indicates that teaching about corpora could support them not only for the corpus literacy course but for their study in general.

The use of technology did not only provide important skills to the students but also showed them that the use of technology could save energy, time, and paper. They learned that technology could make their lives easier as students. In the meantime, they did not spend extra time and energy to go to the teacher's office. In addition, they saved the paper they would use to print their assignments. Moreover, they could get their feedback on their assignment immediately on the Moodle which was also easier for the teacher of the course. Also, they could store all the documents on one platform so that they could reach them whenever they wanted. It was also very practical for both the students and the teachers.

4.6.1.5. Raising Awareness

The last but not least positive aspect of the course was that the teacher realized that the students' awareness was raised in many layers. First, they became more aware of their interlanguage. They recognized how their L1 affected their L2 use, and it made them think about their proficiency level in the target language as future language teachers. In the end, they stated that they had to improve their language skills to be able to teach language better to their students.

They also learned about the importance of authentic language and teaching language in context. With the evidence from corpora and comparison of corpus-informed materials to traditional coursebooks, they became more aware of how they should teach English to their students in the future. In that sense, their awareness of materials could be increased significantly. It was promising that they would evaluate their materials critically

using corpora and produce corpus-informed supplementary materials.

All these positive aspects indicate that the corpus literacy course was fruitful for the participants in many ways. Nonetheless, it does not mean that there were not any problems that the teacher faced. The difficulties faced by the teacher will be explained in the following section in detail.

4.6.2. The Difficulties Faced by the Teacher during the Course

Although the course had plenty of advantages for future language teachers, the teacher observed some problems during the semester and faced some difficulties in conducting the course. The course content and format resulted in some problems, technical issues arose, and the classroom setting was not the optimum version of it. Besides, the materials used to teach about corpora and their applications into language teaching were not target-specific, which caused some problems as well. The details will be presented in the following section.

4.6.2.1. Course Content

In the results of the previous research question, it was suggested by the participants that the course content was at some points too complicated, technical, and loaded. It was something observed by the teacher of the course as well. Especially, in the first classes, it could be noticed that the content was too complicated for the students as they did not hear about corpora or corpus linguistics previously. As a result, it was recognized that the course content should have been simpler and reduced to some extent since it was evident that the students could not comprehend the topic fully as it was highly abstract for them. Although the teacher showed the students some example concordances and made searches on a corpus (COCA), it seemed rather technical for the students. However, after the first few weeks, with the increased amount of hands-on practice, they could get engaged in the course better and their motivation also increased parallelly.

4.6.2.2. Course Format

Similar to the problems stated by the participants, the teacher of the course also observed that decreasing the intensity of the course content, the hands-on practice part should be increased to make the students understand the topic better and also show them they could make use of corpora on their own. This problem also occurred especially at

the beginning of the course which means that in the previous semesters, the teacher should be aware of this problem and take the necessary precautions.

One other problem arose when the students worked in groups as the teacher asked them to form groups in the first week of the semester. It had many positive outcomes as they also learned from each other; however, it was also observed that the members of the groups did not work equally which resulted in the problem that some students could not learn enough as they did not give sufficient effort to complete the assignments. Consequently, it should also be considered by the teacher that working as a group all semester might result in these possible problems.

4.6.2.3. Technical Issues and Classroom Setting

As a necessity of its nature, the corpus literacy course needs a classroom setting which gives the chance of conducting the course to reach its outcomes. Two of these necessities were having a good internet connection and working in an IT lab, which can provide each student with a proper computer that they could make the searches on different corpora individually. However, the internet connection was not available in the very first weeks, and not very stable during the semester. This caused some troubles for the students as not all of them could use their mobile data. In the end, the teacher had to share data with the students to be able to continue to the course in the first weeks.

Another problem was that there was no available IT lab for this course. As the corpus literacy course requires the use of computers actively, it was a must to have access to an IT lab. It was not possible to conduct the course in an IT lab; as a result, the students were required to form groups and that each group was required to bring one laptop to the classroom. This was one of the reasons for favoring group work in the classroom since it was assumed that not all the students had computers. Furthermore, it was not only the lack of computers in the classroom but also the setting of the classroom was not suitable to form groups or work in a group not even to work on computers.

These kinds of problems are not only affecting the flow of the course but also the motivation and interest of the students. It was observed that when the internet connection got better, the students became more motivated and made fewer complaints during the classes. As a result, minimizing these problems would maximize the effectiveness of the course on the students' learning.

4.6.2.4. Course Materials

One of the biggest challenges of conducting this course was the lack of materials aiming at this target. Most of the materials on corpus linguistics and its applications in language teaching were prepared for researchers or the teachers working at universities. The number of texts written for teachers who work in primary or secondary schools was very scarce. Moreover, even the textbooks who were written for language teachers were complicated and aimed the teachers working with advanced learners. This is one of the deficiencies in the field of applied corpus linguistics. In order to increase the use of corpora in language teaching, suitable materials should be prepared for language teachers at all levels not only for tertiary level teachers. Because of the lack of suitable materials, it was not possible to follow a certain book, and it was also very difficult to choose the reading texts for the students of this course. Even though the teacher tried to choose simpler texts as it was the participants' first encounter with corpus linguistics, the participants found the texts difficult to understand as they were too technical. For the compensation, the teacher presented the topic in a simpler way and they had hands-on practices in the classroom.

The difficulties faced by the teachers and the problems observed during the semester have been defined in this part. In the following section, the suggestions made by the course teacher to improve the course's efficiency will be presented.

4.6.3. The Suggestions to Increase the Effectiveness of the Course

The suggestions made for the improvement of the course were parallel to the problems faced. The content analysis of the observations and the teacher journal revealed that the suggestions were on the course content, course format, technical issues/classroom setting, technology and corpus integration to the other courses, and lastly, target-specific materials. Each category will be elaborately explained below.

4.6.3.1. Course Content

As stated in the difficulties part, the course content was sometimes too complicated for the students. They found it difficult to understand. It is strongly suggested to present the topic as simple as possible especially in the first weeks as they are novice in corpus linguistics. It would be much better to create a positive atmosphere and to increase their interest and motivation. Considering the feedback I received from my students, it was discouraging to start the course with a highly complicated and loaded

content. The teacher should plan the course content simple enough that the students' first impression becomes positive towards the course and its content. One of the solutions for this can be also related to the course format, which will be introduced in the following part.

4.6.3.2. Course Format

As the content of the course is sometimes too technical and complicated for the students, one of the reasons for this is that they did not know anything about corpus linguistics before this course, the format of the course plays a crucial role. The observations in the classroom showed that immediate practice in the classroom was very helpful for the students to grasp how corpora worked. As a result, one of the most important suggestions is that as much as possible hands-on practices should be held in the classroom under teacher supervision that they can develop corpus literacy skills. In that way, even if they cannot understand the content well during the lecture part, they can explore it in detail during the practices, and ask more questions about it to the teacher.

One other suggestion is that the students should be given the chance of working individually or in groups. The decision should not be made in the first week; instead, they should decide on it after some weeks as they know their classmates and the course content better. Especially if there is an available IT lab to conduct the course, working individually can be encouraged as well. This might increase the effort they give to learn more about the content, and they also have more chances of doing practice. However, it should be accepted that the technical equipment and classroom setting is vital in that sense.

4.6.3.3. Technical Issues and Classroom Setting

The problems stated previously showed that the lack of technical infrastructure caused vital problems. As a result, a stable internet connection and an IT lab are an indispensable part of a healthy process. Although the internet connection problem was solved at a point, and each group brought one computer to the class, it affected the course flow negatively since the practice period became shorter than planned, and they could not be as active as presumed. It also affected the classroom atmosphere negatively. Taking these into consideration, optimum conditions should be arranged before starting the course.

4.6.3.4. Technology and Corpus Integration into the Other Courses

Technical problems were faced throughout the semester such as internet connection and the lack of an IT lab. However, these were not the only problems in that concern. In addition to these, it was also observed that the students' skills in the use of technology were significantly inadequate. Some students could not follow basic instructions on the computer. Similarly, they had problems in registering the Moodle platform. All these indicated that they were novice not only in corpus linguistics but also in technology use. This implied that the students should be provided with more chances of technology use during their study. In some other courses, the technology should be used actively that it becomes a natural part of the education system. It is not meant that technology should be everywhere, but practical uses of technology would both make the learning/teaching process easier and help the students acquire technology skills.

A similar suggestion can be made about corpus integration into some other courses. Most of the students already stated that corpora could be used in several courses. Especially in skills developing courses, corpora can be used effectively. In writing, reading, and speaking classes, the teacher can make use of corpora. Similarly, in translation, literature, linguistics, and any other courses, there are possible ways of using corpora. If this is managed, the students become more familiar with corpora, and in the corpus literacy course, they learn about how to use corpora in language teaching. Their prior knowledge of corpora would be a base for their further improvement in corpus applications in teaching.

4.6.3.5. Target-specific Materials

The materials produced for corpus literacy courses are rather few in number. As stated in the problems faced during the semester, finding suitable materials or texts to introduce the related content to the students was a challenge for the teacher. Most of the published books are devoted to researchers or teachers working at university. However, there is a need for materials directly aimed at pre-service language teachers as initial teacher education is suggested to be the most convenient step to introduce the use of corpora in language teaching to make them acquire corpus literacy skills.

All these point out that some handbooks and other materials including hands-on practices should be developed for pre-service teachers at the undergraduate level. While

it is highly promoted that in initial teacher education, the students should become corpus literate, suitable materials should be provided to them.

The suggestions made by the teacher of the course have been shared in this section. After introducing the positive aspects of the course, the problems faced during the semester, and the suggestions of the teacher, the findings chapter ends here.

4.7. Chapter Summary

In this chapter, the results of the data analysis for each research question have been presented in detail. The familiarity of the pre-service language teachers with corpus linguistics, the effects of the corpus literacy course on the perspectives of the participants on the role of the teacher in the material development process, the language awareness-raising effect of the corpus literacy course, the overall evaluation of the course by the participants and the course teacher have been elaborately demonstrated in this part.

CHAPTER V

DISCUSSION

5.1. Introduction

In this chapter, the findings of the study will be discussed referring to the related literature. The results regarding the familiarity of the participants with the corpus linguistics, the effect of a corpus literacy course for pre-service teachers on the material development process and raising language awareness will be elaborately discussed as well. Finally, the findings concerning the evaluation of the conducted course by the participants and the teacher will be discussed exploring the efficacious and problematic aspects of this course as well as the suggestions to increase its effectiveness of the course for future semesters.

5.2. Discussion for the Research Question 1

Are pre-service English teachers familiar with corpus linguistics? If yes, to what extent?

The first research question of this study aimed to find out the familiarity of the pre-service English language teachers with corpus linguistics. The results showed that the majority of the students did not even hear the term corpus before; only one student stated that she did some work with corpora previously. As a result, they could not write the definition of the term. Most of the students wrote that "corpus" was a part of the brain, which might be related to the term *corpus callosum.* In parallel to their familiarity results, only one student could write a satisfying definition. Similar to their answers for the term *corpus,* they could not give correct answers for the terms *concordance* and *concordancer.* Besides, the number of students who intended to write the definitions decreased significantly. It shows that the students might have heard the term *corpus* before, however, not the terms *concordance* and *concordancer*. These results indicate that the pre-service English language teachers participating in this study did not have corpus literacy before taking the course "Corpus Literacy in Foreign Language Teaching". As a result, it points out the need for courses introducing corpus linguistics methodology, and corpus application into foreign language teaching. As claimed by Chambers (2019), although the number of the studies on corpora in language teaching increased

tremendously, it is obvious that the impact is not at the desired level in practice. As a result, it can be proposed that there is still a need for intensive direct and indirect applications of corpora into English language teaching as Mukherjee (2006) also suggests. A similar study was conducted by Leńko-Szymańska (2014) in Poland with graduate students in an ELT department. The results are similar to the present study that the students did not have much prior knowledge of corpora. It was also suggested that the students should be provided with as many chances as possible such as interacting with corpora and related tools to behave corpus literacy. It is also known that for the acquisition of these kinds of complex skills a special training is necessary (Boulton, 2009; Römer, 2010). It can be inferred from these that specific courses to introduce corpus applications into language teaching should be offered in the universities. Similar to pre-service teachers, the studies also show that even the in-service teachers do not have much knowledge of corpora and how to use them (Aşık, 2017; Callies, 2019; Mukherjee, 2004, Ozbay and Kayaoglu, 2015)). Considering this, in the initial teacher education, the pre-service language teachers should be taught about corpus linguistics and its applications into language teaching (Boulton, 2010; Breyer, 2008, 2009; Farr, 2010) as they are the stakeholders who can apply the use of corpora directly in teaching and also teach their students how to use them in language learning (Breyer, 2009). Nevertheless, it is still a neglected area in language teacher education, and the results show that more chances should be created for prospective language teachers to acquire corpus literacy skills. All these denote that conducting the course "Corpus Literacy in Foreign Language Teaching" was a necessary initiation to bridge the theory and the practice that the students could reach direct applications of corpora, which is an important step to make use of corpora in language teaching as an everyday material or tool (Chambers, 2019).

5.3. Discussion for the Research Question 2

Does a corpus literacy course in language teacher education affect ELT pre-service teachers' perspectives on teacher role in terms of material evaluation, adaptation, and development? If so, how?

The second question of the present study seeks an answer to the question of whether the "Corpus Literacy in Foreign Language Teaching" affects the perspectives of the prospective language teachers on the role of language teachers in material evaluation, adaptation, and production or not. The results of the data collected through the pre-course survey, which was completed before the course, were compared to the results from the

semi-structured interviews and focus group discussions, which were held after the course. At the end of the course, during the interviews, each participant agreed that the course affected the way they perceived the role of the teacher in material development positively.

The results demonstrate that before the course, the participants had rather broad answers to the question about the role of the teacher in material evaluation, adaptation, and production. Moreover, only few students answered this question elaborately. Nevertheless, the participants provided significantly detailed and informative answers to the questions after the course during the interviews and the focus group discussions. It indicates that the corpus literacy course could change how they perceived the role of the teacher in material development positively. It is highly important as the materials used in language teaching affect learning immensely (Fligelstone, 1993). After learning about corpora and their use in material development, the participants' answers varied greatly regarding the role of the teacher in material evaluation, adaptation, and production.

First of all, they stated that teachers' pedagogical competence was highly important in the material development process. "Use of technology" was highlighted as an important qualification of a teacher to be pedagogically competent. The participants stated that the teachers should not only be able to use technology but also teach their students how to use it. It cannot be refuted that in the 21st century, the teachers should have adequate computer skills to support their teaching as it is acknowledged that technological developments are relevant also to language learning and teaching (Warschauer, 2000). As a result, information and communication technologies should not be an extra part of the initial and in-service teacher education but an integral part (Barney and Murray, 1999). It can be inferred from the results that the course had a positive effect on the participants in that sense.

"Being a researcher" was another sub-category highlighted as the participants stated that thanks to the corpus literacy course, they became aware of the importance of researching the language use in the materials and in general. Thanks to the use of corpora and making searches on them, they could be able to reach authentic language. As suggested by Gilquin and Granger (2010), DDL brings authenticity into the language classrooms since a shred of real-life evidence comes from the corpora. Improving their computer skills and getting advanced in corpus tools, the students/ pre-service teachers have access to the authentic language. Doering & Beach (2002) suggest that the pre-service teachers' awareness of the use of technology and researching can be only raised by active involvement in it, and the results are parallel with these claims. The participants

also added that the teachers should do research and also encourage language learners to do searches themselves so that they could be independent and autonomous which results in learning to learn. Researching and discovering are the core elements of corpora applications in language learning as the learners/teachers are required to use the tools and discover the language by themselves (Johns, 1991a). It also gives them the chance of learning how to learn, which paves the road to be autonomous language learners. It can be also suggested that learners become more self-confident after doing hands-on practices frequently (Leech, 1997), and then they become ready to exploit the corpora for their purposes (Fligelstone, 1993). This way, the quote from Johns (1991) can be achieved: "Research is too serious to be left to researchers". After long practice experience, the experience of the students can be turned to "learned and reliable knowledge" (Kolb, 2014, p. xxi).

The participants also emphasized the importance of being proficient in the target language and providing correct language input to the students. Especially after the error analysis classes, the participants realized that their proficiency in target language was not at the desired level for themselves as future language teachers. This assisted them realize that a language teacher should have a good command of the target language. Besides, after checking the textbooks used in Turkey, they found some mistakes in the activities, especially in the language use, they became aware of the fact that not everything presented in the textbooks is correct. As a result, they stated that they wanted to make use of corpora to reach authentic language. This initiation postulated by the participants should be supported as the teaching materials should reflect the authentic language use, and one of the best sources for that is a corpus (Römer, 2005). These results show that the participants became aware of reality and they can take precautions for their future experiences. As they can reach the authentic language through corpora and improve their language skills through real-life language evidence (Gilquin & Granger, 2010), it can be said that they reached a useful tool for their purposes, and they can correct their own language use or output using the corpora effectively. It again provides them with a tool that is continuously updated and reflecting the authentic language use. Besides, as Johns (1991a) suggests, teaching through corpora is a successful way of inductive teaching and encouraging the discovery of real-life language. Acquiring all these skills, the teachers start developing positive attitudes, self-confidence, and teacher empowerment.

In addition to "being a researcher", the results show that the corpus literacy course made the participants think that they should be innovative in material evaluation,

adaptation, and production. This observed awareness of material issues is very promising as the teachers should be the lobbyists lobbying the publishers and the academicians to show them what the situation is and what they really need in the field (McCarthy, 2008). This is one of the vital steps to bridge the gap between the practitioners and the other stakeholders. They should not only be a consumer but also a producer, and they should be able to change their applications when necessary. Especially in an era in which the language teaching materials are becoming gradually corpus-informed, it is a necessity that the pre-service teachers are aware of corpora and their uses in language teaching (O'Keeffe & Farr, 2003). The results also indicate that introducing the corpora to the teachers is a good way of raising their awareness of materials that do not reflect the authentic language (Coniam, 1997).

Secondly, the results showed that the participants' found the role of the teacher in need analysis for material development very important. They stated that students' needs should be taken into consideration, especially their proficiency level, the goal of the teaching, the age of the students, the interest of the students. It is also important that the teachers know that the first step of the material development is "need analysis" and they can produce functional materials using authentic language.

Finally, the participants strongly stressed the use of corpora in the material development process. They stated that firstly in the material selection process, teachers should make use of corpus-informed content as they found the frequency information very important in teaching. As the learners might encounter with some words in real life more frequently, it would be a sensible choice to use corpora while choosing material content (Römer, 2005). Another reason is that they reach the authentic language instead of the prescriptive language which cannot be observed in real-life (Zareva, 2017). Furthermore, it was highlighted that thanks to the use of corpus data in the materials authentic language could be reflected directly and language could be presented in context. Moreover, the participants also stated that the teachers should provide supplementary materials while teaching that they should not just depend on the materials given by the authorities. This might lead the teachers to be the central stakeholders of the language teaching instead of being a consumer of the give materials without any improvements (McCarthy, 2008). Çalışkan and Kuru Gönen's study (2018) in Turkey is also promising that the tertiary level teachers who were instructed on corpus-informed materials found the use of corpora in material development highly beneficial as they could reach the authentic language and their awareness in language teaching materials was raised. All

these indicate that the corpus literacy course is a good way of teaching the pre-service teachers how to be more effective in the material development process.

Similar to material content selection, the participants emphasized the use of corpora in material evaluation, adaptation, and production processes as well. They suggested that with the help of corpora, they could evaluate the materials with real-life language instead of using their intuition. As this is one of the most frequently faced situations by non-native speakers of English, the use of intuition instead of real-life evidence, making use of corpora would be an accurate way of reaching the real-life language (Gilquin & Granger, 2010; Meunier & Reppen, 2015). Besides, they could present the language in context instead of giving them in decontextualized activities. While developing materials, they could make use of corpora and prepare more motivating and interesting materials which they could enjoy as they are actively involved in the process (Leech, 1997). It was also stressed that they became more aware of being critical about the materials that they would evaluate the materials properly before teaching and adapt them when necessary. In line with these, they stated repetitively that they should be productive and offer various materials to the students. They thought that one of the teachers' roles in the material development process was to evaluate the materials given critically and objectively using corpora; adapting them supporting with the evidence from corpora, and produce materials creatively using corpora. It is now agreed that the teachers should be critical about the materials they use and not accept the given materials directly (Egbert, Paulus, & Nakamichi, 2002) and they are also required to be creative in material development that they can make the learners interested in the learning process.

Taking these into consideration, the results of the study imply that the corpus literacy course could provide the participants with the desired skills to be critical in material evaluation, adaptation, and production using corpora to gather real-life language evidence. It was also added that as non-native speakers of English, they felt much confident with the idea of having a database with millions of words in it that they could reach anytime anywhere. This is again a promising statement that the corpora have the potential not only to be used for English language teaching but also to be used in ELT classrooms (Mukherjee, 2006).

5.4. Discussion for the Research Question 3

Does a corpus literacy course in language teacher education raise ELT pre-service teachers' language awareness? If yes, how?

The third research question investigates the question of whether the suggested corpus literacy course raised the participants' language awareness or not. The results gathered through three data collection tools (reflection papers, semi-structured-interviews, and focus-group discussions) indicate that the corpus literacy course raised the participants' language awareness significantly and in many ways. As also highlighted in the literature, teaching about corpora to future language teachers has many advantages, and one of them is raising their language awareness (Chambers, 2019). All the students agreed that the course had a positive effect on their awareness of language and its use, and this is another proof that corpora could be useful tools to increase language awareness. It is very important as the language teachers should be aware of the language structure and use to be able to teach effectively; besides, they should be able to relate it to their pedagogical practices (Frankenberg-Garcia, 2010). The study conducted by Breyer (2009) also shows that the students found the corpus literacy course useful as it raised their awareness of language, and also gave ideas on how to teach the language.

All the data collected showed that the participants became more aware of the "authentic language" that they realized the importance of real-life language use, how they were taught in a prescriptive way instead of following a teaching method introducing the descriptive nature of language. Unfortunately, in the traditional course books, the language used or the grammar points might be highly prescriptive instead of being descriptive. As a result, the students are forced to learn the strict rules forced by the teachers, and there is little flexibility in the use of target language. They stated that they realized the language was something alive and was not strictly shaped by some rules. They also added that their anxiety of speaking actually resulted from this attitude as they were always corrected for some reason, and this was a mistake their teachers made. This is also a sign that the use of prescriptive rules in language teaching does not have a positive effect on the students' language development; instead, it has a hindering effect. It is also important that the students become aware of these realities that they can redirect their learning/teaching process in accordance with the experiences they had with their interaction with corpus applications into language learning/teaching (Chambers, 2019). Another issue was depending on intuition instead of authentic language. As discussed previously, teaching through real-life language is highly vital as the intuitions might mislead the teachers (Gilquin & Granger, 2010). The results of the study conducted by Ozbay (2017) in Turkey also affirms the awareness-raising effect of learning about corpora and their applications that they could learn about the authentic language and how

misleading their intuitions were sometimes.

Secondly, the participants expressed that they learned about how language units' use might change from context to context. They stated that after the corpus literacy course they became more aware of this, how some words prefer some specific contexts, or how some verbs prefer some nouns or prepositions over the others. This is also another important step to make the students understand that some structures prefer some certain units. This will also be helpful for them as language learners and language teachers. As Conrad (2000) suggests in her study corpora are innovative tools to teach language in context so that a register specific teaching can be accomplished along with teaching vocabulary and grammar together, and also alternative uses of grammar constructions in context can be demonstrated. It is acknowledged that different words and grammar structures are preferred in different registers, and the participants of this study also added that thanks to this course they became aware of the register differences as they realized language use differs in different registers such as spoken language, written language, or academic language, or daily talk. Furthermore, they stated that they realized the use of language changes from one genre to another such as in essays, magazines, news, or articles. As early as 1993, Flowerdew stressed the use of corpora in ESP that in specific fields, certain recurrent phraseological patterns were identified, and the vocabulary used in these patterns were incorporated into the teaching materials. In the past 27 years, the materials produced, and the teaching has also involved more corpus integration. In this study also it can be confidently claimed that the corpus literacy course helped the students realize the register differences and the fact that language use might change from one context to another. Another point that corpora could be useful is that different corpora can be compiled to represent different Englishes reflecting language variety (Tognini-Bonelli, 2001). In the present study, the language variety was also presented to the participants, and they realized that the use of English differs among its varieties such as British English, American English, or Indian English. These results indicate that the course literacy could raise the language awareness of the participants in many ways.

It is a significant step to realize our own language proficiency to be able to good learners and good teachers, and comparing the real-life data presented in corpora to our language output, we can learn more about our language use, and realize the potential deficiencies (Gilquin & Granger, 2010). In line with this statement, the participants stressed how they became aware of their language use, "interlanguage" objectively. It was stressed that thanks to the corpus literacy course and the practices employed in it, the

participants realized that many things they assumed that they knew were actually wrong, and they had frequent L1 inferences into their L2 use. They added that they still have a lot to learn to reach authentic target language use. As Mukherjee (2004) and Gabel (2001) also assert, especially learner corpora can serve effectively to identify the potential errors made by the learners because of the structural differences between their L1 and English, and any cross-linguistic interferences could be decreased substantially. Breyer's study results (2010) show that the errors of native language interference made by the French learners decreased significantly after corpus consultation. It implies that making the students realize the errors they make and why they make them might be a useful method to direct them to focus on the most common errors made, and a significant decrease might be observed. As the first step of achieving a goal is to be aware of the situation, thanks to corpora, the students become their genuine interlanguage and take the necessary action as language learners and future language teachers.

5.4. Discussion for the Research Question 4

What is the overall evaluation of ELT pre-service teachers about the corpus literacy course in their language teacher education program?

a. What are the efficacious aspects of the course?

b. What are the difficulties that pre-service teachers faced during the course?

c. What kind of improvements are suggested to increase the effectiveness of the course?

The fourth research question of this study seeks a broad and detailed evaluation of the newly introduced "Corpus Literacy in Foreign Language Teaching" course. As a result, the participants were asked to evaluate the course and state the efficacious aspects of the course they experience, the difficulties they faced during the course, and any possible suggestions to improve the effectiveness of the course for future semesters.

The results showed that the participants found the corpus literacy course beneficial in many ways. Corpus literacy courses might motivate the learners to do research and discover the authentic language (Farr, 2008). As the nature of the use of corpora requires, the learners need to do research and analyze the reached results and make some generalizations. All these, in the end, make the learners become autonomous that they can continue by themselves to delve into corpus data. In the present study, the participants also agreed that the course was supporting them as language learners as they learned how to learn, and they were motivated to do research. As the conducted course enhanced their

noticing, motivation, and autonomy, it can be expected to have better learners in the end as they have learned how to learn (Boulton, 2017). As the learners are actively involved in the process while discovering through corpora, their motivation and interest levels increase tremendously as they feel more integrated into learning (Aşık, 2017; Breyer, 2009). It can be assumed that these were leading steps to be autonomous language learners. They could reach authentic and contextualized language corpora, which they found very significant as non-native speakers of English. It was also noted that they could learn about some valuable tools to improve their language skills.

Another positive aspect highlighted was that they learned essential things as future language teachers, that the course was useful for language teaching. It is already proven that corpora applications raise pedagogical awareness of the teachers as they learn about the importance of authentic language and teaching language in context (O'Keeffe & Farr, 2003). Similar to the benefits for language learners, the course showed them the importance of teaching the authentic language in context. They recognized that there was a tool they could apply in their teaching to present the authentic language instead of relying on their intuition blindly. Using the concordances, the teachers can teach real-life language to the students, and they can also teach them how language use differs in different contexts. This also paved the way to develop materials using corpora and making use of corpus-informed materials as corpora are great sources to produce materials (McCarthy, 2008). It was postulated by the participants that thanks to this course they could evaluate the materials more objectively and they learned creative ways of material production using authentic language as they did not need to rely on their intuition (Gilquin & Granger, 2010). This is an important point that the traditional materials are generally criticized for not reflecting the real-life language, and the tools and the applications in corpus linguistics provide the learners and the teachers to reach the naturally occurring language (McGarrell, 2013). In addition, it is an effective way to check their intuitions about language use (O'Keeffe, McCarthy, & Carter, 2007). Furthermore, it was also highlighted that the course equipped them as future language teachers with effective pedagogical skills such as using technology into the classroom effectively and researching to produce materials or evaluate the materials. As technology is an indispensable part of education now, teachers need to acquire this skill. Previously, teachers were supposed to have three different kinds of knowledge: content knowledge (CK), pedagogical knowledge (PK), and pedagogical content knowledge (PCK). However, nowadays, teachers are required to have technological knowledge (TK) as well.

Thus, they can have technological pedagogical content knowledge (TPACK) that they can use technology effectively to teach the content they master (Meunier, 2020). As a result, it cannot be refuted that corpora applications in language teacher education play a crucial role in equipping future language teachers with these desired skills.

Previously discussed that awareness-raising is the first step of mastering the desired skills. Regarding the positive aspects of the corpus literacy course, the participants emphasized that the course raised their awareness in many ways. It shows that starting from this course they can improve themselves in many different directions. Firstly, their language awareness was raised after the interaction with different corpora. They said they became more aware of the authentic language use and language in context. Besides, they added that they became aware of the register differences such as spoken, written, academic, or daily talk. That point is significant as the difference even between formal and informal language cannot be recognized by some language learners, and as future language teachers, learning about register differences and language use is a must for them. As a result, corpora can be used for the purpose of showing them different language structures and vocabulary in different registers or genres (O'Keeffe, & Farr, 2003). Also, it was stressed that the participants became aware of their interlanguage more that they needed to improve their proficiency in the target language to teach their students in the future. It was already discussed above being aware of authentic language instead of teaching a prescriptive way and depending on intuition would deteriorate the output of the learners (Gilquin & Granger, 2010). As a result, it is promising that the participants became aware of authentic language and also of their interlanguage so that they have a chance to increase their proficiency and also plan their teaching accordingly (Mukherjee, 2004; Gabel, 2001).

It was noted by the participants that their pedagogical awareness was raised as they learned the importance of teaching authentic language and in context. Belz & Vyatkina (2008) suggest that the learners would use corpora only if they can internalize the applications of corpora and interpret them in a meaningful way. As a result, it can be assumed that being aware of the use of corpora in language teaching and how it can facilitate teaching, the chances of using corpora in and out of the classroom might be expected to increase. It was also stated that the participants learned how to integrate more technology into their teaching. As stated previously, technology integration into teaching is a core element now as along with other knowledge, technology knowledge is also required (Meunier, 2020). Consequently, it is highly important that the pre-service

teachers are aware of the significance of technology integration into language teaching, and they can be confident about how to apply it in real-life conditions.

Another awareness raised in this course was “corpus awareness”. The participants learned something totally new: corpora in language teaching. They were happy to learn what a corpus is and how to use it in their learning and teaching. Finally, it was also stressed that this course showed them technology can be integrated into teaching effectively. As being aware of something is the first step of being successful in it at the end, it is promising that all the students were aware of corpora. The process starts with “corpus awareness”, and after learning about corpora and their uses, and having more hands-on practices, “corpus literacy” can be reached. Finally, become autonomous users of corpora, compiling their own corpora, doing data analysis, and making generalizations devoting substantial time in it, “corpus proficiency” can be acquired (Charles, 2001). It is clear that all the students became aware of corpora in this course and become corpus literate. At this point, they are now free to follow autonomously discovering more about corpora and related tools to inform their language learning and teaching experiences with the possibility of reaching “corpus proficiency”.

The qualities of the course were also suggested as the efficacious aspects of the course. The participants expressed that the course content and course format were well-prepared and well-designed that they could both learn the terminology and did a substantial amount of practice in the class. It was added that technology integration, positive classroom atmosphere, and positive teacher attitude increased the effectiveness of the course as they thought technology facilitated the flow of the course a lot, the atmosphere and the attitude of the teacher affected their affective filters positively and they became more interested and motived. They added that this was very important for them as the topic was new to them and some parts were complicated and too technical, in those cases immediate teacher feedback also encouraged them to continue. Besides, some students emphasized that the course’s being paperless was a plus as it made them more aware of the environmental issues, and also this method was more practical for them.

Finally, the participants stated that the corpus literacy course was useful for the other courses in their foreign language teacher program. It is a very important point as the number of the corpus linguistics course in Turkish universities is considerably rare, and the benefits of such a course were revealed in this study. In addition to undergraduate courses, it was also noted that this course could be beneficial for graduate students. Moreover, some participants said that this could be the topic of their research if they were

to follow an academic career. In the study of Farr (2008), the majority of the master's degree students also found the topic of corpus linguistics and chose it as their dissertation topic. Even if they do not choose the topic for their research, it can be suggested that corpora are efficacious tools in academic writing which might illuminate the students in improving their writing skills (Paquot & Granger, 2012).

The second sub-question was investigating the difficulties faced by the participants during the corpus literacy course. The results showed that the content of the course was sometimes too technical and complicated. As a result, it would be better to simplify the content, especially in the first weeks. In addition, regarding the course format, some students did not want to work in groups; instead, they wanted to work individually. It was also postulated by the participants that the internet connection was problematic. Besides, the lack of an IT lab also noted as a negative aspect of this course. The most common difficulties faced in corpus literacy classes are technical issues and conceptual problems for the students (Farr, 2008). They find the tools introduced complicated and difficult to understand, and as the content is new to them, they might have difficulties with the introduced concepts. As suggested by Callies (2016) the use of corpora in teaching requires three different skills: technological skills, corpus literacy skills, and pedagogical skills. The participants in the present study lacked the technical skills as they also confirmed, and they were new in corpus linguistics. As a result, these difficulties faced by the students might be anticipated before starting the class. In order to overcome these challenges, the technical infrastructure should be complete that the internet connection and the IT lab are available during the semester (Boulton, 2009). However, the reality is not always optimum as in this case, which slows down the spread of corpora applications in language teaching.

The third sub-question was examining the suggestions made by the participants to improve the effectiveness of the course. As a result, in the future semesters, the students and the teacher would not face similar problems. Naturally, the suggestions made were considerably parallel to the difficulties they faced throughout the semester. The participants suggested that the course content should be simplified and lessened that it could be easier for the participants to understand. As this was the first time they heard of corpora, and the other courses in the department do not integrate much corpus integration into their classes, the content of the course seemed complicated in the first weeks. As a result, especially for the introduction part of the course, the content can be simplified to motivate the students and increase their interest in the course. In addition, they also asked

for more practice to fully grasp the applications in real life. This was suggested by the participants of some other studies as well (Leńko-Szymańska, 2017; Zareva; 2017). The students want to have more hands-on practices to be able to use corpora related tools effectively on their own. In the study of Leńko-Szymańska (2017), the participants also stated that instead of having a one-semester course, it would be better to learn it in two semesters. It was also suggested to have a course at their bachelor's degree instead of learning about corpora only when they start their master's degree. It shows that introducing a corpus literacy course in a bachelor's degree is a good way to make the future language teachers engage in corpora applications that they can get more proficient until they become language teachers.

As Boulton (2009) also suggests most of the research in DDL suppose that all the institutions have computer labs, good internet connection, and technicians; however, the reality might not be like that. In line with that, the participants made some suggestions on technical issues that a good internet connection should be available from the beginning of the course. Similarly, an IT lab would be much more efficient for this course instead of a regular lecture classroom as they had to bring their own laptops and work in groups. These are all the necessary infrastructure for giving the chances to the students to have technological pedagogical content knowledge that they can improve their teaching with technology integration (Meunier, 2020). If the students are not provided with the necessary equipment, it would not be reasonable to expect them to be able to use technology in their classrooms effectively.

Finally, they also made some recommendations for the teacher education program. It was suggested that the corpus literacy course should be compulsory in the curriculum so that all the students at the department could learn about that useful tool for language teachers. Also, it was added that the course could be introduced to the students, in the first year of the study, so that the students could make use of it in other courses and they could use what they learned in improving their target language skills. Lastly, it was also suggested by the participants that the other courses in the program should integrate technology into the syllabus more so that they could have the chance to do more practice and realize that the use of technology is not something to be scared of. It was highlighted that technology skills are an essential part of teaching in the 21st century, and they should be taught about it with more hands-on practice. All these statements are very promising that the students became aware of the benefits of the corpora applications' integration into the curriculum that they can make the most of it. It shows that similar to the

participants of Leńko-Szymańska (2017) and Zareva (2017), the students wanted to have more hands-on practices. Although they started to learn about corpora in their bachelor's study, they added that learning about it immediately in the first year of the study also shows that they are aware of the potential advantages of learning about corpora and their applications in language learning and teaching. It can be inferred from these points that frequent hands-on practices are highly useful for the learners (Granger, 2002) and also requested by them. The amount of the hands-on practices should be increased, and the students should interact with corpora as early as possible during their bachelor's degree.

5.5. Discussion for the Research Question 5

What is the overall evaluation of the teacher/the researcher about the corpus literacy course in language teacher education program?

a. What are the efficacious aspects of the course?

b. What are the difficulties the teacher/the researcher faced about the course?

c. What kind of improvements does the teacher/the researcher suggest to increase the effectiveness of the course?

The fifth research question of the present study examines the course teacher's evaluation of the corpus literacy course in three different dimensions. It requires her to state the positive aspects of the course, the difficulties and the problems she faced throughout the semester, and finally, the suggestions she makes to improve the effectiveness of the course.

As the first step of making the learners corpus literate is creating corpus awareness (Charles, 2001), it might be claimed that it was successfully achieved in the course. The results showed that the course content was innovative as the students learned something completely new to them and scaffolded them to improve their use of technology immensely. The content was also useful for the other courses in the department. As the integration of technology into language teaching is suggested to be an important component (Barnes & Murray, 1999; Meunier, 2020) that the teachers should manage, the corpus literacy course provided the participants with this skill that they can enrich their teaching experiences. In addition, it also made the future language teachers more aware of the material development process as they learned about the importance of authentic language use in the materials. It is one of the problems frequently stated that traditional coursebooks do not reflect the naturally occurring language (McCarhty, 2008; McGarrell, 2013). As introduced in the course, corpus-informed materials directly reflect

the real-life language that the learners might encounter in real life. As a result, it was significantly useful for future language teachers to learn about corpora and their uses in material development. Another point that worked well was the course format as the lecture, demonstration, and practice sequence was followed in the class, which helped the students to understand the content better and become more autonomous at the end. It is highly important to create a classroom in which the learners can do as many hands-on practices as possible (Farr, 2008; Zareva, 2017). As asserted by Charles (2001), acquiring corpus literacy skills can only be reached by having intensive practice and become autonomous. Thus, the pre-service teachers can discover the language by themselves. They can both learn the target language further and make inferences as future language teachers. That is very important as it is suggested that giving only the teacher perspective to the pre-service teachers is not enough, they should have both the learners and teacher perspective to be able to use the potential of corpora in their learning and teaching experiences (Breyer, 2011; Farr, 2010; Leńko-Szymańska, 2017).

The positive classroom was also a factor resulting in desired outcomes. As the use of corpora by the students encourage them to do research and become more autonomous (O'Keeffe & Farr, 2003), the student-centered approach as the nature of corpus applications was followed by the teacher, that both the student-student interaction and teacher-student interaction were encouraged. In the end, the students became more motivated and interested in the use of corpora. As suggested by Boyadzhieva (2016), learner-centered approaches increase autonomy, and it paves the way for being more motivated. If someone is motivated, then they can do more by themselves, and their autonomy increases parallelly. Hence, the corpus literacy courses provide the learners with great advantages of increasing their autonomy as while using a concordancing program, the classes become more student-centered and inductive (Koo, 2006). With the maximum technology integration, the students interacted with different tools and platforms in and out of the classroom also saving time, energy, and paper. It can be obviously a way of supporting the pre-service teachers to acquire the necessary skills to integrate technology in their teaching.

The participants of the present study were encouraged to research during all semester, which helped them to learn to learn to follow life-long learning. As also proposed by Breyer (2010), integrating corpora into LTE can be useful for making them aware of corpus-based language descriptions which might enhance their life-long learning strategies. The results are in line with these claims that the course raised the awareness of

the students in many ways, especially of their interlanguage. They realized that their L1 affected their L2 significantly, and they found out that they should increase their proficiency in the target language as future language teachers. It can be proposed that the corpus applications made them aware of the authentic target language use and their own interlanguage, leading them to improve their language skills afterward. This is one of the advantages of being corpus literate that you can use throughout your learning process (Farr, 2008; McGarrell, 2013). Being aware of the use of language, naturally, they also became aware of the corpus-informed materials as during the course the importance of authentic language was emphasized frequently. As seen in this case, after raising language awareness of the pre-service teachers, pedagogical awareness is also raised making them more equipped for material development. Similar to these results, Heather & Helt (2012) also found that the participants felt themselves more empowered to evaluate the materials critically and produce their own materials. It shows that with this awareness and gained corpus literacy skills, the participants could tailor pedagogical materials to meet the needs of their students in the future (Huang, 2017).

The teacher of the course also spotted some difficulties during the corpus literacy course's instruction. The observations showed that the course content was sometimes too technical, complicated, and loaded for the students. As a result, more practice need was also observed to increase the chances for their learning. Especially, in the first weeks of the semester, the content should be simplified, and more practice should be done. It can be suggested that the syllabus of the course can be also redesigned to meet the needs of the students (Heather & Helt, 2012). As claimed by Leńko-Szymańska (2017), the interaction with corpora should start earlier in their study that in some other course they do some DDL activities as language learners. Thus, the learners become more familiar with corpora and when they are instructed about it to exploit corpora, they can proceed faster and more productively. As the results of this study also showed, there was nearly no prior knowledge of corpora when this course started. Hence, it was difficult for participants to understand the newly introduced concepts. It shows that the suggestion made by Römer (2010) that the word of corpus should be spread in any form such as talks, workshops, lectures does not seem enough to make future language teachers gain corpus literacy skills as even one-semester corpus literacy course had difficulties in making the students grasp the basic concepts of corpus linguistics. For this, the technological infrastructure is highly important. However, the internet connection and the classroom setting were not the optimum for this course as it was conducted in an average

lecture room instead of an IT lab. Also, the skills of the students in the use of technology were also rather limited. As a result, it took time for them to adapt to the course. As discussed above, unfortunately not all the institutions are equipped with necessary technical equipment, and this poses a great problem for educators working in those institutions. As a result, it should be noted that the spread of the corpus applications is only possible with a strong foundation like a pyramid. If the internet connection and IT lab cannot be offered to the educators and the teachers, expecting them to use corpora effectively does not seem realistic (Boulton, 2009). Fortunately, the internet connection problem could be solved in this case and the students could bring their laptops; however, it was still observed that the lack of technical infrastructure can be a huge problem in the integration of corpora applications into foreign language teaching.

One of the biggest problems was the lack of target-specific materials as most of the published books and materials target the researchers or teachers working at the tertiary level. Although several researchers published materials aiming language teachers (Bennett, 2010; Friginal, 2018; Reppen, 2010), the content was mostly for the teachers working at the tertiary level or teachers with a research background. As the materials are mostly devoted to this target audience, the results are also parallel to this that the study conducted by Tribble (2012) shows that 80% of the teachers who said they use corpora in teaching were working in tertiary education. As a result, it was very difficult to find materials that were suitable for the participants of this study, in other words, the pre-service teachers. However, a new book had been published (Poole, 2018) aiming at introducing corpora to language learners, which can be a good resource for beginners in corpus linguistics. In addition to this book, more materials should be produced for the beginners in corpus linguistics with simpler content as generally even the books aimed at to the novice language teachers have a very complicated content.

Regarding the difficulties that the teacher observed during the course, some suggestions were also made by the teacher. It was suggested that the course content should be simplified for the level of the undergraduate level students who had no prior knowledge in corpus linguistics. Besides, more practice should be integrated into the course that they can have more time to grasp the use of corpora. Another suggestion for this can be extending the use of corpora in some other courses such as language skills, translation, literature, etc. Thus, the student could have the chance of being familiar with corpora, and in the corpus literacy course, they can learn how to use corpora in the future as language teachers. It is stressed by Leńko-Szymańska (2014) that introducing the

corpora to pre-service language teachers in teacher-trainings is not enough. Even a specific course designed for prospective language teachers might not be enough for them to acquire the desired skills to exploit corpora in language teaching (Breyer, 2011). Firstly, the colleagues at the department should be convinced to integrate corpora in their teaching so that the students have prior knowledge of corpora and have an understanding of basic corpus linguistics concepts. She also states that there should be a model of corpus-based and corpus-driven instruction that the students learn about corpora applications both as learners of English and as the teachers of English (Leńko-Szymańska, 2017). This way, when they start learning how to use corpora in language teaching, they already have knowledge of corpora and their uses in language teaching. It is clear that extensive exposure to corpus applications increases the chances of being proficient in the use of them (Heather & Helt, 2012). Besides, they can also overcome the technological insecurities they feel when they start doing hands-on practices. However, even the technology integration was not found to be sufficient in other courses. Considering these needs, the use of technology should be extended in the other courses in the department. To be able to do that, a stable internet connection and access to a computer lab should be provided by the authorities to optimize the teaching/learning process. One last suggestion made was made to the publishers and material developers. The materials used should be specific to the target audience; in this case, specific materials for pre-service teachers at the undergraduate studies should be published to facilitate the corpus literacy courses.

5.6. Chapter Summary

This chapter has provided a discussion of the findings gathered in this study in detail for each research question by making references to the related literature and their supporting or contrasting results. It explained how a corpus literacy course for pre-service language teachers can be used to equip them with several skills facilitating their language learning and teaching processes.

CHAPTER VI

CONCLUSION

6.1. Introduction

The present chapter introduces the conclusions drawn from the study summarizing the overall findings. Evaluating the results for each research question, it aims to examine conducting a corpus literacy course for pre-service ELT teachers in many ways; also, implications for pre-service teachers as language learners and teachers, instructors working at ELT departments, researchers, and publishers will be shared. In addition, the recommendations for further research and the limitations of the study will be presented respectively.

6.2. General Conclusion

The integration of corpus literacy skills into initial teacher education has been emphasized by many researchers in the last years due to its numerous advantages. However, the number of pre-service teachers and in-service teachers who are aware of corpora and their applications in language learning and teaching is rather scarce. Regarding this fact, the present study firstly aimed to investigate the familiarity of the pre-service English language teachers with corpora. The results showed that nearly none of the participants had prior knowledge of basic corpus linguistics concepts such as corpus, concordance, and concordancer. These results are parallel to the study conducted by Leńko-Szymańska (2014) that results of her study revealed that out of 13 the graduate students who were introduced a corpus literacy course, only 1 students accepted that she had a previous experience with corpora. Also, Ozbay (2015)'s study highlighted the low level of familiarity of tertiary level EFL teachers with corpora that only 1 teacher out of 6 had heard about corpora before being involved in that study. It could be inferred from these findings that the corpus literacy course into the curriculum of the ELT department is a need to inform the future language teachers about what a corpus is, what related tools are used to exploit corpora, how to use them in their language learning and teaching processes. As the related literature showed, the number of courses at bachelor's degree level was rather limited in Turkey (Asik, 2015, 2017;Caliskan and Kuru Gönen, 2018; Ozbay, 2017). The corpus linguistics courses are generally offered at master's or

doctorate level, and they are generally more theoretical than practical. As suggested by Leńko-Szymańska (2014) only one specific course directly devoted to introducing corpus literacy to pre-service teachers is not enough; instead, the use of corpora in other courses in the department by the other professors should be encouraged that the future language teachers can have as much as interaction with corpora and become autonomous users. Thus, the pre-service language teachers might learn about corpora as learners in various courses that they become aware of corpora applications, and the corpus literacy course might introduce them how to use corpora in language teaching to reflect the naturally accruing language in the teaching process.

A language teacher is supposed to have different kinds of knowledge to be effective in her profession, and one of them is content knowledge (Shulman, 1987). In language teaching, the content is the language itself. As a result, the teachers are supposed to have language awareness so that they can inform their teaching with this awareness. Parallel to the results of the study conducted by Farr (2008), the results of this study demonstrated that a corpus literacy course can raise the language awareness of the pre-service teachers as they have the chance to examine the authentic language presented objectively that they do not need to depend on their intuition. As a result, they could realize that the language used in different registers, genres, or Englishes might vary greatly. This is an important contribution of the course to the participants that they can benefit from these acquired skills as language learners and language teachers. Moreover, they also became aware of their "interlanguage" that there were frequent L1 interferences in their L2, and they were using direct translations oftentimes. These realizations encouraged them to reflect on their L2 proficiency and directed them to think about improving their language skills in the target language. It was stated that as language teachers now they learned that their L2 language use might not be always correct, and as future language teachers they need to be better in it since they will be the teachers, and if they let their students learn the language in the same way, then the fossilization is inevitable. All these indicate that in addition to pedagogical outcomes of the conducted course, it can be claimed that it also provided significant support for the pre-service teachers to increase their content knowledge, which a core element in the circle of the knowledge types that the teachers are required to hold.

Having the content knowledge as a language teacher, knowing about the language you are teaching, the teachers become more empowered and confident in their profession. This also paves the way for being more prone to acquire the necessary pedagogical skills

to teach effectively. The reason is that if you do not know what you will teach, it would be highly difficult to teach it. Maybe worse is that, if the things you know about the content you will teach, then, unfortunately, you will teach some inaccurate and incorrect content to your students. Taking this into consideration, corpora are great servants as you both check what you know about the language use; besides, you can also investigate language structures that you have just learned. It is clear that it supports the teachers in both ways efficaciously. This claim has been observed during the semester that the corpus literacy course was conducted. The participants both became aware of the language that they will teach, and they also acquired essential pedagogical skills such as material development. These results are parallel to the study conducted by Breyer (2009) that a corpus literacy course for pre-service language teachers created a stronger connection between the subject matter that they would teach and how to teach it. The first half of the course was devoted more to the theoretical underpinnings of corpus methodology and in the second half, mostly material development was the focus. As a result, compared to the beginning of the semester, the participants' perceptions of the role of the teacher in material evaluation, adaptation, and production changed immensely. At the end of the semester, it was obvious that after the corpus literacy course, they thought that the teacher has a vital role in material development to reflect the authentic language and teach the learners, not the prescribed language dictated in the books but the real life language used by the native speakers of the target language. This also supports the idea suggested by McCarthy (2008) that the material publishers generally perceive the teachers as merely the consumers of the materials. However, the teachers should not be the passive consumers of the materials, but they should be active content developers. It was asserted by the participants that the teachers should have some pedagogical qualities such as being open to improvement, using technology and encouraging learners to use technology, doing research, and also motivating the learners to do research, be proficient in the target language. In addition, it was also added that the teachers should be careful in material content selection, material evaluation, adaptation, production. It was suggested by the participants that the materials should reflect the authentic language, how language is used in context, and also, they should be informed by the frequency information. All these indicated that the participants expected the language teachers use corpus-informed materials instead of using materials that reflect the prescribed language and sometimes informed by the intuition of the author.

During the course, the participants could evaluate the traditional coursebooks and

corpus-informed books, and they became aware of the errors made in the traditional books, especially when the author is a non-native speaker of the target language. As they compared these books to corpus-informed books, their awareness was increased significantly. The majority of the participants postulated that corpora should be used to evaluate the authenticity of the language used in the materials to teach English. Moreover, they can also be used in material adaptation and production so that the content of the material is correct that the learners reach the naturally occurring language. As the participants made highly broad statements about the role of the language teacher in the material development process at the beginning of the semester before they started this course stating that teachers should be able to develop materials meeting the needs of the learners, and they should be problem solvers, it can be understood that the corpus literacy course had a significant positive effect on the perspective of the pre-service teachers on the role of the teacher in material evaluation, adaptation, and development. Hence, the integration of a corpus literacy course into the curriculum of an ELT department might be useful in many ways including making the prospective language teachers more informed in material development. Although the teachers are suggested to be active material developers using corpora, the results of the study conducted by Breyer (2009) reveals that the future language teachers find it considerably time-consuming to produce their corpus-informed materials, and they add that a lot more teachers would use DDL if the materials were already prepared for the teachers.

It can be concluded that the course had some positive effect on the participants as it raised the language awareness of the ELT pre-service teachers, and also it affected their perceptions on teacher role in the material development process positively. However, these were not the only contributions of the course to the prospective language teachers. The study investigated the participants' evaluations of the course to find out the positive aspects of the course, the difficulties they faced, and the suggestions they wanted to make to increase the effectiveness of the corpus literacy course. It can be understood from the findings that the course content and the format was effective in many ways as it was something new, and it was quite innovative because of its very nature. They learned about content that could affect their skills as future language teachers multi functionally. Also, they could see that the technology could be integrated into teaching successfully and becoming more proficient in technology use was not as scary as they had thought. It was evident for them that with the help of intensive hands-on practices they could improve themselves throughout the semester. With the gained skills, they could learn the

importance of authentic language learning/teaching, being aware of the language structures differing from one context to another, and also they realized that they were more equipped with technological and research skills which could make them more autonomous learners/teachers in the process.

It can be also inferred from the results that another positive outcome of the course was raising the awareness of the participants on many levels. It was proved that the course increased their corpus awareness that they learned what corpora are and how they can be used to inform language learning/teaching. As it is the first step to gain corpus literacy skills, it is an important result. These results are similar to the findings of the study conducted by Zareva (2017) that the participants of her study also indicated that with the use of corpora they could discover their passion (words) as one participant also stated "*This is a whole new world to me."* As also stated above, their pedagogical awareness was also increased in many ways especially in terms of material development. Moreover, their technology awareness was increased as well since the course did not only teach how to use corpora as technological tools in language teaching but also integrated technology into its own structure. It increased the awareness of the pre-service teachers that it was practical to use technology in the classroom and it was not as difficult as they had thought. Furthermore, language awareness was also raised as stated above. All these results imply that the corpus literacy course could support the pre-service teachers to gain knowledge that is necessary to be a teacher: content knowledge (here it is language knowledge), pedagogical knowledge, and technological knowledge. These are parallel with the model suggested as Technological Pedagogical Content Knowledge (TPACK), which is a recent model showing the knowledge that the teachers have (Meunier, 2020). It can be concluded that the corpus literacy course can be an effective way to convey related knowledge to the future language teachers to make them more equipped with the desired skills.

The results also showed that the positive classroom atmosphere and positive teacher attitude were also found to be efficacious aspects of the course. As it is already acknowledged that the affective factors are highly significant in the learning/teaching environment, the qualities of this course could serve effectively in this sense. The reason behind this is that corpora applications create a learner-centered environment that the students take responsibility for their learning. In the course, they worked in groups and they could interact with their peers freely as well as to their teacher. It also made them feel more motivated and confident. After some time, they could use the concordancers by themselves which made them feel more autonomous and their self-confidence also

increased. As a result, it should be noted that the corpus literacy course makes the student the center of the learning/teaching process which makes the student more active and interested in the course so that they can learn better compared to a teacher-centered course. These results are parallel to the claims made by Kaltenböck, and Mehlmauer-Larcher (2005) that corpora applications facilitate discovery learning and promote learner autonomy provided their use is mediated by the teacher.

As the last beneficial aspect of the course, it was also noted that the course could be useful for the other courses in the department during their undergraduate studies. Leńko-Szymańska (2017) asserts that in initial teacher education corpora should not be introduced only in corpus literacy courses but also in language and linguistics classes. Ozbay and Kayaoglu (2015) carried out a study giving a workshop on corpus use in language teaching to 6 tertiary level EFL teachers. About the integration of corpora to the other courses, the teachers suggested that corpora could be well situated into academic writing and translation courses. Besides, it could be also motivating for the students who wish to pursue an academic career. Farr's (2008) study results revealed that most of the participants would prefer to carry out research using corpora. These results show that the course is an effective way of supporting the students for their academic development both in undergraduate and graduate studies. It points out that the integration of the corpus literacy course into the curriculum of the ELT department was an effective modification regarding all the positive outcomes of it.

Although the course had plenty of positive sides, there were also some difficulties faced by the participants. The most common challenge was about technical issues such as internet connection and the lack of an IT lab. In most of the studies, the research takes part in an environment that provides the learners with the necessary equipment and access to the internet as it is known that technological infrastructure is a necessity to make use of corpora applications fruitfully. As a result, it can be easily assumed that without these, the efficiency of the courses decreases substantially. Fortunately, the internet connection problem was solved in the semester, and the participants could bring their own computers, the problem was managed to be decreased to a minimum. However, it should be noted that without these challenges, the outcomes could be better. Another difficulty faced was about the content of the course and some concordancers, as it was sometimes too technical or complicated for the participants. Similar results were obtained by Farr (2008) and (Zareva, 2017) that the students had difficulties while navigating corpora, making searches on the interfaces, and making inferences of the results gathered. As proposed

before, the best way to overcome this obstacle might be introducing the students with corpora applications and DDL activities in the other courses of the department as language learners. Thus, they can have an understanding of the main concepts of corpus linguistics, and they have some prior interaction with certain concordancers before the corpus literacy course. In the end, they can use corpora effectively in the course as future language teachers for teaching purposes.

Parallel to the difficulties faced, the participants made also some suggestions to improve the course's effectiveness. Similar to the suggestions made by the participants of the studies conducted by Farr (2008) and Zareva (2017), the participants stated that they would prefer to perform more hands-on practice to grasp the use of corpora as they did not know much about corpora before this course. In addition, they asked to lessen the content of the course as it was too loaded for a one-semester course. The reason behind that is also the fact that it took time for them to understand the basics of corpus linguistics, and it was not as quick as expected to move to corpora application in language teaching. As a result, they suggested that there should be more technology integration into the other courses that they become more familiar with these practices. They also added that the corpus literacy course should be given in the first year of the study making it a compulsory course so that they have more chances of using corpora in other courses and also more chances of practicing throughout the study. It was also suggested that these could be managed only if the technical issues were solved. As the results suggest the technical equipment and infrastructure are key points in popularizing the use of corpora by the language teachers. Unfortunately, the necessary equipment is not always available in the departments which is a hindering factor for the more common use of corpora.

The participants of the course evaluated the course as the main focus of the study, and the recipients of the course. In addition to this, the teacher of the course also evaluated the course stating the efficacious aspects, difficulties faced, and the suggestions to increase the effectiveness of the course. Not surprisingly, the evaluations made by the teacher were similar to the ones made by the students. It was observed by the teacher that the course content was interesting for the students, and the course format worked very well as it provided a good amount of hands-on practicing making the students active and creating a positive classroom atmosphere. Successful integration of the technology raised the awareness of the students, and also it was very practical for the teacher to use the online teaching platform, Moodle. However, it was observed that especially in the first weeks of the semester, it was highly challenging for the students to understand the basic

concepts such as corpus, corpora, concordancer, etc. IT showed that as the participants did not have background knowledge of corpus linguistics, it was rather difficult for them to understand the content. As a result, it should be noted that if the students do not have any prior knowledge of corpora, the first weeks of the course should be arranged very carefully not to discourage the students and as much as practices and concrete examples should be provided to them.

One other reason for the fact that the course content was difficult for the students was that the teaching materials which were published for language teachers are generally not suitable for novice language teachers or pre-service teachers. Even the ones introducing the applications of corpora in teaching, directly targeting the language teachers, are not simple and intelligible enough for pre-service teachers. Although it is suggested in the related literature that the popularization of the use of corpora among the language teachers is only possible by directly teaching them and producing materials for them, still the published books are not practical enough for the teachers. Instead, they are generally useful for the teachers working at the tertiary level with some corpus linguistics study, the graduate students, or researchers working on corpus applications in language teaching. As a result, it is still a missing part of the integration of corpus literacy into initial teacher education. If it is highly recommended to integrate corpus literacy into initial teacher education, the necessary materials should also be published to facilitate this process and make the use of corpora in language learning/teaching a normal routine.

As also stated by the participants, one of the first criteria for a corpus literacy course to be effective is not having significant technical issues hindering the desired outcomes. With an available internet connection and IT lab, the efficiency of the course could increase tremendously. Besides, with these improvements, it would be also easier to integrate corpora applications into the other courses in the department. It is also obvious that in order to achieve this goal, the colleagues in the department should be also informed about the advantages of doing so, and they should be convinced to use DDL activities, especially in language skills courses. This would also help the popularization of the use of corpora in language learning/teaching. One of the advantages of this would be that the students would see as language learners in person that corpora are useful in language learning. As they would have direct experience, the effect of the applications would be stronger and long-lasting.

All in all, it can be concluded that the pre-service teachers are not familiar with corpora and their applications in language learning/teaching, and a corpus literacy course

could serve as an effective tool not only to make them aware of corpora but also how to use them in language learning teaching. As a result, it is clear that the integration of a corpus literacy course into the curriculum of an ELT department might be useful and functional in many ways if the technical infrastructure is provided appropriately.

6.3. Implications

The results of the present study have important implications for pre-service teachers as language learners and teachers, instructors conducting corpus literacy courses, researchers in the field of applied corpus linguistics, and publishers.

It can be inferred from the results that a corpus literacy course can provide the pre-service teachers with valuable skills that they can employ in their profession as language teachers, and also, they can improve their language skills to be proficient in the target language to teach the naturally occurring language. Another point is that a corpus literacy course could be efficacious in raising the student teachers' awareness in many ways such as raising their corpus awareness, technology awareness, language awareness, and pedagogical awareness. For that reason, the integration of the corpora applications into the ELT department should not be ignored, instead, it should be utilized in as many courses as possible and as early as possible. To manage that, the instructors working at the department should also be made aware of corpora and their use in the classroom (Leńko-Szymańska, 2017) that the use of corpora is not limited to a specific corpus literacy course. To achieve this, workshops can be organized for the department faculty and material exchange among them can be encouraged. This way, the popularization of the use of corpora in language learning/teaching could be achieved facilely and functionally.

Technology integration into teaching is highly emphasized in the literature; however, the results showed that the technical infrastructure is not at the optimum level to facilitate the acquisition of technological skills by the prospective language teachers. These point out that universities should provide the necessary equipped for the students that they can achieve the goal of using technology effectively in teaching.

Finally, more studies should be carried out for expanding the integration of corpora applications into initial teacher education. The results denote that along with some concordancers, the content of the course seemed complicated and technical for them. One of the reasons for that was the lack of available teaching materials for pre-service language teachers. Although it is emphasized that there is still a gap between the

theory and practice, and bridging this gap is only possible by making the language teachers equipped with corpus literacy skills, it does not seem easy to manage it with the lack of suitable materials (Chambers, 2019). Initial teacher education is suggested to be the best time to introduce to the teachers what corpora are and how they are used (Farr, 2008), supplementary materials for this target audience unfortunately still not sufficient.

6.4. Recommendations for further research

The results of this study showed that the participants in it did not have much familiarity with corpus linguistics. However, the number of participants is not high enough to generalize that the majority of the pre-service teachers are not familiar with corpora. As a result, a study with a higher number of participants representing the whole country can be conducted to see the general situation. It would make it easier to make inferences about the need for the corpus literacy courses in the ELT departments.

One of the problems stated by the participants of this study was about the technical issues arose during the corpus literacy course as the internet connection was problematic for a few weeks, and the students had to bring their own computers into a lecture classroom. In another study, eliminating these problems, the course could be conducted again to see if it worked better. It was thought by the researcher that the students focused on the technical issues in terms of the challenges faced; as a result, after the elimination of these issues, they could also be critical about some other aspects that the course that can be also improved.

Another research that could answer the question of the effectiveness of using corpora in other courses in the department can be also conducted. As it is suggested in the literature to make the students interact with corpora as early as possible, a longitudinal study could reveal the effect of earlier interaction with corpora in some courses, then having a corpus literacy course. That kind of research could show the long-term effects of early and frequent interaction of the pre-service teachers with corpora.

It is a significant step to teach pre-service teachers how to exploit corpora in their teaching; however, the effect of the course could also be examined in practice. In other words, another longitudinal study might be conducted to investigate whether these participants could apply the skills they acquired in their own classroom. This kind of research could show the effectiveness of the corpus literacy course and the lacking aspects of it. With the results gathered in that study, the courses can be modified in collaboration with the teachers who were instructed in initial teacher education programs.

6.5. Limitations

The present study was conducted in a regular lecture room with no computers available. As a result, the students had to bring their own personal computers into the classroom. Besides, the internet connection was not good for some weeks. These technical issues posed some problems as in the first weeks, it was not easy to reach online tools. Also, bringing their own personal computers was not easy for the participants although only one person brought it in each group. Without these problems, the outcomes could be more positive as the participants also suggested.

6.6. Chapter Summary

In this chapter, the overall conclusion of the study has been presented referring to the findings of the study. The study had several implications for different stakeholders in the English language teaching field, these implications have also been shared in the chapter. Finally, the recommendations for further research and the limitations of the study have been presented in detail.

REFERENCES

Alderson, C. (1996). Do corpora have a role in language assessment? In J. Thomas & M. Short (Eds.), *Using corpora for language research* (pp. 248–259). London: Longman.

Altenberg, B., & Granger, S. (2001). The grammatical and lexical patterning of MAKE in native and non-native student writing. *Applied linguistics*, *22*(2), 173-195.

Angelo, T. A., & Cross, K. P. (1993). *Minute Paper*. Retrieved from http://www.learnspeakgrow.com/resources/one_minute_paper.pdf

Anthony, L. (2014). AntConc (Version 3.4.3) [Computer Software]. Tokyo, Japan: Waseda University. Available from https://www.laurenceanthony.net/software

Anthony, L. (2016). Introducing corpora and corpus tools into the technical writing classroom through Data-Driven Learning (DDL). In J. Flowerdew & T. Costley (Eds.), *Discipline specific writing: Theory into practice* (pp. 162-180). London: Routledge. https://doi.org/10.4324/9781315519012

Aşık, A. (2015). The use of corpora in EFL classrooms: What do Turkish EFL teachers know and offer to promote pragmatic competence?. *The Asian EFL Journal Quarterly December 2015 Volume 17 Issue 4*, 194.

Aşık, A. (2017). A sample implementation of corpus integration through coursebook evaluation: Implications for language teacher education. *Journal of Language and Linguistic Studies*, *13*(2), 728-740.

Barabadi, E., & Khajavi, Y. (2017). The effect of data-driven approach to teaching vocabulary on Iranian students' learning of English vocabulary. *Cogent Education*, *4*(1), 1283876.

Barnes, A. and Murray, L. (1999) Developing the pedagogical ICT competence of modern foreign languages teacher trainees. Situation: All change and plus ça change.

Journal of Information Technology in Teacher Education 8 (2), 165–180.

Barut, H. (2017). *Ilkokul Ingilizce 4 Ders ve Çalışma Kitabı, 3. Kitap* (Student and Workbook for English for Primary School 4th Graders, 3rd Book). Pantera Publishing ouse: Ankara.

Baten, L., Cornu, A. M., & Engels, L. (1989). The use of concordances in vocabulary acquisition. *Special language: From humans thinking to thinking machines*, 452-467.

Belz, J. A., & Vyatkina, N. (2008). The pedagogical mediation of a developmental learner corpus for classroom-based language instruction. *Language Learning & Technology*, *12*(3), 33-52.

Bennett, G. R. (2010). *Using corpora in the language learning classroom: Corpus linguistics for teachers*. Michigan, USA: University of Michigan Press.

Biber, D., Johansson, S., Leech, G., Conrad, S., & Finegan, E. (1999). *Longman grammar of spoken and written English*. London: Longman.

Boulton, A. (2007). But where's the proof? The need for empirical evidence for data-driven learning. *In Proceedings of the BAAL Annual Conference 2007.* (pp. 1-13). London: Scitsiugnil Press.

Boulton, A. (2009). Testing the limits of data-driven learning: language proficiency and training, *ReCALL, 21(1), 37-54*. https://doi.org/10.1017/S0958344009000068

Boulton, A. (2009). Data-driven learning: reasonable fears and rational reassurance. *Indian Journal of Applied Linguistics, 35(1), 81-107.* Retrieved from https://hal.archives-ouvertes.fr/hal-00326990v2

Boulton, A. (2010). Learning outcomes from corpus consultation. In M. Moreno Jaén, F. Serrano Valverde & M. Calzada Pérez (Eds.), *Exploring New Paths in Language Pedagogy: Lexis and Corpus-Based Language Teaching.* London: Equinox, *129-144.* Retrieved from https://hal.archives-ouvertes.fr/hal-00502629v2

Boulton, A. (2012). *Hands-on/hands-off: Alternative approaches to data-driven learning*. Masaryk University Press. Retrieved from https://hal.archives-ouvertes.fr/hal-00503034

Boulton, A. (2017). Corpora in language teaching and learning. *Language Teaching, 50*(4), 483–506. https://doi.org/10.1017/S0261444817000167

Boulton, A. (2017). Data-Driven learning and language pedagogy. In S.Thorne, S. May (Eds.), *Language, education and technology. Encyclopedia of Language and Education (3rd ed.).* Springer, Cham. https://doi.org/10.1007/978-3-319-02328-1

Boyadzhieva, E. (2016). Learner-centered teaching and learner autonomy. *Procedia-Social and Behavioral Sciences, 232*, 35-40.

Breyer, Y. (2009). Learning and teaching with corpora: Reflections by student teachers. *Computer Assisted Language Learning*, *22*(2), 153–172. https://doi.org/10.1080/09588220902778328

Breyer, Y. (2011). *Corpora in language teaching and learning: Potential, evaluation, challenges.* Frankfurt, Germany: Peter Lang.

Caliskan, G., & Kuru Gönen, S. I. (2018). Training teachers on corpus-based language pedagogy: Perceptions on vocabulary instruction. *Journal of Language and Linguistic Studies*, *14*(4), 190–210.

Callies, M. (2016). Towards corpus literacy in foreign language teacher education: Using corpora to examine the variability of reporting verbs in English. In R. Kreyer, S. Schaub, & A. Gulderning (Eds.), *Angewandte Linguistik in Schule und Hochschule* (pp. 391–415). Frankfurt, Germany: Peter Lang.

Callies, M. (2019). Integrating corpus literacy into language teacher education. *Learner Corpora and Language Teaching, 92, 245*. https://doi.org/10.1075/slcs.201.12cal

Chambers, A., Farr, F., & O'Riordan, S. (2011). Language teachers with corpora in mind: From starting steps to walking tall. *Language Learning Journal*, *39*(1), 85–104.

https://doi.org/10.1080/09571736.2010.520728

Chambers, A. (2019). Towards the corpus revolution? Bridging the research-practice gap. *Language Teaching*, 1-16. https://doi.org/10.1017/S0261444819000089

Chapelle, C. A. (2001). CALL in the 21st century: Looking back on research to look forward for practice. *CALL in the 21st Century* CD-ROM. Whitstable: IATEFL

Charles, M. (2011). Using hands-on concordancing to teach rhetorical functions: Evaluation and implications for EAP writing classes. In A. Frankenberg-Garcia- L. Flowerdew and G. Aston (Eds.), *New trends in corpora and language learning*, 26-43. A&C Black.

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

Cobb, T. (1997). *From concord to lexicon: Development and test of a corpus-based lexical tutor* (Doctoral dissertation, Concordia University).

Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education.* Oxon:Routledge.

Collins Cobuild (1987). *Collins Cobuild English language dictionary*. London: Collins ELT.

Coniam, D. (1997). A practical introduction to corpora in a teacher training language awareness programme. *Language Awareness*, *6*(4), 199–207. https://doi.org/10.1080/09658416.1997.9959929

Conrad, S. (2000). Will corpus linguistics revolutionize grammar teaching in the 21st century?. *Tesol Quarterly*, *34*(3), 548-560.

Creswell, J. W. (2007). Five qualitative approaches to inquiry. In J. W. Creswell (Ed.),

Qualitative inquiry and research design: Choosing among five approaches, 2, 53-80. Lincoln: Sage Publications.

Creswell, J. W. (2014). The selection of a research approach. *Research design: Qualitative, quantitative, and mixed methods approaches*, 3-24. Thousand Oaks: Sage Publications.

De Cock, S., Gilquin, G., & Granger, S. (2009). Introducing LINDSEI, ICLE's talkative sister. *In the 30th Annual Conference of the International Computer Archive for Modern and Medieval English (ICAME)*.

Doering, A. and Beach, R. (2002) Preservice English teachers acquiring literacy practices through technology tools. *Language Learning and Technology* 6 (3), 127–146.

Egbert, J., Paulus, T.M., and Nakamichi, Y. (2002) The impact of CALL instruction on classroom computer use: A foundation for rethinking technology in teacher education. *Language Learning and Technology* 6 (3), 108–126.

Farr, F. (2008). Evaluating the use of corpus-based instruction in a language teacher education context: Perspectives from the users. *Language Awareness*, *17*(1), 25–43. https://doi.org/10.2167/la414.0

Farr, F. (2010). How can corpora be used in teacher education? In O'Keeffe, A. and McCarthy, M. (Eds.), *Routledge Handbook of Corpus Linguistics* (pp. 620-632). London and New York: Routledge.

Fligelstone, S. (1993). Some reflections on the question of teaching, from a corpus linguistics perspective. *ICAME Journal, 17*, 97-109.

Flowerdew, J., & Costley, T. (Eds.). (2016). *Discipline-specific writing: Theory into practice*. Taylor & Francis.

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2011). *How to design and evaluate*

research in education. New York: McGraw-Hill Humanities/Social Sciences/Languages.

Frankenberg-Garcia, A. (2012). Raising teachers' awareness of corpora. *Language Teaching*, *45* (December 2010), 475–489. https://doi.org/10.1017/S0261444810000480

Friginal, E. (2018). *Corpus Linguistics for English Teachers: Tools, Online Resources, and Classroom Activities*. New York: Routledge.

Gabel, S. (2001). "Over-indulgence and under-representation in interlanguage: reflections on the utilization of concordancers in self-directed foreign language learning", *Computer Assisted Language Learning* 14(3-4), 269- 288.

Gezmis Ceyhan, N., & Ozmen, P. (2017). *Ortaoegretim English, Student's Book A1.2*. Yildirim Publishing: Anakara.

Gilquin, G., & Granger, S. (2010). How can DDL be used in language teaching? *The Routledge Handbook of Corpus Linguistics*, (January 2010), 359–369. https://doi.org/10.4324/9780203856949.ch26

Granger, S. (2002). A bird's-eye view of learner corpus research. In S. Granger, J. Hung, and S. Petch-Tyson (Eds.), *Computer learner corpora, second language acquisition and foreign language teaching, 6*, 3-33. Amsterdam and Philadelphia: John Benjamins Publishing.

Granger, S. (2003). The international corpus of learner English: A new resource for foreign language learning and teaching and second language acquisition research. *TESOL Quarterly*, 37(3), 538-546.

Granger, S. (2015). Contrastive interlanguage analysis: A reappraisal. *International Journal of Learner Corpus Research*, *1*(1), 7-24.

Granger, S. (2018). Has Lexicography Reaped the Full Benefit of the (Learner) Corpus Revolution?. In *The XVIII EURALEX International Congress* (p. 206).

Guba, E. G., Guba, Y. A. L., & Lincoln, Y. S. (1994). Competing paradigms in qualitative

research. *Handbook of Qualitative Research*, 105–117. https://doi.org/http://www.uncg.edu/hdf/facultystaff/Tudge/Guba%20&%20Lincoln%201994.pdf

Habiboglu, H., & Ozbay, N. (2017). *Secondary School English 7, Student's Book.* Pantera Publishing House: Ankara.

Hanks, P. (2012). The corpus revolution in lexicography. *International Journal of Lexicography*, *25*(4), 398-436.

Heather, J., & Helt, M. (2012). Evaluating corpus literacy training for pre-service language teachers: Six case studies. *Journal of Technology and Teacher Education*, *20*(4), 415-440.

Heyvaert, L., & Laffut, A. (2008). Corpora in the teaching of English in Flemish secondary schools: current situation and future perspectives. In *Proceedings of the 8th Teaching and Language Corpora Conference* (pp. 400-409). Associação de Estudos e de Investigação Cientifica do ISLA Lisboa; Lisbon.

Huang, L. S. (2017). Has Corpus-Based Instruction Reached a Tipping Point? Practical Applications and Pointers for Teachers. *TESOL Journal*, *8*(2). https://doi.org/10.1002/tesj.271

Hunston, S., & Sinclair, J. (2000). A local grammar of evaluation. S. Hunston and G. Thompson (Eds.), *Evaluation in Text: Authorial Stance and the Construction of Discourse, Oxford: OUP*, 74-101.

Hunston, S. (2002). *Corpora in applied linguistics*. Ernst Klett Sprachen.

Hyland, K. (2007). Genre pedagogy: Language, literacy and L2 writing instruction. *Journal of second language writing*, *16*(3), 148-164.

Johns, T. (1986). Micro-concord: A language learner's research tool. *System*, *14*(2), 151-162.

Johns, T. (1991a). Should you be persuaded - two samples of data-driven learning materials. In Johns, T., and King, P. (Eds.), *Classroom Concordancing*, 1-16

Johns, T. (1991b.) From printout to handout: grammar and vocabulary teaching in the context of data-driven learning. In Johns, T. and King, P. (Eds.), *Classroom Concordancing*, 27-45

Kaltenböck, G., & Mehlmauer-Larcher, B. (2005). Computer corpora and the language classroom: On the potential and limitations of computer corpora in language teaching. *ReCALL*, 17(1), 65-84.

Kaszubski, P., & Wojnowska, A. (2003). Corpus-informed exercises for learners of English: The TestBuilder program. *Research and Scholarship in Integration Processes: Poland-USA–EU*, 337-354.

Khojasteh, L., & Shokrpour, N. (2014). Corpus linguistics and English language teaching materials: A review of recent research. *Khazar Journal of Humanities and Social Sciences*, *17*(3), 5–17. Retrieved from http://jhss-khazar.org/wp-content/uploads/2014/06/1NEW-Nasrin-shokrpour-1.pdf

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development.* Upper Saddle River, NJ: Prentice Hall.

Kolb, D. A. (2014). *Experiential learning: Experience as the source of learning and development*. FT press.

Koo, K. (2006). *Effects of using corpora and online reference tools on foreign language writing: A study of Korean learners of English as a second language* (Doctoral dissertation, The University of Iowa).

Krippendorff, K. (2004). *Content analysis: An introduction to its methodology*. Thousand Oaks*:* Sage publications.

Kukulska-Hulme, A. (2012). How should the higher education workforce adapt to

advancements in technology for teaching and learning? *Internet and Higher Education*, *15*(4), 247–254. https://doi.org/10.1016/j.iheduc.2011.12.002

Kvale, S. (1996) Interviews. London: Sage Publications.

Landau, S. I. (Ed.). (2000). *Cambridge Dictionary of American English (Klett Edition) Paperback and CD ROM Pack*. Ernst Klett Sprachen.

Leech, G. (1997). Teaching and language corpora: a convergence. In A. Wichmann, S. Fligelstone, T. McEnery and G. Knowles (Eds.), *Teaching and Language Corpora*, 1-23.

Lenko-Szymanska, A. (2012). The role of conventionalized language in the acquisition and use of articles by Polish EFL learners. In *Developmental and Crosslinguistic Perspectives in Learner Corpus Research* (pp. 83-104). John Benjamins.

Leńko-Szymańska, A. (2014). Is this enough? A qualitative evaluation of the effectiveness of a teacher-training course on the use of corpora in language education. *ReCALL*, *26*(2), 260–278. https://doi.org/10.1017/S095834401400010X

Leńko-Szymańska, A. (2017). Training teachers in data-driven learning: Tackling the challenge. *Language Learning & Technology*, *21*(3), 217-241.

Li, S. (2017). Using corpora to develop learners' collocational competence. *Language Learning & Technology*, *21*(3), 153–171.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.

McAlpine, J., & Myles, J. (2003). Capturing phraseology in an online dictionary for advanced users of English as a second language: a response to user needs. *System*, *31*(1), 71-84.

McCarthy, M. (2004). Touchstone: From corpus to course book. Cambridge University Press. Retrieved from http://www.cup.cam.ac.uk/elt/touchstone/TS_downloads/corpusbookletfinal.pdf

McCarthy, M., McCarten, J., & Sandiford, H. (2005). *Touchstone series*. Cambridge: Cambridge University Press.

McCarthy, M., McCarten, J., & Sandiford, H. (2006). *Touchstone 3 (Teacher's book).*

McCarthy, M. (2008). Accessing and interpreting corpus information in the teacher education context. *Language Teaching*, *41*(4), 563–574. https://doi.org/10.1017/S0261444808005247

McEnery, A. M., & Wilson, A. (2001). *Corpus linguistics: an introduction*. Edinburgh University Press.

McEnery, T., & Xiao, R. (2011). What corpora can offer in language teaching and learning? *Handbook of research in second language teaching and learning*, *2*, 364-380.

McGarrell, H. (2013). Classroom practices informed by corpus linguistics. *Contact*, 39(2), 70- 91.

Meunier, F., & Reppen, R. (2015). Corpus versus non-corpus-informed pedagogical materials: Grammar as the focus. *The Cambridge Handbook of English Corpus Linguistics*, 498–514. https://doi.org/10.1007/9781139764377.028

Meunier, F. (2020). A case for constructive alignment in DDL: rethinking outcomes, practices, and assessment in (data-driven) language learning. In Crosthwaite, P. (Eds.), *Data-driven learning for the next generation: Corpora and DDL for pre-tertiary learners* (pp. 13-30). Oxon and New York: Routledge.

Mindt, D. (1996). English corpus linguistics and the foreign language teaching syllabus. *Using corpora for language research*, 232-247.

Mukherjee, J. (2004). Bridging the gap between applied corpus linguistics and the reality of English language teaching in Germany. In *Applied Corpus Linguistics* (pp. 239-250). Brill Rodopi.

Mukherjee, J. (2006). Corpus linguistics and language pedagogy: The state of the art and beyond. In S. Braun, K. Kohn, and J. Mukherjee (Eds.), *Corpus Technology and Language Pedagogy: New Resources, New Tools, New Methods* (pp. 5-24). Frankfurt: Peter Lang. Retrieved from http://www.uni-giessen.de/anglistik/LING/Staff/mukherjee/pdfs/Corpus Linguistics and Language Pedagogy.pdf

Mukundan, J., Nimehchisalem, V., & Hajimohammadi, R. (2011). Developing an English language textbook evaluation checklist: A focus groupsStudy. *International Journal of Humanities and Social Science, 1*(12), 100–106.

O'Keeffe, A., & Farr, F. (2003). Using language corpora in initial teacher education: Pedagogic issues and practical applications. *TESOL Quarterly, 37*(3), 389–418. https://doi.org/10.2307/3588397

O'Keeffe, A., McCarthy M., & Carter R. (2007). *From corpus to classroom: Language use and language teaching.* Cambridge: Cambridge University Press.

Ozbay, A., & Kayaoglu, M. N. (2015). EFL teacher's reflections towards the use of computerized corpora as a teaching tool in their classrooms. *Çukurova Üniversitesi Eğitim Fakültesi Dergisi, 44*(1), 85-104.

Ozbay, A. Ş. (2017). Turkish EFL English majors' perceptions towards the implementation of "Introduction To Corpus Linguistics" course in an English department in Turkey. *Electronic Turkish Studies, 12*(34).

Paquot, M., & Granger, S. (2012). Formulaic language in learner corpora. *Annual Review of Applied Linguistics, 32,* 130-149.

Park, K. (2014). Corpora and language assessment: The state of the art. *Language Assessment Quarterly, 11*(1), 27-44.

Patton, M. Q. (2002). Two decades of developments in qualitative inquiry: A personal, experiential perspective. *Qualitative social work, 1*(3), 261-283

Pim, C. (2013). Emerging technologies, emerging minds: digital innovations within the primary sector. In G. Motteram (Ed.), *Innovations in learning technologies for English language teaching (pp. 15-42).* London: British Council.

Poole, R. (2018). *A Guide to Using Corpora for English Language Learners*. Edinburgh University Press.

Rassool, N (2000) Contested and contesting identities: Conceptualising linguistic minority rights within the global cultural economy. *Journal of Multilingual and Multicultural Development,* 21/5: 386–398.

Reppen, R. (2010). *Using corpora in the language classroom*. Cambridge University Press.

Römer, U. (2005). *Progressives, patterns, pedagogy: A corpus-driven approach to English progressive forms, functions, contexts and didactics* (Vol. 18). John Benjamins Publishing.

Römer, U. (2010). Using general and specialized corpora in English language teaching: Past, present and future. In M. C. Campoy, B. Belles-Fortuno, M. L. Gea-Valor (Eds.), *Corpus-based approaches to English language teaching*, 18-35.

Römer, U. (2011). Corpus research applications in second language teaching. *Annual review of applied linguistics*, *31*, 205-225.

Rundell, M., & Stock, P. (1992). The corpus revolution. *English Today*, *8*(3), 21-32. doi:10.1017/S0266078400006520

Saeed, N. Al, & Waly, S. (2008). Corpus for Classrooms : Ideas for Material Design. *10th METU ELT Convention*. Ankara/Turkey.

Sampson, G. (1992). *Review of K. Aijmer and B. Altenberg* (1991). ICAME, 16. 81-82.

Schön, D. A. (1987a). *Educating the reflective practicioner*. Washington, DC:American Educational Research Association.

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

Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review, 57*(1), 1-23.

Simpson-Vlach, R. C., & Leicher, S. (2006). *The MICASE handbook: A resource for users of the Michigan corpus of academic spoken English*. University of Michigan Press.

Sinclair, J. (1987). The nature of the evidence. J. Sinclair (Ed.), *Looking Up*, 150-159.

Sinclair, J. (1987). *Collins COBUILD English language dictionary*. Harper Collins Publishers.

Sinclair, J., & Renouf, A. (1988). A lexical syllabus for language learning. In R. Carter and M. McCarthy (Eds.), *Vocabulary and language teaching* (pp. 140-160). London: Routledge.

Sinclair, J. (2000). Lexical grammar. *Naujoji Metodologija*, *24*, 191-203.

Smith, S. (2009). *Corpora in the classroom: Data-driven learning for freshman English*. Retrieved from http://www3.nccu.edu.tw/~smithsgj/Corpora%20in%20the%20classroom.pdf

Stevenson, A. (Ed.). (2010). *Oxford dictionary of English*. Oxford University Press, USA.

Summers, D., & Gadsby, A. (Eds.). (1995). *Longman dictionary of contemporary English*. Longman, USA.

Tammelin, M. (2001). Empowering the language teacher through ICT training and media education: Case HSEBA. In *CALL in the 21st century CD-ROM*.Whitstable: IATEFL.

Todd, R. W. (2001). Induction from self-selected concordances and self-correction. *System*, *29*(1), 91-102.

Tognini-Bonelli, E. (2001). *Corpus linguistics at work* (Vol. 6). Philadelphia, Amsterdam: J. Benjamins.

Tognini-Bonelli, E. (2010). Theoretical overview of the evolution of corpus linguistics. In A. O'Keeffe and M. McCarthy (Eds.), *The Routledge handbook of corpus linguistics* (pp. 42-56). London: Routledge.

Tribble, C. (2000) Genres, keywords, teaching: Towards a pedagogic account of the language of project proposals. In L. Burnard and T. McEnery (Eds.), *Rethinking Language Pedagogy from a Corpus Perspective. Papers from the Third International Conference on Teaching and Language Corpora* (pp. 75–90). Frankfurt: Peter Lang.

Tribble, C. (2012) Teaching and language corpora: Quo vadis? *10th international conference on Teaching and Language Corpora: TaLC10. Warsaw, 11–14 July*. Retrieved from http://talc10.ils.uw.edu.pl/files/2011/09/TRIBBLE.pdf

Tyne, H. (2012). 'Corpus work with ordinary teachers: Data-driven learning activities'. In Thomas, J. & Boulton, A. (Eds.), *Input, Process and Product: Developments in Teaching and Language Corpora.* Brno: Masaryk University Press.

Warschauer, M. (2000). The changing global economy and the future of English teaching. *Tesol Quarterly*, *34*(3), 511-535.

Yin, R. K. (2003). *Case study research and applications: Design and methods (3rd ed.)*. Thousand Oaks: Sage.

Zareva, A. (2017). Incorporating corpus literacy skills into TESOL teacher training. *ELT Journal*, *71*(1), 69–79. https://doi.org/10.1093/elt/ccw045

APPENDICES

APPENDIX A

INFORMED CONSENT FORM

Consent Form for Participation in a Research Study

Corpora in Foreign Language Teacher Education: Introducing a Corpus Literacy Course to ELT Pre-Service Teachers

Description of the research and your participation

You are invited to participate in a Ph.D. thesis study conducted by Tuğba Şimşek. The purpose of this research is to introduce pre-service English Language Teaching Department (ELT) students what a corpus is, why pre-service language teachers should learn about it, how they can use it in their profession, and how to apply it in their classrooms. The study will investigate whether this course will be useful for teacher candidates or not.
Your participation will involve attending the class, writing minute papers at the end of each session, active use of Moodle page created by the researcher, being interviewed at the end of the semester, and have a focus group discussion.

Risks and discomforts

There are no known risks associated with this research.

Potential benefits

This research may help you to learn about corpora and their use in language teaching which gives you the chance of using authentic language in your classroom and vary the activities you implement.

Protection of confidentiality

We will do everything we can to protect your privacy. Your identity will not be revealed in any publication resulting from this study. The data gathered will only be used for academic purposes.

Voluntary participation

Your participation in this research study is voluntary. You may choose not to participate, and you may withdraw your consent to participate at any time. You will not be penalized in any way should you decide not to participate or to withdraw from this study.

Contact information

If you have any questions or concerns about this study or if any problems arise, please contact Tuğba Şimşek at Çukurova University.

Phone: +90
e-mail: simsektugbaa@gmail.com

Consent

I have read this consent form and have been given the opportunity to ask questions. I give my consent to participate in this study.

Participant's signature_____ Date:_____

A copy of this consent form should be given to you.

APPENDIX B

PRE-COURSE SURVEY

(Adapted from Leńko-Szymańska, 2014)

Name Surname:

Pre-Course Questionnaire

Question 1: The course "*Corpora in Foreign Language Teacher Education: Introducing a Corpus Literacy Course to ELT Pre-Service Teachers"* is optional. What were your reasons for choosing this class? Choose the answers below. If you choose more than one answer, order them from the most important (1) to the least important (8).

The more attractive options were already full.

The time of the course fits my schedule well.

I have expected that this course is easy and undemanding.

I have expected that this course is interesting and useful.

I know nothing about corpora, and I would like to find out what they are and how to use it.

I have already worked with corpora and I would like to find out more about how to use it.

I am interested in language teaching and I would take any course related to it.

Other (specify) ……..

Question 2: Have you ever heard the term *corpus*, and do you know what it is? Choose one from the options below.

I have never heard the term *corpus* before.

I have heard the term *corpus* before, but I have no idea what it is.

I have heard the term *corpus* before, and I have a rough idea what it is.

I am familiar with corpus linguistics, but I have never done any practical work with corpora.

I have already done some work with corpora.

Question 3: Define in your own words the term *corpus.* Even if you do not know or are not sure what it is, try to explain how you understand the term.

……
……..

Question 4: Define in your own words the term *concordance.*

……
……..

Question 5: Define in your own words the term *concordancer*. Can you give any examples?

……
……..

APPENDIX C

ANTCONC PRACTICE

Week 4 Assignment

AntConc Analysis Report

Topic:

1. The most frequent 10 words:
2. How many function words (write the words):
3. How many content words (write the words):
4. The most frequent 3 words collocate with (provide concordance lines):
5. while analysis, we had difficulties in …

6. It was easy to……..

7. I want to add that ….

Group members:

APPENDIX D

AntConc Practice Completed by the Participants

Week 4 Assignment

AntConc Practice
AntConc Analysis Report

Topic: Refugees- risks and challenges

1) The most frequent 10 words:

1. The-161
2. Of-104
3. To-101
4. And-94
5. İn-94
6. a-41
7. is-41
8. or-41
9. are-39
10. refugees-38

2) .How many function words (write the words):

   9: The-of-to-and-in-a-is-or-are

3) How many content words (write the words):
   1: refugees

4) The most frequent 3 words collocate with (provide concordance lines):
   a) are issued to those in flight, without the accordance of full Convention standards
   b) do international agencies choose to pull out of a conflict situation (as some did from
   c) usage, the term "refugee" does not apply **to** a number of groups. This may have

5) while analysis, we had difficulties in 4th question, we could not have a certain decision of what we would do. But I hope we succeeded it.

6) It was easy to use AntConc.

7) I want to add that the lessons are getting fine.

Group members: Par X, Par Y

APPENDIX E

CONCORDANCER TOOL PRACTICE ASSIGNMENT

WEEK 5 Assignment

Concordancer Tool Practice Assignment

1. Which tool have you used?

2. What was the search you made?

3. What are the results of your search?

4. What are your general views on the tool?

5. What are the advantages of using this tool?

6. What kind of challenges have you encountered during the practice?

7. Do you have any suggestions for this practice?

8. Group members

1. a.
2. b.
3. c.
4. d.

APPENDIX F

Concordancer Tool Practice Completed by the Participants

WEEK 5 Assignment

Concordancer Tool Practice Assignment

1. Which tool have you used?
   Just The Word

2. What was the search you made?

Firstly, we discovered that the concordancer is fourth-generation so we didn't download it. We used it in online. Secondly, we understood how it works. Then we wrote a word and investigated this word. The result of the investigation, we collected data related to the word.

3. What are the results of your search?

We searched a word and 'Just To Word' found and showed 3 headlines about the word. These are combinations, alternatives from thesaurus, and alternatives from learner errors. We found data related to the word.

4. What are your general views on the tool?

We think that it is so useful. When you investigate a word, you can find lots of combinations of it (with prepositions, with adjectives, with adverbs, with nouns, etc.) and cover the words in context, find example sentences. Also, using this concordancer is practical and easy.

5. What are the advantages of using this tool?

Both teachers and students are able to use this concordancer without and complications and difficulties (after they learned). Also, it offers lots of information and example sentences that students can discover individually.

6. What kind of challenges have you encountered during the practice?

No explanation about it, so we used it wrong. After our mistake, we realized that something went wrong. We examined it carefully and found actually how it works. Secondly, it includes three different headlines but data doesn't change so we were confused.

7. Do you have any suggestions for his practice?

8.

We think that it is so useful, nearly everyone needs this concordancer but most of them don't know it. Therefore, as a teacher, we should introduce it to most of the people.

Group members

APPENDIX G

Practices on Register Variation

1. Search for the affixes "*tion, *ment, *ize" on COCA, "Chart" search and state in which register
    a) They are the most common (state the frequencies (per million)).
    b) The fewest (state the frequencies (per million)).
    c) Is there a change in time?
    d) What does the result imply for language teachers?

2. Search for "n't, ain't, 'm" on COCA, "Chart" search and state in which register

    a) They are the most common (state the frequencies (per million)).
    b) The fewest (state the frequencies (per million)).
    c) Is there a change in time?
    d) What does the result imply for language teachers?

3. Search for "well, I mean, however" on COCA, "Chart" search and state in which register

    a) They are the most common (state the frequencies (per million)).
    b) The fewest (state the frequencies (per million)).
    c) Is there a change in time?
    d) What does the result imply for language teachers?

4. Search for "so, in addition, thus" on COCA, "Chart" search and state in which register

    a) They are the most common (state the frequencies (per million)).
    b) The fewest (state the frequencies (per million)).
    c) Is there a change in time?
    d) What does the result imply for language teachers?

5. Search for "I guess, in my opinion" on COCA, "Chart" search and state in which register

    a) They are the most common (state the frequencies (per million)).
    b) The fewest (state the frequencies (per million)).
    c) Is there a change in time?
    d) What does the result imply for language teachers?

6. Search for "really, highly, significantly" on COCA, "Chart" search and state in which register

    a) They are the most common (state the frequencies (per million)).
    b) The fewest (state the frequencies (per million)).
    c) Is there a change in time?
    d) What does the result imply for language teachers?

7. Search for "require, want" on COCA, "Chart" search and state in which register

a) they are the most common (state the frequencies (per million)).
b) the fewest (state the frequencies (per million)).
c) Is there a change in time?
d) What does the result imply for language teachers?

8. Search for the adjectives in Academic – Medicine register and Academic – Law-Political Sciences register on COCA, “List” search and state

a) The most common 10 adjectives in Medicine
b) The most common 10 adjectives in Law
c) Are there mutual ones? If yes, which ones?
d) What does the result imply for language teachers?

APPENDIX H

Practices on Register Variation Completed by the Participants

1. Search for “so, in addition, thus” on COCA, “Chart” search and state in which register

a. they are the most common (state the frequencies (per million)).
b. the fewest (state the frequencies (per million)).
c. Is there a change in time?
d. What does the result imply for language teachers?

SO

a: It is mostly used in spoken language. The frequency in spoken language is 4,761.41 per million.
b: The fewest area of use is academic language. The frequency in academic language is 1,042.26.
c: In spoken language, there is little rise during the years.
d: We should teach not to use ‘so’ in written language because it is not a common area of use.

IN ADDITION

a: It is mostly used in academic language. The frequency in academic language is 257.90 per million.
b: The fewest area of use is fiction. The frequency in fiction is 14.90 per million.
c: There is almost no change in time.
d: We can emphasize the importance of the word in written language and advice to use it instead of the word ‘so’ while we are teaching writing techniques.

THUS

a: It is mostly used in academic language. The frequency in academic language is 477.43 per million.
b: The fewest area of use is spoken language. The frequency in spoken language is 12.93 per million.
c: There is little decrease until 2014, but after that time there is a rise again.
d: We can emphasize the importance of the word in written language and advice to use it instead of the word ‘so’, but we should advise to use the conjunction ‘in addition’ instead of ‘thus’ because that is more common than ‘thus’.

APPENDIX I

Reflection Paper Template

Dear Students,
Please write a reflection for each question below. Do not forget that this paper will function as your mid-term exam. As a result, please think thoroughly and write satisfying answers. Answer the questions separately.

1. Please write three adjectives describing the course “Corpus Literacy in Foreign Language Teaching”.

2. What have you learned in this course so far?

3. How can apply what you have learned in this course to other courses in your program?

4. How can you use what you have learned in your profession as an English language teacher in the future?

5. What are the positive sides of the course (in terms of issues such as classroom atmosphere, teaching way, teacher, interaction, topics, activities, evaluation, etc.)?

6. What are the negative sides of the course (in terms of issues such as classroom atmosphere, teaching way, teacher, interaction, topics, activities, evaluation, etc.)?

7. Do you have any suggestions to make this course better for the next semesters (in terms of issues such as classroom atmosphere, teaching way, teacher, interaction, topics, activities, evaluation, etc.)? If yes, please state.

APPENDIX İ

Reflection Paper Written by a Participant

Dear Students,
Please write a reflection for each question below. Do not forget that this paper will function as your mid-term exam. As a result, please think thoroughly and write satisfying answers. Answer the questions separately.

1. What Please write three adjectives describing the course "Corpus Literacy in Foreign Language Teaching".

   Useful: The course is very useful for teacher candidates like us- of course- if I can use it appropriately in my teaching.

   Informative: The course has a very informative syllabus. We learn new things such as a term, application every week.

   Interesting: The name of the course drew my attention when I saw the course for the first time in course registration time. Yes, it is totally different from other courses. According to me, its including is not uncommon in our department.

2. What have you learned in this course so far?

   I have learned in this course so far;

   What are the types of corpora? (Some examples of them)
   What is a concordancer?
   Types of concordancer (Differences between each other)
   Use of AntConc (To analyze a text)
   How can I use the WebCorb?
   What is a register?

3. How can apply what you have learned in this course to other courses in your program?

   I can apply what I have learned in this course to other courses in my program for example:

   In the literature course; I can use the corpus in order to see the frequency of usage of old words and new words such as in Shakespeare's poem vs others.

   In translation courses; I can use the corpus to find the most appropriate word for

the sentence.

In Material Design; I can use the corpus in order to present as a material in my teaching.

4. How can you use what you have learned in your profession as an English language teacher in the future?

   I can use what I have learned in vocabulary and grammar lessons in my profession as an English language teacher in the future. (To show students the correct use). Sometimes the dictionaries can be inappropriate because they are not from real life. The corpora are very useful to see the frequency of words, collocations, etc.

5. What are the positive sides of the course (in terms of issues such as classroom atmosphere, teaching way, teacher, interaction, topics, activities, evaluation, etc.)?

   We don't need to write everything; it is enough to take some notes. We have an online group on the internet (Moodle), it is very easy to access our course content. The course of the teacher is very positive, she is always smiling. This motivates us.

6. What are the negative sides of the course (in terms of issues such as classroom atmosphere, teaching way, teacher, interaction, topics, activities, evaluation, etc.)?

   Sometimes it lasts too long we feel boring.

7. Do you have any suggestions to make this course better for the next semesters (in terms of issues such as classroom atmosphere, teaching way, teacher, interaction, topics, activities, evaluation, etc.)? If yes, please state.

   Yes. I joined the class lately. Because of that, I had some missing points about the course. Even I didn't know what it is corpus until the third week. Maybe the teacher could revise them or in brief, it could be better to explain unknown/unclear things in the mother tongue.

APPENDIX J

Specific Error Tagging Code

(Bennet, 2010, p.79)

Table 7.1
Specific Error Tagging Code

Symbol	Error	Explanation
vt	verb tense	Incorrect verb tense
vf	verb form	Verb incorrectly formed
wo	word order	Incorrect or awkward word order
sva	subject-verb agreement	Subject and verb do not agree in number
art	article	Incorrect or missing article
sing/pl	singular/plural	Problem with the singular or plural of a noun
wf	word form	Incorrect word form
wc	word choice	Incorrect word choice
cs	comma splice	Comma inserted unnecessarily
frag	fragment	Incomplete sentence
ro	run-on	Two independent clauses joined with no punctuation
cap	capital	Capital letter needed
sp	spelling	Word incorrectly spelled
p	punctuation	Incorrect or missing punctuation
nonid	nonidiomatic	Not expressed this way in English
lc	lowercase	Use a lower case letter
--	join words	Put words together (class room)
#	space	Add a space or remove extra space
~	transpose	Transpose elements
pa	agreement	Pronoun/antecedent agreement
/	delete	Delete word
c	comma	Needs a comma inserted
o	word omitted	A word has been omitted from the sentence
po	possessive	Possessive error

APPENDIX K

An Error Tagged Essay

There is no benefit of making someone do something unless they want to.
An issue as serious as military service, I think the point should be willingness because men who dont **< #P dont I don't >** want to work and give compromises from their lives will do everything unwillingly anyway. But if men who want to work for and defend their country are military service, there will be benefits mutually.
Another aspect of military service is nationality We **< #CAP We I we >** are born in places we can't choose, so devoting your life and lose it for abstract, meaningless borders and some papers that are worth lives are nothing to fight for, so it is logical not to choose military service and because of the same issue, this should be an option not a must.
There are also people I know who have to work their lives with departed families and who will take their families' care when they are gone?
However **< #C I ,** > some still can think that serving to military is a pay off to your country, **< #P , I** > with which a lot of people agree.
To conclude, this is a very hot debate with interesting ideas going around.

APPENDIX L

Computer-aided Error Analysis Report

	vt	vf	wo	sva	art	Sing/pl	wf	wc	cs	frag	ro	cap	sp	p	nonid	lc	jo	spa	~	pa	del	c	o	po	Total
Essay 1																									
Essay 2																									
Essay 3																									
Essay 4																									
Essay 5																									
Essay 6																									
Essay 7																									
Essay 8																									
Essay 9																									
Total																									

1. What is the most common error type in total? Provide 3 example sentences

2. What is the most common second error type in total? Provide 3 example sentences

3. Which essay has the fewest errors? How many errors are there in it?

4. Which essay has the highest number of errors? How many errors are there in it?

5. How can you (as language teachers and language learners) use this kind of analysis in foreign language learning/teaching?

6. What are the advantages of using such kind of tool in a foreign language teaching class?

7. Do you think this analysis and its results contribute to raising the linguistic and pedagogical awareness of teachers?

8. What are the difficulties in conducting this kind of analysis?

Group Members

APPENDIX M

Computer-aided Error Analysis Report Completed by a Participant

	vt	vf	wo	sva	art	Sing/pl	wf	wc	cs	frag	ro	cap	sp	p	nonid	lc	jo	spa	~	pa	del	c	o	po	Total
Essay 1												1										1			2
Essay 2													1		2							6			9
Essay 3	1							1						4		1						4	1		12
Essay 4										1		2			4								1		8
Essay 5				1	1	1				1				2		2						4	1		13
Essay 6																									0
Essay 7												7		2								1			10
Essay 8	1	1		1					4					4	1	1	1				1	1	2		18
Essay 9				1		3	1	1					3	3		5					1	8			26
Total	2	1	0	3	1	4	1	2	4	2	0	10	4	15	7	9	1	0	?	0	2	25	5	0	98

1. What is the most common error type in total? Provide 3 example sentences

   The most common error type is ‘comma’.
   Essay 1: All students are taking the same courses < #C I , > but in a different way.
   Essay 8: In my opinion < #C In my opinion I In my opinion, > money is the root of all evil is not true.

Essay 9: Actually < #C I , > knowledge which is provided by Universities < #LC Universities I universities >, is not as valuable as we think it is < #DEL it is I > .

1. What is the most common second error type in total? Provide 3 example sentences

   The most common second error type is ‘punctuation’.
   Essay 5: In todayÕs world, it is obvious that all human beings arenÕt aware of the miracle of nature. < #P . I , >
   Essay 7: An issue as serious as military service, I think the point should be willingness because men who dont < #P dont I don’t > want to work and give compromises from their lives will do everything unwillingly anyway.
   Essay 9: For example < #C I , > girls, < #P I ; > they can be doctor, lawyer, engineer < #C I , > but if they donÕt know cooking, ironing, lighting, they can have difficulty in this < #SING/PL this I these > houseworks < #SING/PL houseworks I housework >.

2. Which essay has the fewest errors? How many errors are there in it?

   Essay 6 has none error. Essay 1 has the fewest error; just 2 errors are there in it

3. Which essay has the highest number of errors? How many errors are there in it?

   Essay 9 has the highest number of errors. There are 27 errors in it.

4. How can you (as language teachers and language learners) use this kind of analysis in foreign language learning/teaching?

   We can observe our classes by using this kind of analysis in our teaching experiences and use the results for creating specialized materials according to our students’ needs.

5. What are the advantages of using such kind of tool in a foreign language teaching class?

   Observing our classes and noticing their mistakes’ types and their frequencies help us to create special materials for our students to correct the mistakes and teach them better.

6. Do you think this analysis and its results contribute to raising the linguistic and pedagogical awareness of teachers?

We think that this tool and this type of analysis contribute to raising the linguistic and pedagogical awareness of ours.

7. What are the difficulties in conducting this kind of analysis?

There is not any difficulty in conducting this kind of analysis except for being a little bit time-consuming.

Group Members

APPENDIX N

Corpus-informed Material Evaluation and Adaptation Report

Dear Students,
You are supposed the evaluate each of the extracts from textbooks used to teach English for Turkish learners. The coursebooks were written by non-native speakers of English (L1 Turkish writers).

PLEASE WRITE YOUR GROUP MEMBERS NAMES HERE
1.
2.
3.

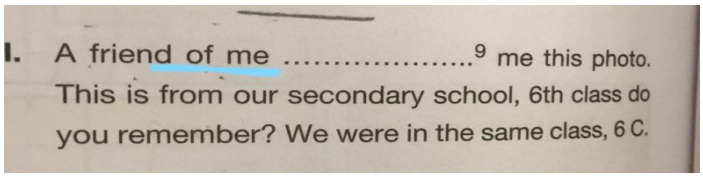
PART 1

The guide for evaluation and adaptation:

1. Decide whether there is something wrong with language use or not.
2. If there is not, state that there is nothing wrong
3. If there is, identify the mistake- write it clearly
4. justify it by showing evidence from COCA (insert screenshots or write the frequencies)
5. add 2-3 example sentences for the correct form
6.

EXAMPLE:

EXTRACT 1



a) There is a mistake in the extract.
b) "a friend of me" an incorrect use, after "of" to show the possession we use possessive pronouns (mine, hers, his, …) not object pronouns (me, him, her,..).

SEE CONTEXT: CLICK ON WORD OR SELECT WORDS + [CONTEXT] [HELP...] COMPARE

		CONTEXT	FREQ	
1		MINE	1576	
2		WHO	396	
3		HIS	229	
4		HERS	170	
5		YOURS	153	
6		OURS	123	

Corpus of Contemporary American English

SEARCH | FREQUENCY | CONTEXT | HELP

FIND SAMPLE: 100 200 500 1000
PAGE: << < 1 / 16 > >>

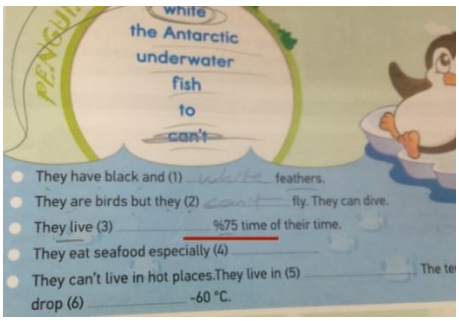
CLICK FOR MORE CONTEXT [?] SAVE LIST CHOOSE LIST ---------- CREATE NEW LIST [?] SHOW DUPLICATES

1	2017	SPOK	Fox: The Five	A	B	C	big. You're going to win big, Lou. Good luck. A friend of mine for a long time, Representative Mike Kelly. Thank you, Mike
2	2017	SPOK	PBS: PBS Newshour	A	B	C	woke up this morning and was sent a photo of Kurt von Tillow from a friend of mine. He happened to have very conservative politics. There are people
3	2017	SPOK	NPR: Fresh Air	A	B	C	brother and I made and was really involved in our charity projects and became a friend of mine. And yeah, and she died in 2010. And I kind
4	2017	SPOK	CBS: This Morning	A	B	C	get -- I mean, I was separated from my own crew. Then a friend of mine here with me now, she got separated from her husband. They
5	2017	SPOK	NBC: Dateline NBC	A	B	C	): I'll never forget the day. I was playing tennis with a friend of mine and Cory came over and, you know, met us, and
6	2017	SPOK	ABC: The View	A	B	C	not putting yourself in those types of situations, as well. I have a friend of mine that came up to me regarding this director Toback, and she said
7	2017	SPOK	Fox: Your World: Cavuto	A	B	C	You know, no, not at all. It was just a song a friend of mine, Dan Roberts, had wrote and got to me, because he
8	2017	SPOK	CNN: (--)	A	B	C	advice, Senator Franken should come -- I need to disclose, he's a friend of mine. I donated to his campaign, I campaigned for him in Minnesota
9	2017	SPOK	PBS: PBS Newshour	A	B	C	need to get that out into the public square. And so I asked a friend of mine to share the content of the memo with a reporter. Didn't
10	2017	SPOK	PBS: PBS Newshour	A	B	C	wind. You have white people marching with Black Lives Matter. I had a friend of mine who's a Sikh, and she put it like this. Quickly
11	2017	SPOK	PBS: PBS Newshour	A	B	C	many years ago. And I remember as good today as I did then a friend of mine, very close to, lived with her in the dorm, who
12	2017	SPOK	NPR: How I Built This	A	B	C	. GUY-RAZ# So what'd you find? HOWARD-SCHULTZ# So I left Xerox because a friend of mine shared with me that there was a Swedish company openi
13	2017	SPOK	NPR: How I Built This	A	B	C	sell. Two or three days later, I'm playing basketball, and a friend of mine, who is my young attorney at the time, Scott Greenburg -
14	2017	SPOK	NPR: Fresh Air	A	B	C	fun and somebody's sitting in some, like, dark room who's a friend of mine who's like, great, yeah, thanks. I really needed
15	2017	SPOK	NPR: How I Built This	A	B	C	... GUY-RAZ# This is in LA? JANICE-KARMAN# In LA. And I saw a friend of mine who was having dinner with Ross, who I didn't know.
16	2017	SPOK	NPR: Fresh Air	A	B	C	. Listen to this, Terry. A couple years ago in Portland, a friend of mine was in the hospital. I went to visit him, and he
17	2017	SPOK	NPR: Fresh Air	A	B	C	And there's this contest that - as I write in the book, a friend of mine at one point really helped me out' cause she said, what
18	2017	SPOK	NPR: Fresh Air	A	B	C	shegetz boyfriend. ALEC-BALDWIN: And she did. And I go to visit a friend of mine. She says, why don't you audition for the acting program
19	2017	SPOK	NPR: Fresh Air	A	B	C	were doing, your shtick. And then the next thing you know, a friend of mine, who was at NYU, her roommate was in the acting program

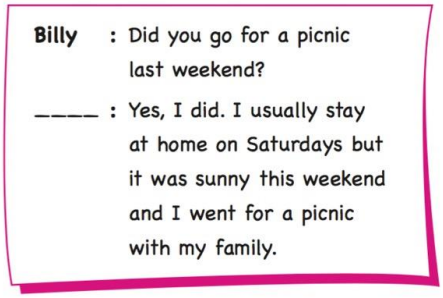
EXTRACT 2



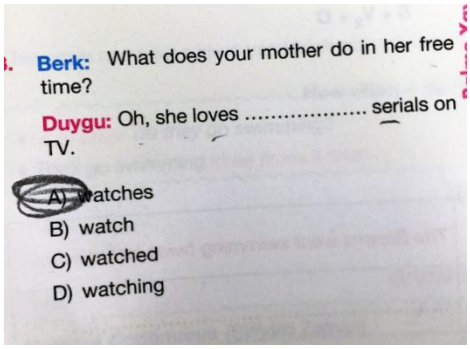
EXTRACT 3



EXTRACT 4



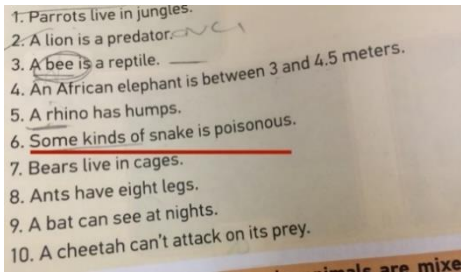
EXTRACT 5


Berk: What does your mother do in her free time?

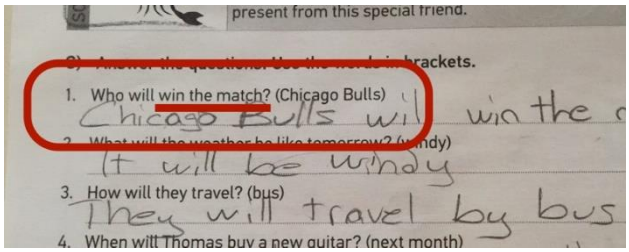
Duygu: Oh, she loves ..... serials on TV.

A) watches
B) watch
C) watched
D) watching

EXTRACT 6

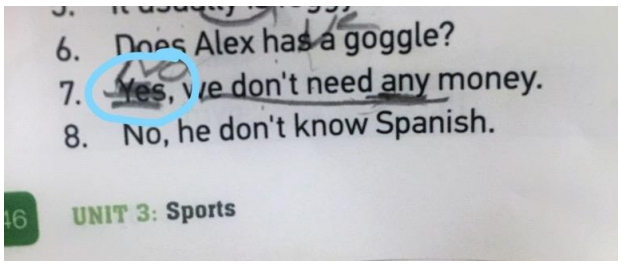

1. Parrots live in jungles.
2. A lion is a predator.
3. A bee is a reptile.
4. An African elephant is between 3 and 4.5 meters.
5. A rhino has humps.
6. Some kinds of snake is poisonous.
7. Bears live in cages.
8. Ants have eight legs.
9. A bat can see at nights.
10. A cheetah can't attack on its prey.

EXTRACT 7


present from this special friend.

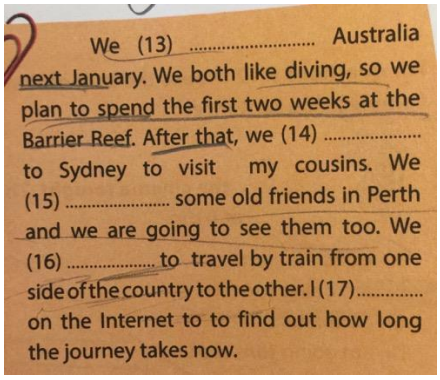
1. Who will win the match? (Chicago Bulls)
Chicago Bulls will win the
3. How will they travel? (bus)
They will travel by bus
4. When will Thomas buy a new guitar? (next month)

EXTRACT 8

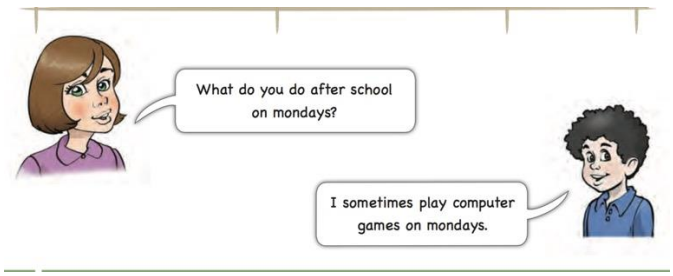

6. Does Alex has a goggle?
7. Yes, we don't need any money.
8. No, he don't know Spanish.

46 UNIT 3: Sports

EXTRACT 9


We (13) ..... Australia next January. We both like diving, so we plan to spend the first two weeks at the Barrier Reef. After that, we (14) ..... to Sydney to visit my cousins. We (15) ..... some old friends in Perth and we are going to see them too. We (16) ..... to travel by train from one side of the country to the other. I (17) ..... on the Internet to to find out how long the journey takes now.

EXTRACT 10



PART 2

1. What kind of benefits does that activity provide to language teachers?

2. Do corpus-based material evaluation and adaptation support the teacher's role as a producer? How?

3. Do corpus-based material evaluation and adaptation raise language teachers' linguistic and pedagogical awareness? How?

4. As a language teacher, would you use corpora to evaluate and adapt your materials? State the reasons for both answers (yes or no)?

APPENDIX O

Corpus-informed Exercise Example

I mean

Exercise 1.

a. *I mean* is quite a functional tool in English language, it is in the top 15 expressions. Below there are examples of uses of *I mean* in two ways: repeating the idea again or correcting what you said.

Read the sentences and decide on the function : **repeating or correcting**

1. I could hear a pen drop, and I experienced being heard -- I mean, profoundly listened to. …….
2. But those are the guys, I mean, those are the superstars. ……
3. I have THREE -- I mean, two dragons. ……
4. It's exciting, I mean it's been a dream come true for her …….
5. Oh, that Willow Acres. Yes. I mean, no. ……..

Exercise 2. Work with a partner and write a short dialogue, giving direction to a building in the city. Use *I mean* in the dialogue meaningfully.

A: I am sorry, How can I get to the police station?
B: Well, umm. …….

APPENDIX P

Corpus-informed Material Development Exercise Template

Dear Students,

Please write an exercise on any topic you want. However, do not forget to explain why you chose this topic and how you based it on data from a corpus (give the name of the corpus). You can make use of the information based on *Cambridge International Corpus* given in Touchstone Series Books.

Group Members:
1.
2.
3.

1. EXERCISE

2. EXPLANATION FOR THE EXERCISE

3. When you become a teacher, would you prefer books that are corpus-informed? Why? (please answer individually?)

4. Would you prepare yourself corpus-informed materials or make use of ready ones? Why? (please answer individually?)

APPENDIX Q

Textbook Evaluation Practice

Dear Students,

Please download the “Textbook Evaluation Checklist” on cucorpusliteracy.gnomio.com Week April 26 – May 3, and then compare one of the books written by the Turkish Ministry of Education and one of the books from Touchstone series written based on Cambridge International Corpus data.

Do not forget to provide screenshots from the books to prove your comments. Make your evaluations for each subsection in the checklist, please ignore the sections “Listening, Pronunciation, Exercises”.

Tugba Simsek

Group Members:
1.
2.
3.

EVALUATION (BOOK 1 (Write the name of the book) – BOOK 2 (Write the name of the book)

APPENDIX R

Semi-structured Interview and Focus Group Discussion Questions

1. Considering the content of the course that we covered, do you think that the corpus literacy course you took could affect your thoughts on the use language, and especially your own language use? Could the corpus literacy course raise your awareness of language? If so, how?

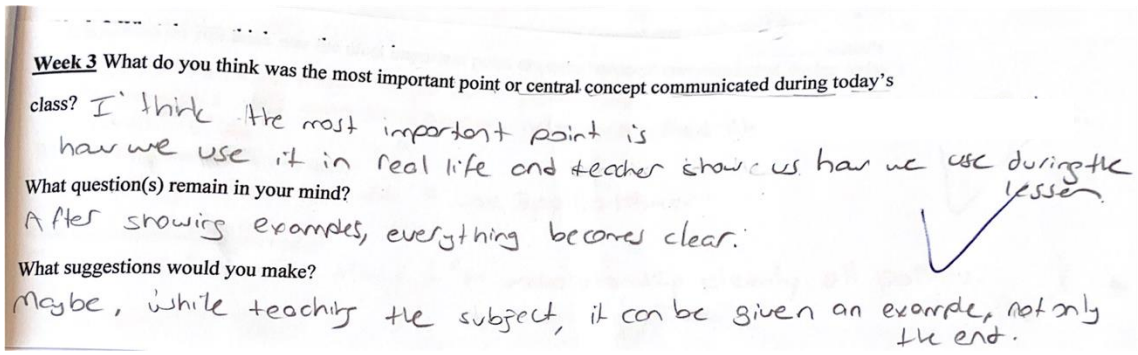
2. Do you think that the corpus liteacy course could contribute to your perspective on teacher role in terms of material evaluation, adaptation, and development? Have your thoughts on teacher role in terms of material evaluation, adaptation, and development changed during/after the course?

3. What is your overall evaluation about the corpus literacy course?

   What are the efficacious aspects of the course?
   What are the challenges that pre-service teachers experienced during the course?
   What kind of improvements are suggested to increase the effectiveness of the course?

APPENDIX S

Minute Paper Samples



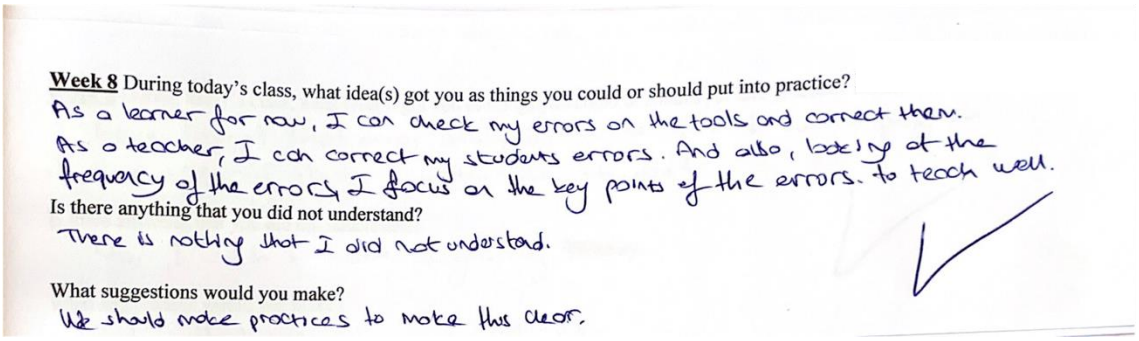
Week 3 What do you think was the most important point or central concept communicated during today's class? I think the most important point is how we use it in real life and teacher show us how we use during the lesson.

What question(s) remain in your mind?

After showing examples, everything becomes clear.

What suggestions would you make?

Maybe, while teaching the subject, it can be given an example, not only the end.



Week 8 During today's class, what idea(s) got you as things you could or should put into practice?

As a learner for now, I can check my errors on the tools and correct them. As a teacher, I can correct my students errors. And also, looking at the frequency of the errors I focus on the key points of the errors. to teach well.

Is there anything that you did not understand?

There is nothing that I did not understand.

What suggestions would you make?

We should make practices to make this clear.

CURRICULUM VITAE

A. PERSONAL INFORMATION

Name: Tuğba ŞİMŞEK
Date of Birth: 27/06/1990
Place of Birth: Bozyazı/TURKEY
E-mail: tsimsek@cu.edu.tr

B. EDUCATIONAL BACKGROUND

Date	Degree	University	Field
2015-2020	Doctor of Philosophy	Cukurova University TURKEY	English Language Studies
2019 (Fall Semester)	Exchange Ph.D. Student	University of Bremen GERMANY	English Speaking Cultures
2017 (Spring Semester)	Exchange Ph.D. Student	University of Valencia SPAIN	Advanced English Studies
2013-2015	Master of Arts	Cukurova University TURKEY	English Language Teaching
2008-2012	Bachelor of Arts	Cukurova University TURKEY	English Language Teaching

C. JOB EXPERIENCE

Date	Title	Institution
2014-	Research Assistant	ELT Department, Cukurova University, Turkey
2018-2018 (June 7th-	English Language Teacher	Valencia Language Club,

September 1st)		Valencia, Spain
2013-2014	English Language Teacher (Ministry of National Educ.)	Ömer Haluk Özuçak Primary School, Adana, Turkey
2012-2013	English Language Teacher (Ministry of National Educ.)	Abdurrahim Karakoç Secondary School, Adana, Turkey

D. ACADEMIC WORK

D.1. PUBLICATION

1. Şimşek T., Müftüoğlu A.C., "Practicum Experiences of Student Teachers Studying at ELT Department: An Evaluation From the Real Actors", International Journal of Language, vol.5, pp.106-122, 2017.

2. Şimşek, T. (2016) "Turkish EFL Learners' Perceptions on Corpus-Based Language Learning". Global Journal of Foreign Language Teaching, Volume 6, No 1, p. 21-27, 2016. http://dx.doi.org/10.18844/gjflt.v6i1.806

3. Şimşek, T. (2015). "The Role of Anxiety in Foreign Language Classes: A focus on Gender". International Journal of Language Academy, Volume ¾ Winter, p. 70-83, 2015. http://dx.doi.org/10.18033/ijla.332

D.2. BOOK CHAPTERS

1. Sofu H., Şimşek T. (2018). ""Ya" Bağlacının İşlevleri ve Edinimi" (Acquisition of conjuction "Ya" in Turkish". In Eds. Deniz Turan Ü., Kopkallı Yavuz H., Balcı A., *Dilimde Güncel Tartışmalar*, Ed., Dilbilim Derneği Yayınları, 2018, Ankara, ss.51-62, 2018

D.3. PAPERS PRESENTED

1. Şimşek, T., Can, C. (2019). "A Corpus Literacy Course Evaluation: Strengths and Weaknesses Highlighted by ELT Students". *The 10th International Corpus Linguistics Conference, CL2019*, Cardiff/UK, 23-27 July 2019.

2. Badem, N. Simsek, T. (2019). "A Comparison of Turkish EFL Learners' Use of Phrasal Verbs to L1 English Users': *A Corpus-Based Study". Language in Focus Conferences "Language, Research, and Teaching in the 21st Century"*. Dubrovnik/Croatia, 2-4 May 2019.

3. Şimşek T., Sofu H., "Acquisition of Turkish "ol-"", *19th International Conference on Turkish Linguistics*, Astana, Kazakhstan, 17-19 Ağustos 2018, pp.37-37.

4. Şimşek T., Badem N (2018). "Spotting Phrasal Verbs in Written and Spoken Registers: Are Turkish EFL Learners Aware of the Difference?", *LIF2018 - Language in Focus Conferences 2018 - Contemporary Means and Methods in ELT and Applied Linguistics*, Thessaloniki, Greece, 3-5 Mayıs 2018, pp.56-56.

5. Şimşek T., Müftüoğlu A.C., "Practicum Experiences of Student Teachers Studying at ELT Department: An Evaluation from the Real Actors", *3rd Cukurova International ELT Teachers Conferences - CUELT 2017*, Adana, Türkiye, 20-21 Nisan 2017, pp.133-133.

6. Şimşek T., Can C., "Introducing a Corpus-Literacy Course in ELT Teacher Education Program: A Course Proposal", *International Conference on Foreign Language Education*, Famagusta, Cyprus, 20-21 Ekim 2017, pp.34-34.

7. Şimşek T., Müftüoğlu A.C., "In-Service Teacher Education for English Language Teachers in Turkey: A MultiPerspective Study", *3rd Cukurova International ELT Teachers Conferences - CUELT 2017*, Adana, Türkiye, 20-21 Nisan 2017, pp.134-134

8. Sofu H., Şimşek T., ""Ya" Bağlacının İşlevlerinin Edinimi", *31. Ulusal Dilbilim Kurultayı,* Eskişehir, Turkey, 12-14 Mayıs 2017, ss.39-39

9. Şimşek, T. (2016) *Priming Linking Adverbial Use of Turkish EFL Learners: A Corpus-Based Implementation. Language and Focus Conference 2016 Conference, From Theory to Practice: New Directions in ELT and Applied Linguistics*, Istanbul, Turkey. March 10-12, 2016.

10. Şimşek, T., and Badem, N. (2016). Tracing the Use of Phrasal Verbs in ICLE and BAWE: A Corpus-Based Analysis. *Language and Focus Conference 2016 Conference, From Theory to Practice: New Directions in ELT and Applied Linguistics*, Istanbul, Turkey. March 10-12, 2016.

11. Sofu, H., and Şimşek, T. (2016). Acquisition of Coordination in Turkish Children: Additive Connectives. *3rd International Conference on Language, Innovation, Culture, and Education (ICLICE),* Singapore. 20th-21st February 2016 (in press). http://proceedings.icsai.org/3iclice/3iclice-63.pdf

12. Şimşek, T. (2016). Turkish EFL Learners' Reflections' on Corpus-Based Language Teaching. *8th World Conference on Educational Sciences, WCES-2016.* University of Alcala, Madrid, Spain; 04-06 February 2016.

13. Tüm, G., and Şimşek, T. (2015). A Study on Writing Skills in Teaching Turkish as a Foreign Language, *1st International Symposium on Language Education and Teaching,* Hacı Bektaş Veli University, Nevşehir, Turkey, 28-30 May 2015.

14. Şimşek, T. (2015). The Role of Anxiety in Foreign Language Classes: A focus on Gender. *1. Cukurova International ELT Teachers (CUELT) Conference: An Insider Voice into Practice,* Cukurova University, Adana, 21-22 May 2015.

15. Tüm, G., and Şimşek, T. (2015). The Analysis of Reading Passages in Turkish for Foreign Learners Textbooks in terms of Skimming and Scanning Strategies. *I. International Congress of Teaching Turkish as a Foreign Language,* Sakarya University Turkse Unie van Belgie and Yunus Emre Institute, Gent, Belgium, 24-26 April 2015.

D.4. CONFERENCE PARTICIPATION AS A LISTENER

1. *Learner Corpus-based approaches to Second Language Acquisition, Utrecht Institute of Linguistics (UIL-OTS),* March 31st – April 1st, 2017, Utrecht, Netherlands.

2. *IATEFL TTEd SIG INTERNATIONAL CONFERENCE event: The Journey from Input to Interaction in English Language Learning,* IATEFL Associate. Gaziantep, Turkey; 22-26 April 2015.

3. *Enhancing Mentoring Skills: Creating a Synergy between Pre-Service and In-Service Teacher Education Programs in English Language Teaching.* ELT Department of Cukurova University and British Council. Adana, Turkey; March 5-6, 2015.

4. *Language Teaching and Learning Strategies.* Cukurova University ELT Department, Adana/Turkey. May 29-30, 2014.

D.5. CONFERENCE ORGANISATION

1. LIF2019 - Language in Focus Conferences "Language, Research, and Teaching in the 21st Century", Croatia, May 2019, Conference Secretary.

2. LIF2018 - Language in Focus Conferences "Contemporary Means and Methods in ELT and Applied Linguistics", Greece, May 2018, Conference Secretary.

3. 4th Cukurova International ELT Teachers Conference (CUELT) "Innovative Practices in EFL/ESL Learning & Teaching", Cukurova University, Adana, Turkey, April 2018, Organizing Committee Member.

4. 3rd Cukurova International ELT Teachers Conference "Reshaping Teaching and Learning English for the 21st Century" Çukurova University, Adana, Turkey. April 20-21, 2017, Organizing Committee Member.

5. LIF2017 - Language in Focus Conference "Multiple Perceptual Frames on ELT", Famagusta, Cyprus, March 2017, Conference Secretary.

6. 18th International Conference on Turkish Linguistics, Cukurova University, Adana, Turkey, February 24-26, 2017, Conference Secretary.

7. 2nd Cukurova International ELT Teachers Conference "Replacing Cliches: Teaching Subordinated to Learning" Çukurova University, Adana, Turkey, April 28-29, 2016, Organizing Committee Member.

8. LIF2016, Language in Focus Conference, From Theory to Practice: New Directions in ELT and Applied Linguistics. Istanbul, Turkey, March 10-12, 2016, Conference Secretary.

9. Çukurova University ELT Teachers (CUELT) Conference "An Insider Voice into Practice. Cukurova University, Adana, Turkey, May 21-22, 2015, Organizing Committee Member.

10. International Symposium on Global Perspectives on Social Sciences and Humanities Theory and Practice. Warsaw, Poland. September 16-18, 2015, Conference Secretary.

11. LIF2015 - Language in Focus Conference "Contemporary Perspectives on Theory, Research, and Praxis in ELT and SLA", Cappadocia, Turkey, March 2015, Conference Secretary.

D.6. PROJECTS

1. YouthSport (Erasmus + Project) is a European project funded within the Erasmus+ Programme by the Italian National Agency for Youth (Agenzia dall'Agenzia Nazionale Giovani). - Participant (Turkey), 2016.

2. "Take My Hand, I am with You", S-TU-150-17-GR-0023, Researcher, 2017. (A project designed for the integration of Syrian refugees studying at Cukurova University into the social and educational environment of Turkey. The project was funded by US embassy).

E. SCHOLARSHIPS

1. Scientific and Technological Research Council of Turkey Philosophy of Doctorate Education Grant (Philosophy of Doctorate – 2015- 2019)

2. Scientific and Technological Research Council of Turkey Master of Arts Education Grant (Master of Arts – 2013-2015)

F. LANGUAGE SKILLS

1. Turkish (Mother tongue)
2. English (Advanced)
3. Spanish (Intermediate)
4. German (Intermediate)