A FLIPPED LEARNING SYLLABUS FOR TEACHING ENGLISH FOR SPECIFIC PURPOSES: AN ACTION RESEARCH STUDY

Ogün İLTER

Doctoral Dissertation

Department of Foreign Languages Education

2020

(All rights reserved.)

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

ÖZEL AMAÇLI İNGİLİZCE ÖĞRETİMİ İÇİN TERS YÜZ ÖĞRENME İZLENCE ÖNERİSİ: BİR EYLEM ARAŞTIRMASI

(A Flipped Learning Syllabus for Teaching English for Specific Purposes: An Action Research Study)

DOKTORA TEZİ

Ogün İLTER

Danışman: Doç. Dr. Savaş YEŞİLYURT

Erzurum

Kasım, 2020

KABUL VE ONAY TUTANAĞI

Ogün İLTER tarafından hazırlanan "Özel Amaçlı İngilizce Öğretimi İçin Ters Yüz Öğrenme İzlence Önerisi: Bir Eylem Araştırması" başlıklı çalışması 17 / 11 / 2020 tarihinde yapılan tez savunma sınavı sonucunda başarılı bulunarak jürimiz tarafından Yabancı Diller Eğitimi Ana Bilim Dalı, İngiliz Dili Eğitimi Bilim Dalında doktora tezi olarak kabul edilmiştir.

Jüri Başkanı:	Prof. Dr. Mehmet TAKKAÇ *Atatürk Üniversitesi*	Aslı ıslak imzalıdır
Danışman:	Doç. Dr. Savaş YEŞİLYURT *Atatürk Üniversitesi*	Aslı ıslak imzalıdır
Jüri Üyesi:	Doç. Dr. Servet ÇELİK *Trabzon Üniversitesi*	Aslı ıslak imzalıdır
Jüri Üyesi:	Doç. Dr. Ceyhun YÜKSELİR *Osmaniye Korkut Ata Üniversitesi*	Aslı ıslak imzalıdır
Jüri Üyesi:	Dr. Öğr. Üyesi Oktay AKARSU *Atatürk Üniversitesi*	Aslı ıslak imzalıdır

Bu tezin Atatürk Üniversitesi Lisansüstü Eğitim ve Öğretim Yönetmeliği'nin ilgili maddelerinde belirtilen şartları yerine getirdiğini onaylarım.

…. / 11 / 2020

Aslı ıslak imzalıdır

Prof. Dr. Adnan KÜÇÜKOĞLU

Enstitü Müdürü

ETİK VE BİLDİRİM SAYFASI

Doktora Tezi olarak sunduğum "Özel Amaçlı İngilizce Öğretimi İçin Ters Yüz Öğrenme İzlence Önerisi: Bir Eylem Araştırması" başlıklı çalışmanın tarafımdan bilimsel etik ilkelere uyularak yazıldığını ve yararlandığım eserleri kaynakçada gösterdiğimi beyan ederim.

14 /12 / 2020

Aslı ıslak imzalıdır

Ogün İLTER

☐ Tezle ilgili patent başvurusu yapılması / patent alma sürecinin devam etmesi sebebiyle Enstitü Yönetim Kurulunun …./…/…. tarih ve ……. sayılı kararı ile teze erişim 2 (iki) yıl süreyle engellenmiştir.

☐ Enstitü Yönetim Kurulunun …./…/…. tarih ve ……. sayılı kararı ile teze erişim 6 (altı) ay süreyle engellenmiştir.

ACKNOWLEDGEMENTS

I am indebted to many people who provided expertise, support, and encouragement, which helped make this dissertation a reality. I am most appreciative of my thesis supervisor, Assoc. Prof. Dr. Savaş YEŞİLYURT not only for generously sharing his knowledge, academic guidance, and expertise, from which I have learned so much but also for his endless patience, sincere encouragement and continuous support in conducting this dissertation. I would also like to thank the other members of my thesis committee, Prof. Dr. Mehmet TAKKAÇ, Assoc. Prof. Dr. Servet ÇELİK, Assoc. Prof. Dr. Ceyhun YÜKSELİR and Assist. Prof. Dr. Oktay AKARSU for their insightful comments and helpful criticism to help me gain multiple perspectives in the evaluation of the research.

In particular, I would like to thank all the participants, who gave consent to be a part of this action research; namely, the lecturers of English for sharing their experience and professional suggestions with me on such a demanding job of teaching pharmaceutical English; the faculty members at the faculty of pharmacy for allocating time to share their expertise in needs analysis and the final evaluation of the syllabus, and lastly, my students who took up the challenge of learning pharmaceutical English in a totally new learning environment for keeping up with the dynamic processes of the flipped learning experience. The end product of this dissertation certainly encapsulated the collective wisdom of each one of the participants in this research.

My special thanks go to my close friends, Nur TARIM for her boundless support during this PhD work; Ayşegül DİNÇ for providing the inspiration and encouragement to become a writer to get through my dissertation; Esra DEMİREL for her psychological guidance both as a professional and a sister; and Merve GEÇİKLİ not only for the proofreading of this dissertation but also for suggesting many inspirational insights on handling the study.

I feel deeply indebted to my parents, my elder sister, and my husband's parents for their unconditional love and unyielding support in all these years to complete my PhD study. Last but not the least, my greatest debt is definitely to my husband, Hayri, and my beloved daughter, Ferah Aden, for enduring and surviving my experience of doctoral study with great understanding, never-ending patience and unyielding encouragement. Words will certainly fall short of expressing my gratitude to them.

Ogün İLTER

ÖZ

DOKTORA TEZİ

ÖZEL AMAÇLI İNGİLİZCE ÖĞRETİMİ İÇİN TERS YÜZ ÖĞRENME İZLENCE ÖNERİSİ: BİR EYLEM ARAŞTIRMASI

Ogün İLTER

Kasım 2020, 311 Sayfa

Amaç: Bu çalışma, ters yüz öğrenme ortamında akademik-eczacılık İngilizcesi öğretimine yönelik bir izlence tasarlamak için eczacılık fakültesindeki öğrencilerin, öğretim üyelerinin ve İngilizce öğretim görevlilerinin işbirliğiyle, birinci şahıs eylem araştırması gerçekleştirmeyi amaçlamaktadır.

Yöntem: Araştırma, birinci şahıs eylem araştırması deseninde tasarlanmıştır. İzlence tasarlama süreci; ihtiyaç analizi, uygulama ve değerlendirme olmak üzere üç aşamadan oluşmuştur. İlk olarak, eczacılık fakültesindeki 5 öğretim üyesiyle yarı-yapılandırılmış görüşmeler gerçekleştirilerek ve Türkiye' deki mevcut izlenceler ve ders kitapları incelenerek bir ihtiyaç analizi yapılmıştır. İkinci olarak, ortaya çıkan öğrenim çıktılarına dayalı bir izlence tasarlanmış ve ters yüz öğrenme ortamında 12 hafta boyunca bu izlence uygulanmıştır. Son olarak, izlencenin son şeklinin verilmesinde; dönem içi değerlendirmede, haftalık 3 ders saatinin 12 hafta boyunca kayıt edilmesinden, dersi alan 38 öğrencinin tuttuğu yansıtıcı raporlardan ve araştırmacının alan notlarından faydalanırken; dönem sonu değerlendirmede ise; 38 öğrenciyle, 3 İngilizce öğretim görevlisiyle ve 2 öğretim üyesiyle gerçekleştirilen odak grup görüşmelerinden yararlanılmıştr. Elde edilen veriler, NVivo 11 Pro aracılığıyla içerik analizine tabi tutulmuştur.

Bulgular: Çalışmanın bulguları, ters yüz öğrenme stratejisinin, sınıf içi zamanın etkili kullanımı, eğitimin bireyselleştirilmesi ve akran etkileşimi gibi pek çok avantaj sağladığını göstermiştir. Öte yandan, ters yüz öğrenme modeli, öğretmen bağımlılığı ve yerleşmiş öğrenme alışkanlıklarından kaynaklanan bazı uyumsuzluk sorunlarını da beraberinde getirmiştir. İzlencenin dil öğrenme içeriğine, daha fazla dinleme, telafuz ve kelime öğrenme etkinliklerinin eklenmesine karar verilmiştir. Son olarak, izlencenin eczacılık mesleki içeriğindeki modüllerin kapsamının genişletilip ve/veya daraltılarak yeniden düzenlenmesi düşünülmüştür.

Sonuç: Bu çalışmada, ters yüz öğrenme ortamı için tasarlanan akademik-eczacılık İngilizcesi izlencesinin yeniden düzenlenmiş bir modeli önerilmiştir. Çalışmanın bulgularından hareketle, uygulamaya ve ilerde yapılacak araştırmalara yönelik önerilerde bulunulmaktadır.

Anahtar Kelimeler: Ters yüz öğrenme, özel amaçlı İngilizce öğretimi, akademik-eczacılık İngilizcesi öğretimi, eylem araştırması.

ABSTRACT

DOCTORAL DISSERTATION

A FLIPPED LEARNING SYLLABUS FOR TEACHING ENGLISH FOR SPECIFIC PURPOSES: AN ACTION RESEARCH STUDY

Ogün İLTER

November 2020, 311 Pages

Purpose: The purpose of this study was to conduct action research in collaboration with learners, faculty members and instructors of English at a faculty of pharmacy to design a syllabus for teaching academic pharmaceutical English in a flipped learning environment.

Method: The study was based on first-person action research. The syllabus design process in the action research was composed of three fundamental phases: needs analysis, implementation and evaluation. First of all, the researcher handled a needs analysis via semi-structured interviews with 5 faculty members and reviewed ESP syllabuses and coursebooks for teaching pharmaceutical English in Turkey. Secondly, relying on the learning outcomes, a syllabus was designed and implemented in a flipped learning environment through 12 weeks. Eventually, the design of the syllabus was evaluated, firstly, during implementation via video recording the 12 weekly three-class-hour courses, collecting the 38 learners' reflective journals and keeping field notes; and secondly, after finishing the implementation by holding separate focus group interviews with the 38 students, 3 English lecturers, and 2 faculty members. The data were analysed by content analysis via using NVivo 11 Pro software.

Findings: The findings of the study indicate that the flipped learning strategy ensured many advantages, including the efficient use of class time, differentiation and peer interaction. On the other hand, flipped learning model also brought some adoption problems derived from teacher dependence and established passive learning habits. Regarding the findings on the linguistic dimension, more listening, pronunciation and vocabulary activities were considered to be added in the revised version. Finally, the modules in the pharmaceutical content were considered to be revised by either extending or narrowing their scope.

Result: As a result, a revised version of the flipped academic pharmaceutical English syllabus was proposed. Considering the findings of the study, practical implications for professional practise as well as suggestions for further research were presented.

Keywords: Flipped learning, English for specific purposes, English for academic pharmaceutical purposes, action research.

CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

CLIL : Content-Language Integrated Learning
EAP : English for Academic Purposes
EAPP : English for Academic Pharmaceutical Purposes
EFL : English as a Foreign Language
EGP : English for General Purposes
ELT : English Language Teaching
EOP : English for Occupational Purposes
ESL : English as a Second Language
ESP : English for Specific Purposes
FLGI : Flipped Learning Global Initiative
FLN : Flipped Learning Network
L1 : First Language
L2 : Second Language
LMS : Learning Management System
LSP : Language for Specific Purposes
OTC : Over-the-counter (medicine)

CHAPTER ONE

Introduction

This chapter will present firstly, the statement of the problem, underlying the position of English for specific purposes (henceforth, ESP) practice in teaching English as a foreign language (henceforth, EFL) environments and the rising demand of flipped learning strategy in higher education sector; secondly, the rationale of the study that led the researcher to conduct the present action research in her teaching environment, benefitting from the flipped learning strategy in teaching English for pharmaceutical purposes; and thirdly, the significance of the study which underlies the contributions of the study to the research and practice. In addition to the purpose of the study and related research questions that guide the present action research, this chapter will be concluded by presenting the delimitations of the study to set the boundaries of research scope; definition of the terms to clarify the commonly used terminology in the dissertation; and the dissertation outline, summarizing the structural scope of the dissertation.

Statement of the Problem

ESP is a branch of a broader teaching movement, Language for Specific Purposes (henceforth, LSP), which is an umbrella term for teaching mostly German, French and English for specific learner purposes. Unlike general purposes language instruction, in which the content of a syllabus is standardized for all learners regardless of their learning needs in their particular contexts, the setting and the people involved in a specific field drive the LSP curriculum (Trace, Hudson & Brown, 2015, p. 2). That is, in LSP courses, the elements of a curriculum, which are the objectives, the methodology, the content, the materials and the assessment practices, all derive from an identified set of specialized needs in the target language. Additionally, Strevens (1998) emphasizes that specific purpose instruction is associated with context-specific content for particular disciplines, occupations, and activities; and is devoted to the language required for those tasks (cited in Trace, Hudson & Brown, 2015, p. 2). Within this frame, ESP is defined by Johns and Price (2014, p. 472) as a pedagogical trend in applied linguistics built upon research-driven materials to teach learners with specific learning purposes within their academic or occupational environments either at present or in the target settings. They identify an ESP course as “a very focused course” due to its orientation towards language needs, wants, and academic and/or occupational goals of a

specific group of learners as well as the related discourses and cultures, in which these learners will use English. As for teaching such a focused course, the question, 'Who should teach ESP courses?' has been as a matter of controversy for decades in the field of English language teaching (henceforth, ELT). The content experts surely possess the valuable content knowledge required in a particular domain; on the other hand, they lack the expertise in teaching English as a foreign or second language, which refers to more than conventionally exposing learners to key terminology and translation of genre-specific texts. On the contrary, teachers of English have the skills and knowledge of teaching English while lacking content knowledge. However, in the course of time, there has appeared to be a consensus on allocating responsibility of teaching occupational English courses to English teachers due to their overwhelming success in teaching practice in comparison to content experts (e. g. Aliyasin & Pouyan, 2014; Maleki, 2008; Miller, 2001; Mousavi, Gholami & Sarkhosh, 2019; Rajabi, Kiany & Maftoon, 2011). The success of ESP teachers relies on the five key roles identified by Dudley Evans and St. John (1998, cited in Gatehouse, 2001) for an ESP practitioner, which refers to more than just the act of teaching. These are the roles of a teacher, a researcher, a course designer and material provider, a collaborator, and an evaluator. As a teacher, an ESP practitioner is supposed to create authentic learning opportunities through efficient teaching methods to meet the needs of a particular group of learners. As a researcher, an ESP practitioner is expected to conduct a needs analysis to determine the target needs, goals and interests of a specific group of learners in addition to improving their knowledge of specific content to be taught by determining the language skills required to meet the learners' goals and searching for genre-specific media sources available. As a course designer and material provider, an ESP practitioner generates the learning outcomes of the ESP course relying on the needs analysis and builds the basic elements of syllabus design around them in addition to developing and/or adjusting course materials available to carry out the course. As a collaborator, an ESP practitioner collaborates with other subject specialists in the community of practice to obtain the knowledge of the field-specific content, target language skills necessary to perform tasks in the target setting and reaching out the discipline-specific sources of media to be used in the particular context. Finally, as an evaluator, an ESP practitioner evaluates the effectiveness of their teaching methods and course materials as well as learning outcomes of that particular group of learners at the beginning, during and at the end of their courses. Accordingly, the narrow scope of an ESP course derived from a needs analysis will probably help the ESP teacher to generate more favourably accepted learning outcomes by learners. As learners find it reasonable to study for achieving the discipline-specific learning outcomes, they will involve in the

processes of mastering occupational content knowledge and occupational skill development in English peculiar to the norms of their target community of practice. As a consequence, learning motivation is facilitated, leading to success in achieving these outcomes.

Nonetheless, the issue becomes more complicated when it comes to EFL environments which have contextual disadvantages to teach ESP courses as compared to settings where English is a second language (henceforth, ESL). That is to say, ESP learners in EFL settings lack the opportunities to use English they have learnt in ESP courses outside the classroom walls as well as accessing occupation-specific materials in English to catch up with their counterparts in ESL environments. Therefore, ESP courses in EFL settings are often replicas of ESL environments generated to compensate for learners' limited access to use of English out of class contrary to the ESP courses in ESL contexts which have more direct practice as the tasks can be handled in their natural contexts (García Laborda & Litzler, 2015, p. 43), which, as a result, influences the ESP course design. Additionally, the tasks and activities in EFL contexts are often limited to time constraints and learners have limited access to authentic conditions related to their disciplines. Therefore, the ESP practitioners in EFL settings engage in the challenges of designing real-like learning environments for their learners to support their practising occupational English skills in addition to reaching out occupational texts they have to have a command of in their profession. Moreover, when ELT coursebook market cannot respond to teaching ESP for particular domains, the responsibility of generating occupation-specific content and materials for ESP courses is all left to ESP practitioners themselves. In such cases, ESP practitioners are supposed to supply the demand for course design and material development for particular professions so that their learners are provided with the required English proficiency to handle the necessary occupational skills in English in their community of practice.

Other obstacles in ESP classes in EFL environments are threefold: one is the varied language background of learners who need individualized learning support to reach a common ground with their peers in their particular discipline before receiving ESP teaching; another is the high number of students at one setting in a limited time frame, which again obstructs delivering personal feedback and counselling to each learner who has the different attention span, learning speed and needs in an ESP class; and the third is the learner profile of today's generation Y and Z students who are easily distracted and with shorter attention span, which again challenges the conventional way of instruction in ESP courses. All these three dimensions of ESP environment require individualization in ESP instruction in EFL settings so that ESP courses can be adaptive for learners' varied levels of proficiency, flexible for

receiving personal feedback and appealing to learners' interests, attention span and compatible with the way they learn in the 21st century. Moreover, Şahin and Kurban (2016, p.12) argue that while delivering qualified education, tertiary level institutions should speak the language of today's generation, in which use of technology is the medium of communication in learners' daily lives. They should not be forced to learn in the way against their mindset, and institutions should meet such expectations to reach and communicate knowledge in today's world.

Such challenges in the practice of ESP teaching lead ESP practitioners to be in search of best practices to realize the ideal learning atmosphere for learners in EFL environments. In order to enable learners to adapt what they have learned in ESP classes into their professional lives, institutions are supposed to adopt such an approach that not only makes the most of the benefits of technological opportunities but also provides rich active learning environments so that they can prepare individuals for the globalized employment world, which speaks the language of technology. One of the recent responses to such demands has recently come from a blended learning model, the flipped learning approach. In the foreword of the book, 'The Flipped Approach to Higher Education: Designing Universities for Today's Knowledge Economies and Societies' by Şahin and Fell Kurban (2016), Jon Bergmann, one of the pioneers of flipped learning, emphasizes that 'flipped learning' directs one basic question, "What is the best use of face-to-face class time?" Especially for today's YouTube generation who benefit from the medium of videos to reach information, lecture-based instruction in class time is seemingly no more effective to teach any content in the 21st century. Therefore, this generation demands more from educational institutions; briefly speaking, at least, further than presenting only fundamental information in valuable face-to-face class time. It is the responsibility of ESP practitioners at tertiary level education to catch up with the needs and mindset of these generations via technologically integrated innovative models as is the case with the flipped learning.

In the flipped learning approach, the stages of Bloom's taxonomy of the cognitive domain are the focus of course design, through which in- and out-of-class work are organized. Basically, the application of the lower stages of the Bloom's taxonomy is aimed to be achieved before class time, which is called 'individual space' in the flipped learning community, while the higher stages of Bloom's taxonomy are intended to be reached in in-class work, which is called 'group space' by the practitioners of flipped learning. To be more precise, in flipped learning, students are exposed to the content delivery through lecture videos and/or other supplementary materials shared by instructors on a learning management

system (henceforth, LMS). Therefore, the lower stages of 'remembering' and 'understanding' are realized in individual space through learners' interacting with lecture videos and/or texts as well as being tested on content knowledge via short online quizzes to make sure of their understanding of the content before class time. It is due to this individual learning space that learners can access to course content using any media devices they have whenever, wherever, and as many times as they want, which helps achieve individualization and flexibility in learning. By this means, in-class time is freed from the conventional way of content delivery by the instructors themselves. Therefore, learners' coming to class having prepared to engage in the tasks in the group space makes it possible to carry out tasks in the higher stages of Bloom's taxonomy, which are 'applying', 'analysing', 'evaluating', and 'creating', to attain deeper learning. In this way, learners take ownership of their learning in flipped learning model, and the instruction in class becomes more personalized as the flipped model provides instructors with extra time to communicate with each and every student in the class, and, by doing so, responding to individual learning needs in mini-talks with their students during class time (e.g. Öznacar, Köprülü & Çağlar, 2019; Şahin & Fell Kurban, 2016).

Flipped learning takes language learning further by starting to engage students in learning materials before class, where learners are exposed to authentic use of language more through varied media sources, and by enabling ESP teachers to mentor through higher cognitive level tasks in class, where learners can put what they learn into practice (Cunningham, 2016; Mehring, 2016). As well as using authentic language in class, holding content-based activities, as is the case with ESP teaching, facilitates learners to expand their real-world knowledge and specific uses of language with the integration of technology and task-based activities in class as well as making it possible to practice English via several active learning tasks, such as role-plays, simulations, games, discussion, and presentation in ESP classes (Sakulprasertsri, 2017). As for teaching language skills, flipped learning is considered to provide EFL teachers with many advantages, including carrying out communicative activities more in class through teaching grammar via online tools outside the classroom (e.g. Correa, 2015; Nguyen, 2018; Temizyurek & Ünlü, 2015; Webb & Doman, 2016); improving learners' collocation skills (e.g. Alnuhayt, 2018; Suranakkharin, 2017; Zhang, Li, Jiao, Ma, & Guan, 2016); enhancing learners' willingness to communicate and improving learners' speaking skill (e.g. Hung, 2015, 2017b; Lee & Wallace, 2018; Lin & Hwang, 2018); increasing learners' listening skill proficiency due to the high number of chances to listen to English in individual space (e. g. Ahmad, 2016; Leis, 2016); enhancing learners' reading comprehension (e.g. Chavangklang & Suppasetseree, 2018; Karimi & Hamzavi, 2017); facilitating learners' composition skills due to receiving constructive

feedback from their teacher in class sessions (e. g. Engin & Donanci, 2014; Pavanelli, 2018); boosting EFL learners' proficiency and academic achievement in English (e.g. Başal, 2015; Engin, 2014; Evseeva & Solozhenko, 2015; Hung, 2015; Hung, 2017a; Lee & Wallace, 2018; Sözler, 2018); supplying learners with more time to internalize knowledge before applying it, and thus, encouraging deeper thinking (e.g. Boyraz & Ocak; 2017; Choe & Seong, 2016; McKeown, 2016; Sun, 2017; Zainuddin, 2017).

Depending on the findings of the studies in the literature, teaching ESP courses in a flipped learning environment seems to make it possible for learners to internalise content knowledge in individual space and to master that knowledge and improve related skills through active learning in group space. It is because flipped learning atmosphere satisfies the expectations of learners from varied language learning background, attention span and learning speed by providing individualized instruction that catches up with the emerging learning culture, interests, learner differences, demands and renewed needs of the 21st century's ESP learners. However, to the knowledge of the researcher, analysing the existing literature on empirical ESP research conducted in flipped learning approach, it seems that related research is scarce when compared to the studies conducted in EGP courses. Additionally, in the narrow literature on ESP teaching in EFL flipped learning settings, for example in China (Duan & Chen, 2019; Li & Zhang, 2016; Lin, Hwang, Fu, & Chen, 2018; Liu, 2017; Yang, 2019; Zhang, 2015, 2016; Zhonggen & Guifang, 2016); in Egypt (Salem, 2018; Soliman, 2016); in Japan (Kirk & Casenove, 2015); in Korea (Kang, 2018); in Romania (Păcurar, 2018); in Russia (Kvashnina & Martynko, 2016; Rudneva & Valeeva, 2017; Pavlova, Valeeva, Rudneva & Nigmatzyanova, 2019); in Taiwan (Lee, 2017); in United Arab Emirates (Nickerson, 2018); in Ukraine (Bahlai, Machynska, Matviiv-Lozynska, Senkovych & Voloshyn, 2019; Karapetian, 2020); in Vietnam (Nghi, 2014; Nhat, Lee & Dung, 2019; Tri & Trang, 2019), the majority of the studies are conducted in the far eastern countries (e.g. China, Japan, Korea, Russia, Taiwan and Vietnam), and it is followed by countries in the central Europe, (e.g. Romania & Ukraine), Egypt and United Arab Emirates while no studies are found in Turkey's EFL context. Therefore, to comprehensively evaluate the dynamics of the flipped learning environment in ESP teaching practice in EFL settings, further empirical data is needed so that ESP practitioners can upgrade their teaching practice while adopting the flipped learning approach in their EFL contexts. The knowledge drawn from such experience seems to contribute to ESP practice in EFL environments on the development of technologically integrated innovative approaches that are appealing to today's ESP learner profile.

Rationale of the Study

The impetus for the present practical action research study comes from the challenges the researcher has faced in her teaching environment in an EFL higher education setting, which were teaching the occupational skills and content of particular disciplines in English medium and trying to achieve individualized instruction to meet specific language needs of each and every student in overcrowded classrooms with numerous learner profiles.

Firstly, teaching ESP in occupational English courses has been a matter of intensive endeavour for many years for the researcher in her institution since reaching out related materials appropriate to learners' language background and ESP needs has been almost impossible in the market either because there may not be any ESP coursebooks exactly meeting the needs of the particular group of ESP learners, or because the available ones are generally for ESL learners, thus require adaptations to EFL settings, and /or too expensive for the learners to pay for as they are supposed to be ordered overseas. Therefore, the researcher has always had to search for necessary ESP content by asking faculty members for any printed materials related to their departments, which are generally suggested by faculty staff as research articles that are high above learners' language background; or by looking for YouTube videos and podcasts for authentic uses of English for occupational purposes (henceforth, EOP), which mostly results in having no efficient source at all. That is, developing ESP materials as a teacher by oneself requires a quite amount of time and effort to adapt materials via adding necessary language support to these materials; or leaving out or simplifying some content as learners' contextual background may not be suitable for those materials, which may also continue during the term, in almost every week. Similarly, within the scope of the present study, when the researcher was assigned to teach the occupational English course at the faculty of pharmacy in her institution, the situation did not change. At the faculty of pharmacy, the researcher taught English for three years up to the time of the study, having experienced teaching different types of English courses on a continuum of a pre-intermediate course at one end and occupational English course at the other. As was the case with the other disciplines, ESP course materials for pharmaceutical purposes were almost impossible to reach in Turkish ESP coursebook market. The only book available which was also comprehensive in content was 'English for Pharmacy Writing and Oral Communication', by Miriam Diaz-Gilbert, published by the Point Publishing. However, that book was very expensive to ask learners to buy individually as it was sold in the U.S.A. Additionally, the level of English of that book was above the researcher's students at pharmacy faculty, whose levels show variety between pre-intermediate and intermediate levels. Moreover, as the book

was aimed for ESL learners, a great number of adaptations were needed to adapt it to not only the researcher's context but also the learners' level of proficiency. Therefore, the researcher decided to design an ESP course syllabus to use in the occupational English course at the faculty of pharmacy via partly relying on that book, but mostly depending on an intensive needs analysis to generate on-site learning outcomes.

Secondly, the classes of occupational English were not organized around levels of proficiency, as is the case with almost all ESP courses, but composed of learners who showed variety in not only levels of proficiency in English, but also in levels of motivation to learn English for pharmaceutical purposes, disregarding individualized learning needs, speeds and desires of each student. That is, while some students had sentence-level problems, some students asked for more speaking practice in class. Similarly, some learners considered occupational English courses as an unnecessary course that they had to pass to graduate from the university while some regarded such courses as necessary for their future career, which also affected the overall learning atmosphere of occupational English courses. In addition to the mixed profile of learners in terms of proficiency and learning motivation, the large classroom size and the traditional method of content delivery with no individualized strategies for instruction was inefficient in teaching English in occupational English classes. Having searched for remedies to overcome the challenges of teaching English for pharmaceutical purposes, but with keeping learners' language needs in mind, the researcher aimed at teaching English for academic pharmaceutical purposes (henceforth, EAPP). Besides, due to the inefficiency of the one-size-fits-all approach in conventional content delivery, the researcher also intended to create a learning environment where learners' speeds, needs, and desires are considered through individualization strategies while delivering course content in pre-class sessions and engaging them in mastering content and occupational skills in face-to-face sessions. As a result of intensive research, she came up with the idea of using flipped learning strategy to create such a learning environment. However, in search of finding an example for a flipped EAPP course in the narrow ESP literature in EFL contexts, the researcher could not reach any results. The studies on teaching English for pharmaceutical purposes were very limited and in none of them, flipped learning was used as the teaching strategy (e.g. Berardo, 2017; Dewi & Chakim, 2017; Diaz- Gilbert, 2004; Grabowski, 2013; Graham & Beardsley, 1986; Hussin, 2013; Khan, 2017; Kobayashi, Yazawa, Saguchi & Tanaka, 2018; Kokkinn & Stupans, 2011; Mayo, Antón & Vasco, 1995; Van de Poel, Van Dyk, Gasiorek & Blockmans, 2015; Woźniak & Acebes de la Arada, 2018). Therefore, designing and implementing an EAPP syllabus in a flipped learning environment would be a brand-new application in ESP practice.

Finally, the researcher felt the need for making a change in her teaching practice, firstly by involving in the process of generating occupational content for the ESP course at the faculty of pharmacy; and then by changing the way she had taught overcrowded classrooms with numerous learner profiles by teaching the occupational English course in a flipped learning environment; and finally challenging her professional identity through reflective thinking and team working with all the stakeholders in the learning environment of occupational English courses at the faculty of pharmacy by conducting an action research.

Purpose of the Study

In order to meet the need of an ESP syllabus for students of pharmacy in an individualized learning environment, this study aimed to suggest an EAPP syllabus in a flipped learning environment for learners at the faculty of pharmacy in collaboration with the learners, faculty members, and instructors of English. To achieve the purpose of the study, the following research questions will be sought to be answered in the analysis of the data gathered during an action research process.

1.What are the context-driven tasks to handle in English for pharmaceutical purposes?

1.1. In which pharmaceutical contexts is English needed to be used?

1.2. Which language skills are needed in these pharmaceutical contexts?

2. What are the views of the learners towards learning English for pharmaceutical purposes through the flipped EAPP syllabus?

2.1. What are the strengths of the flipped EAPP syllabus in learning English for pharmaceutical purposes?

2.2. What are the weaknesses of the flipped EAPP syllabus in learning English for pharmaceutical purposes? How can these weaknesses be overcome?

3. What are the views of the lecturers of English towards the linguistic dimension of the flipped EAPP syllabus?

3.1. What are the strengths of the linguistic dimension of the flipped EAPP syllabus?

3.2. What are the weaknesses of the linguistic dimension of the flipped EAPP syllabus? How can these weaknesses be overcome?

4. What are the views of the faculty members towards the pharmaceutical content of the flipped EAPP syllabus?

4.1. What are the strengths of the pharmaceutical content of the flipped EAPP syllabus?

4.2. What are the weaknesses of the pharmaceutical content of the flipped EAPP syllabus? How can these weaknesses be overcome?

Significance of the Study

In order to determine the significance of the study, the possible contributions of the present action research to the research and practice of the target audience are to be considered. To begin with the narrowest focus, firstly, the end-product of the present study may hopefully serve as an example of a flipped EAPP syllabus for ESP teachers who teach English for pharmaceutical purposes in a flipped learning environment. Not only the suggestions on teaching pharmaceutical occupational skills in English, but the suggestions on designing and teaching such a syllabus in a flipped learning environment may help ESP practitioners to teach EAPP in their own context. All in all, the present dissertation is the first attempt to design and implement an ESP course for pharmaceutical purposes in a flipped learning environment in a higher education setting in Turkey.

Secondly, the processes of ESP course design, which are handling a needs analysis to generate a pool of learning outcomes, implementing the syllabus and finally evaluating the entire teaching practice, may also set an example of generating a needs-driven ESP syllabus for ESP practitioners who wish to design and implement an ESP course for a specific group of learners in their teaching environment.

Thirdly, the present study may also help first-time practitioners of flipped learning in language classes to have an idea on how to handle a flipped language course, specifically, in an ESP context. Additionally, the suggestions on designing the learning spaces, i.e. individual and group space, of a language class may probably pave the way for language teachers to make use of most of the class time for practising language skills in addition to using individual space for exposing learners to authentic uses of language rather than dominantly teaching the basic grammar or vocabulary knowledge, etc., in valuable class time, specifically in EFL environments. Moreover, as flipped learning is not a pure teaching methodology of a particular discipline, but a metastrategy which is a combination of varied learning models, such as active learning, collaborative learning etc., the implications derived from the present study may promote not only teaching languages, but also other disciplines in a flipped learning environment as well. Thus, the study results may support teaching and course design practices of teachers of varied branches who wish to flip their classes in their own settings.

Finally, teachers of varied disciplines may also benefit from the phases of the practical action research handled in the current study as an example for conducting an action research

in their teaching environment where they can challenge their professional practices in collaboration of the stakeholders in the setting to deliver a solution to problematic situations in their own contexts. Similarly, researchers may benefit from action research design as a powerful tool of professional development practices for in-service teachers who are interested in flipped learning strategy as well as in any other aspects of their setting they are tempted to remedy and improve. All in all, the present dissertation is expected to set as an example for the practitioners and researchers not only for the contextual, linguistic or methodological suggestions within the scope of teaching EAPP in a flipped learning environment but also for modelling as a framework for course design either for an ESP course and/or for a flipped class as well as for phases of conducting all these processes in an action research design.

Delimitations of the Study

As stated by Mauch and Birch (1993, cited in Roberts, 2010), the terms 'limitation' and 'delimitation' differ principally from one another in that a limitation is not under control by the researcher and may significantly affect the study while a delimitation is intentionally controlled by the researcher (p. 139). Since limitations refer to the methodological weaknesses of the study, they are placed in the methodology section of the present dissertation. Therefore, the factors that are controlled by the researcher, which are delimitations of the current study, are presented in this section.

Firstly, as the current dissertation is an action research conducted to find solutions to specific problems in the researcher's teaching environment, the results of the study do not express any concern about the generalization of the findings to a large population. Accordingly, the participants of the study only involve those in the particular setting as the study was conducted in collaboration with all the stakeholders who are engaged in the challenges of the learning environment. Therefore, rather than generalization, the transferability principle of the qualitative research paradigm is applicable in this study; that is, the results gained are suggested to be adopted to similar contexts with similar participants by other researchers and/or practitioners. Moreover, as the implementation of the syllabus is a part of the syllabus design process, here the end-product of the study-the flipped EAPP syllabus- may also need adaptations by other practitioners in their own contexts. Furthermore, depending on the language learning needs of the learners and possible contextual differences of ESP setting, practitioners may also adapt the learning outcomes of the syllabus. All in all, the present study delineates the processes of designing a flipped ESP syllabus for pharmacy students in an EFL setting via conducting action research, which will hopefully be an example for practitioners to engage in similar endeavours in their own settings.

Secondly, the suggested flipped EAPP syllabus is aimed to cover one semester; therefore, the time of the study was composed of almost one semester-12 weeks, which was sufficient for the researcher to reach the saturation point while drawing conclusions from the data. However, studies lasting for longer periods may also serve for generating a syllabus that is broader in scope.

Thirdly, as the challenges in the learning environment are experienced in a small-scale city in the eastern part of Turkey, the contextual disadvantages were inevitable. That is, as the present study was conducted in a small-scale city in the eastern part of Turkey, it was unusual to see a foreign patient visiting the pharmacy store, which affected the way the tasks being handled in an authentic setting. Instead, typical scenarios and/or cases were handled in class to compensate for this contextual disadvantage in the present study. Similarly, the language learner profile of the students was varied with the majority of them having low-level of proficiency in English. The low proficiency of learners was observed to affect the implementation, which, in turn, affected the learning outcomes of the syllabus as well. That is, the occupational tasks in the syllabus were adapted to the existing proficiency of the learners. However, the researcher acknowledges that such an adaptation enabled her to consider variety in the design of tasks and activities to appeal to varied language learning profiles of learners. As the basic rule of thumb refers to, it is the ESP practitioners' responsibility to consider such contextual features while designing and implementing ESP syllabuses in their unique contexts.

Finally, as the present action research does not claim generalization of the research findings to large populations, but rather focuses on suggesting on-site solutions in the particular research environment, the study depends merely on the participants' meaning-making of their experiences via using qualitative data sources. Therefore, having a narrow focus in research purpose, but gathering multiple perspectives via involving the parties in the learning environment enabled the researcher to concentrate on improving the quality of educational practice and suggest a practical solution in a specific setting within the context of teaching English for pharmaceutical purposes. Taking into consideration these delimitations of the study, practitioners and/or researchers may adopt the processes of design and implementation of the flipped EAPP syllabus to their unique teaching and/or research environment.

Definitions of Terms

The terms frequently used within the scope of this dissertation are defined below in order to prevent any conceptual confusion.

Action research

Action research is a type of research design that requires 'active participation' of stakeholders that conduct research and generate solutions on how parties can mend and reform problematic situations in practice, and 'put their suggestions into practice' with 'reflective thinking' and evaluation of actions afterwards (Güler, Halıcıoğlu & Taşğın, 2013, p. 259).

Bloom's taxonomy

In 1956, Benjamin Bloom with his colleagues Max Englehart, Edward Furst, Walter Hill, and David Krathwohl generated a framework for categorizing educational goals: 'Taxonomy of Educational Objectives', popularly known as 'Bloom's Taxonomy', which has been adopted by teachers from various levels in education in their teaching practice for many years. The framework is composed of six main levels: 'Knowledge', 'Comprehension', 'Application', 'Analysis', 'Synthesis', and 'Evaluation'. The key point here is that 'knowledge' is the necessary precondition for putting other levels of cognitive skills into practice. Accordingly, teachers design the activities in their courses relying on the learning outcomes of their syllabuses based on the six levels of Bloom's taxonomy.

English for academic pharmaceutical purposes (EAPP)

The rationale behind determining the scope of the suggested syllabus in the current dissertation as teaching English for academic pharmaceutical purposes relies on the argument by Belcher (2009) that as the disciplines and sociocultural needs overlap, the fields of English for Academic Purposes (henceforth, EAP) and EOP keep getting combined in 'hybrid' versions, as is the case with the current study where the language needs of the learners and the occupational skills required in pharmacy domain overlap to learn English for academic pharmaceutical purposes.

Flipped learning

> Flipped Learning is a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter ("Flipped Learning Network", 2014).

Group space vs individual space

As indicated in the definition of the flipped learning above, these two pedagogical terms are widely used by many flipped learning practitioners to talk about the two learning spaces in the flipped learning course design, by using the term 'individual space' to refer to pre-class work where learners study individually while using the term 'group space' to talk about in-class work where learners study with the presence of the teacher and/or in groups.

Learning management system (LMS)

A learning management system, (LMS) is an online platform where educators generate, share, and manage the delivery of educational content, either as a stand-alone server or a cloud-based platform.

Syllabus

To clarify the meaning of 'syllabus', the difference between syllabus and curriculum needs to be explained: 'curriculum' is a general statement of the issues related to the overall program, such as rationale, purposes, design and implementation while 'syllabus' deals with the specific course-related issues, such as choosing and sequencing specific course content, etc. (Graves, 1996, cited in Basturkmen, 2006, p. 21). In other words, while the curriculum is composed of general statements about learning purpose, evaluation and teachers and learners' roles in learning and teaching environment, the syllabus is concerned with what happens in the classroom to realize the goals in the curriculum (Nunan, 1993, p. 5).

Dissertation Outline

This first chapter highlighted the statement of the problem that depicted the background of the study, the rationale of the study to justify the need to handle the present action research and the significance of the study to emphasize the importance of the study in research and practice in addition to the purpose of the study and related research questions that guided the entire study. This chapter was finalized by presenting the delimitations of the study, definition of the terms and the dissertation outline.

The remainder of the study is organized into four chapters, a list of references, and appendices in the following manner. To begin with, Chapter 2 will present the relevant literature concerning the theoretical stance of the present study, focusing mainly on ESP and flipped learning course design perspectives. Firstly, the fundamentals of ESP course design will be elaborated, being followed by the related ESP literature in EFL settings with special emphasis on teaching English for pharmaceutical purposes. Secondly, the related literature on

flipped learning strategy will be introduced in relation to its development, design principles, and its impact on the higher education sector. Finally, within the scope of the present study, the benefits and challenges of the implementation of the flipped learning strategy in EGP and ESP courses in EFL settings will be discussed with references to the empirical research conducted in the field.

Chapter 3 delineates the research design and methodology of the study. In this chapter, relying on the qualitative research paradigm, the justification behind the decision of the research design, the participants of the study and the setting will be presented in fine detail. Besides, the design of data collection tools, data collection, and data analysis procedures will be elaborated. Finally, the ethical considerations, the issues to achieve trustworthiness in these processes and the methodological limitations of the study will be expressed.

The presentation and the discussion of the findings with the revised version of the flipped EAPP syllabus are presented in Chapter 4. In this chapter, the data gathered before, during and after the implementation of the flipped EAPP syllabus will be interpreted in relation to the research questions of the study, and they will be discussed with references to the empirical evidence in the related literature. To begin with, in the first section of the chapter, the data gathered to generate the pool of learning outcomes before the implementation will be presented with references to the participants' responses and the related documents; and the syllabus generated relying on these learning outcomes will be exhibited. In the second section of the chapter, the data gathered during and at the end of the implementation of the syllabus will be interpreted to gain an understanding of what can be included in and/or excluded from the pharmaceutical content of the occupational English syllabus in the revised version and what kind of improvements can be realized in the implementation of the flipped learning model. These data will be presented around the four units of the previous version of the syllabus and will be discussed with references to the formative and evaluative feedback of the participants during and at the end of the term and with the discussion of the related research in the field. Finally, in the third section, the final version of the flipped EAPP syllabus will be suggested, relying on the evaluation made by the participants and suggestions from the empirical research.

Chapter 5 contains an overview of the study, important conclusions drawn from the data presented in Chapter 4 in addition to implications for professional practice and recommendations for further research. The dissertation concludes with a list of references, appendices and the curriculum vitae of the researcher.

CHAPTER TWO

Literature Review

In this chapter, the relevant literature will be critically reviewed in relation to the theoretical stance of the present study, focusing mainly on ESP and flipped learning course design perspectives. In order to achieve this, first, information on the concept of ESP will be introduced with regard to its differences from English for General Purposes (henceforth, EGP), which is followed by the development of ESP pedagogy, the classifications of ESP, and the stages of ESP course design. After the fundamentals of ESP course design principles, related literature in EFL settings, and specifically on teaching English for pharmaceutical purposes, will be treated. Secondly, the related literature on flipped learning strategy will be handled in relation to its definition, historical development, design principles, its impact on higher education, and finally, as the core purpose of the present study, the benefits and challenges of its implementation in EGP and ESP courses in EFL settings.

What is ESP?

ESP is a sub-division of a broader teaching movement, LSP, whose history goes back as far as the Roman and Greek Empires. LSP is an umbrella term for teaching mostly German, French and English for specific learner purposes, and ESP approaches are indeed very similar to the varieties of LSP; however, some focus more on vocabulary learning when compared to ESP (Dudley-Evans & St. John, 1998, p. 2). According to Trace, Hudson and Brown (2015, p. 2), it is the context and the people involved in a specific field that drives the LSP curriculum, unlike general purposes language instruction, in which the content of a syllabus is standardized for all learners regardless of their learning needs in their particular contexts.

To understand what exactly ESP is, there have been many different definitions of the term so far. However, fundamentally, three of them are worth mentioning here as they created the chief principles of the ESP field by their clarifications. To begin with, Hutchinson and Waters (1987, p. 18) define ESP as an approach rather than a product by distinguishing what ESP is not. According to them:

a) ESP is not about teaching ‘specialized varieties’ of English. The ‘typical’ features of a particular context of use require learners to use language appropriately in the

target situation. But these differences should not be dissociated from general English language use.

b) ESP is related to communication rather than just a series of grammar topics or terminological vocabulary within a specific domain. It is crucial to differentiate between performance in the target language and competence in knowledge about language structures and related vocabulary in the target area.

c) An ESP methodology does not exist; any other English learning methodologies can be applied in an ESP class. In other words, the learning process is just the same way as that of EGP. The only difference in terms of the methodology is that teaching of the content may vary within particular domains, which does not lead to any differences in language teaching and learning processes.

Finally, we see Hutchinson and Waters (1987) emphasize learner needs as the starting point of the teaching of that language. The choice of language to be taught, the context, and the learners themselves with their needs and wants determine the learning outcomes of each ESP course.

As the second prominent definition of ESP, Robinson (1991, pp. 2-4) emphasizes needs analysis when defining ESP. She defines ESP under two chief criteria and a series of features which are met in many ESP courses. These key criteria are that "ESP is normally goal-directed", and that "ESP course is based on needs analysis". By goal-oriented courses, it is meant that learners of ESP have specific purposes to learn English rather than learning English for any interest in English culture. Such learners need English for academic or occupational purposes. By needs analysis in ESP, Robinson (1991, p. 3) mentions learners' initial learning needs as well as those focused on target necessities. As for her definitions of ESP characteristics, she mentions 'a limited time period', in which course objectives are to be met; and that 'ESP being taught to adults' in ' homogenous classes' where learners share a common occupational or academic purpose.

Finally, Dudley-Evans and St. John (1998) modify an earlier ESP definition by Strevens (1988, cited in Dudley-Evans and St. John, 1998, p. 3), in which they define absolute and variable characteristics of ESP as in the following:

Absolute characteristics

i. ESP is designed to meet the specific needs of the learner.
ii. ESP makes use of the underlying methodology and activities of the disciplines it serves.
iii. ESP is centered on the language (grammar, lexis, and register), skills, discourse and genres appropriate to these activities.

Variable characteristics

i. ESP may be related to or designed for specific disciplines.
ii. ESP may use, in specific teaching situations, a different methodology from that of general English.
iii. ESP is likely to be designed for adult learners, either at a tertiary level institution or in a professional work situation. It could, however, be used for learners at secondary school level.
iv. ESP is generally designed for intermediate or advanced students. Most ESP courses assume a basic knowledge of the language system, but it can be used with beginners. (pp. 4-5)

Similarly, Alousque (2016, p. 193) revises different definitions of ESP by explaining its core and non-core features, as depicted in Figure 1 below. Accordingly, among the core features; first, ESP is 'goal-directed', that is, the primary aim is to communicate effectively in specific fields and professional contexts. Second, ESP relies on needs analysis to determine course design, teaching methodology, and course materials. Meeting learners' needs is of primary importance. Third, as the goal of ESP instruction is to use English for academic or occupational purposes, it has also to do with specific disciplines and occupations. As for the non-core features of ESP; first, ESP stands on a multidisciplinary basis, in which language and learning theories and various disciplines in linguistics have effects on its evolution throughout its history; second, research-based pedagogies underlie ESP methodology; that is to say, ESP teaching and learning processes are adapted according to recent research realized into language, genres, and contexts of target language use within a specific field with pedagogical purposes; and third, ESP courses are mainly provided to adult learners, mostly in tertiary students, in EFL settings.

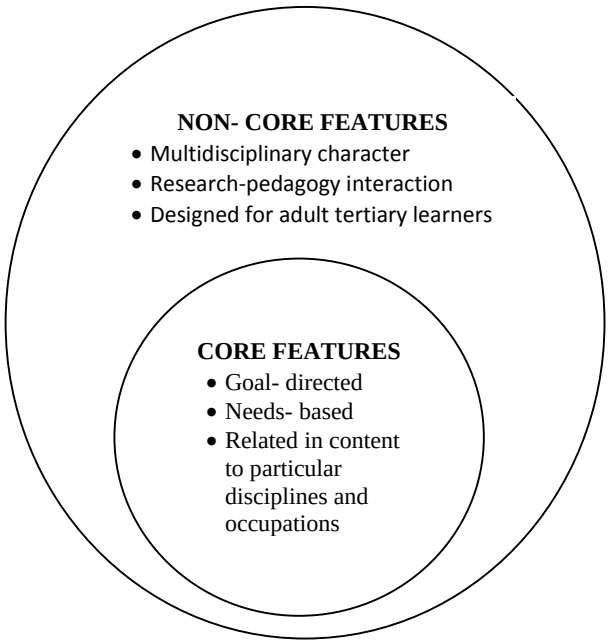

Figure 1. The features of ESP (Alousque, 2016, p. 193).

From this point of view, Johns and Price's (2014, p. 472) description of ESP, which includes all these features of ESP in itself, defines ESP as a pedagogical trend in applied linguistics oriented towards creating research-driven materials and teaching learners with specific learning purposes within their academic, professional, or vocational environments either at present or in the future. Johns and Price (2014) identify an ESP course as "a very focused course" due to the constant research done by ESP practitioners into a specific group of learners' language needs, wants, and academic and/or professional goals (*needs analysis*) in addition to the related discourses and cultures in which these learners will use English (*target situation analysis*). Not only before the design of a course for a group of students with specific aims to learn English but also during the delivery of this course, the repeated scrutinizing of the learners' contextual needs and desires is a fundamental issue in ESP.

Differences Between ESP and EGP

As an attempt to define ESP, researchers also differentiated its features from those of EGP. For example, Far (2008, pp.5-6) pointed out these differences as in the following criteria:

1. 'Learners and purposes of learning': According to Far, the most crucial difference between ESP and EGP is learners' purpose for learning English. He justifies this notion by identifying ESP learners as mostly adult learners who have already some English language background in order to be able to perform certain professional skills and activities.
2. 'Aims of instruction': EGP and ESP also differ in the aim of language instruction. That is to say, instead of equal weight on four- language skills as in the case of EGP, the needs analysis in ESP specifies the language skills needed by ESP learners, and ESP practitioners develop ESP syllabuses correspondingly. For example, for a tourist guide, spoken English is more needed while for an academician, reading and writing skills are more demanded for publishing purposes.
3. 'Focus of instruction': In a regular EGP class, teaching language structures is the main focus. An ESP class, however, is designed on an assessment of learners' purposes and some particular activities which require uses of English in such particular situations, which creates a more meaningful context, and thus, increases the learning motivation of learners, leading to successful learning.

Finally, Far (2008) emphasizes the remarkable difference of ESP in that as ESP relies on needs, it enhances learning motivation by integrating discipline-specific content with related language skills.

Similarly, Orr (2002, pp. 1-2) makes a clear distinction between ESP and EGP, stating that EGP is 'the common core of English', learned by lots of non-native speakers all around the world for general possibilities of use while ESP is 'a tailor-made language package', learned by a definite group of learners for very specific demands to learn English within specific communities of discourse. Orr (2002) states that it is the ESP practitioners' job to provide such highly specialized English courses that require both comprehensive knowledge of the specific language context and the proper instruction.

Additionally, Johns and Dudley-Evans (1991, p. 301- 302) list a series of reasons for the rise of ESP practices, rather than EGP, in EFL contexts:

- Learners of ESP have their own roles in the development of their nation's educational and social lives by handling some tasks in their professional and/or academic discourse communities that require uses of English at international level.
- There is a growing need for 'scientific and technical English (EST)' in research publications and graduate schools.
- The need for international communication among international business, airways, and maritime, etc. requires English to be the common language used even among non-native speakers.

Acknowledging that ESP courses, in general, rest on the idea that content of English courses should focus on learners' expectations to use English for certain purposes, Basturkmen (2010, pp.7-9) also distinguishes between EGP and ESP approach to language pedagogy in the following aspects:

- External vs internal goals for language teaching: External goals refer to the instrumental view of learning English in that ESP learners engage either in academic or occupational interests, using English as a tool to follow these pursuits whereas EGP learners learn English for pure linguistic goals, such as the development of wide vocabulary, grammar structures or speaking competence, etc.
- 'Situated language use' vs the 'language usage': About the distinction between ESP and EGP on the issues of use vs usage dichotomy, Basturkmen suggests that the difference is a matter of degree rather than an explicit division. That is, despite some exceptions, EGP generally focuses on language usage, the underlying

language systems, while ESP is based on "how language is used in particular contexts the learners will work or study in" (2010, p. 8).

- Unfamiliar specific domain use vs general skills use: Basturkmen emphasizes that an average EGP learner cannot be familiar with the specific domain content and related skills in ESP courses no matter how proficient they are. Thus, an ESP teacher has to cope with the specific content knowledge that they have not mastered while designing an ESP course, which requires extra demands on behalf of the teacher contrary to the case of an EGP teacher who depends on developing general purposes skills of their learners.
- Limited vs indefinite time for course delivery: ESP courses are usually conducted in limited time intervals due to the constant changes of learners' needs and conditions while EGP courses have more structured time schedules.

Finally, Basturkmen (2010, p. 11) argues that the 'limited and highly specified aims' of ESP courses possibly lead to achievement when compared to those of EGP courses. The question of efficiency also contributes to the understanding of the distinctions made between ESP and EGP approaches. To elaborate, firstly, as ESP courses meet learners' demands to learn English, the learners will engage in the content of the course related to their work and/or study interests more, which, as a consequence, results in higher levels of learning motivation leading to actual learning. In addition, the limited aims of ESP courses derived from needs analysis create more favourably accepted learning outcomes by learners. As learners find it reasonable to be taught to achieve certain learning outcomes in their interests, again, learning motivation is facilitated, leading to success in achieving these outcomes.

Classification of ESP

In ESP world, several categorisations of ESP have been emerged depending on various perspectives. Primarily, giving a more holistic view, Hutchinson and Waters (1987, p.17) resemble the relationships among branches of ELT to the branches of a tree, as shown in Figure 2 below. As with this tree analogy, at top of the tree branches, the individual ESP course possibilities are seen, being derived from the specific reasons to learn English, either for study (EAP: English for Academic Purposes) or for work/training (EOP/EVP/VESL: English for Occupational Purposes / English for Vocational Purposes / Vocational English as a Second Language). Here Hutchinson and Waters pay attention to the fact that people may work and study simultaneously, or language learned in a study environment may be used later when a student takes up a job. Therefore, this may not be a clear-cut differentiation. At the next level down, three large divisions are defined: EST (English for Science and Technology),

EBE (English for Business and Economics), and ESS (English for the Social Sciences). As we look down the tree, we see that ESP is only a branch of EFL and ESL, which are already the main branches of ELT in general, which is also a variety of various kinds of language teaching. What all these branches have in common rely on the roots of the tree: learning and communication as their core principles. As Hutchinson and Waters state, ESP should not be seen as a product, but as an approach to language teaching, focusing on specific reasons for learning.

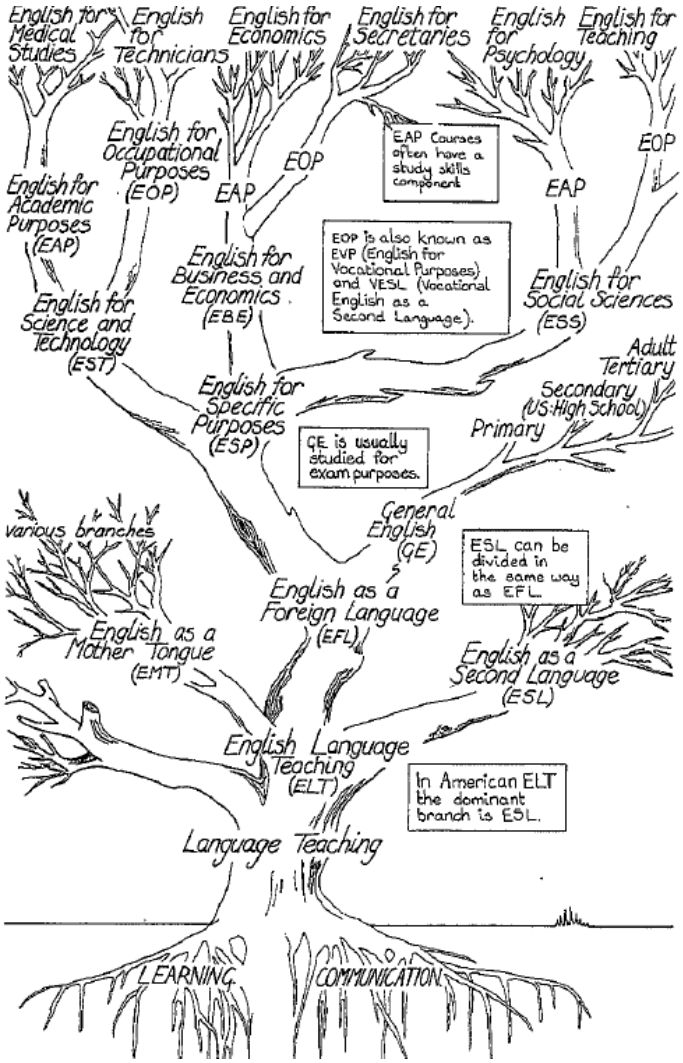

Figure 2. The tree of ELT (Hutchinson & Waters, 1987, p.17).

As an alternative classification of ESP, Basturkmen and Elder (2004, p. 672) divide LSP courses as “pre-experience” and “post-experience”. That is, the former refers to courses for learners who aim at being a member of a particular workplace, academic, or vocational situation. In these courses, the learners are taught the language skills and content knowledge they will need in the target contexts. As for the latter, the courses are for learners already involved in the target situations. In these courses, the learners are supplied with on-the-job training, in order to meet the communicative demands in their current professional contexts.

Within the two broad subdivisions of ESP; EAP and EOP, Johns and Price (2014, pp. 478-482) describe ESP variations relying on contextual variations and learner demands as in the following. Among EAP models are:

Stand-alone EAP courses. This type of EAP courses is mainly reading and writing courses designed for undergraduate or graduate-level learners, appealing to almost all academic disciplines. Generally, such courses focus on studying common text types across disciplines (e.g. writing research articles, summaries, etc.).

Adjunct courses. In this model, a single content course is integrated with the language course. The learners of this model are enrolled in both an EAP course and a content course. The two instructors of the two linked courses often collaborate on most of the assignments as they share common objectives.

Team-teaching. Learners of this model are instructed by two teachers generally within the same classroom since the instructors team-teach the same class. As an ideal model for EAP courses, this model is difficult to carry out; however, it helps learners to perform content-related tasks that the content teacher asked for with the help of an EAP teacher giving linguistic support.

On the other hand, the most common EOP models are:

Pre-employment EOP. This version is defined as wide-angled ESL model as the content is generally related to various EOP fields. Learners in this model are engaged in practising the language in general occupational tasks, such as making requests, writing an e-mail, etc. They may also be trained for job application procedures. In this model, technology is integrated with tasks in the application process.

Occupation-specific EOP. This model is a narrow-angled version of EOP as this kind of syllabuses are based on particular job necessities, such as nursing assistant or pharmacists, etc., which is closer to the ideal in ESP. Having conducted an in-depth needs analysis and target situation analysis, the language and discourses are critically determined. Such courses may be either given as before, or simultaneously with, a vocational program. Mostly, the language teachers and vocational instructors collaborate both before the course design and during the instruction period.

I-BEST (Integrated Basic Education and Skills Training) EOP. In this model, the ESL instructor either teaches as in a team-teaching model in the same class or collaborate with the content instructor in different settings to teach learners linguistic competences in relation to workforce skills. Johns and Price (2014) give the example of a Personal Care

Assistant/Caregiver class, which is team-taught in collaboration of an ESL instructor and a registered nurse. While the ESL instructor teaches the linguistic skills for personal care assistants/caregivers, the registered nurse teaches the practical skills necessary for the job.

Cluster EOP. This model is a combination of wide-angled and narrow-angled EOP applications. In this model, learners from various disciplines study all four skills often in a general theme-based program. In the syllabus, within a wide-angled approach, students learn English, for example, to meet people and/or make small talk in the workplace in addition to studying while in narrow-angled approach, they learn individualized modules composed of their discipline/occupation-specific content. The learners' performances are evaluated on the specialized content.

Workplace EOP. The courses in this model are provided to employees in workplace settings. The expenses of the course are met by employers, and the employees are officially allowed to attend the courses on their workdays. The workplace EOP instruction is focused on improving English language use in the workplace to increase job productivity of the employees.

On the other hand, García Laborda and Litzler (2015, p. 42) remark that the three approaches to language learning; ESP, Content-Based Instruction (henceforth, CBI) and Content-Language Integrated Learning (henceforth, CLIL) overlap in some cases as they all integrate content and language, which is confusing to differentiate. They explain the differentiation as a continuum between ESP and CBI (see Figure 3 below). In CBI, non-native speakers of English are prepared to acquire language while learning the content in English-speaking environments whereas in CLIL contexts, development of the second language (henceforth, L2) is equally regarded as well as the content. On the other hand, in ESP settings, language development overweighs content knowledge in order to prepare learners to use English in specific situations. Here what makes the difference is the emphasis given on either content or language learning.

Figure 3. Continuum according to the learning of contents and foreign language (García Laborda & Litzler, 2015, p. 43).

Concerning the classification of ESP, Belcher (2009) asserts that there are as many kinds of ESP as the number of each specific learner's needs and target communities. She observes that as language educators themselves are mostly part of academia, the most-known type of ESP is EAP, designed to meet learner needs at the higher educational level. On the other hand, EOP is less known to academia due to its variety of possibilities in diversified workplace language learning settings. Among the branches of EOP, those which are related to steadily growing professions are also the branches of ESP which are constantly developing simultaneously; these are EBP, English for Business Purposes; ELP, English for Legal Purposes; and EMP, English for Medical Purposes. Belcher (2009) also observes that EAP and EOP keep getting combined in 'hybrid' versions, such as 'EAMP, English for Academic Medical Purposes (for health science students); EABP, English for Academic Business Purposes (for students majoring in business), and EALP, English for Academic Legal Purposes (for law students)' too (p. 2). Such variations show that as the disciplines and sociocultural needs overlap, similar variations of ESP will probably continue to emerge in the following years. Similarly, Johns and Price (2014, p. 479) point out that each group of learners may need a new, or at least, a modified version of present curriculums since each of them may show differences in terms of linguistic, socio-cultural and contextual needs and wants as well. Thus, ESP programs are adapted to the settings and needs of particular groups of learners involved.

ESP Course Design

Before starting the ESP course design, it is widely suggested to consider a series of parameters in order to make decisions. Dudley-Evans and St. John (1998, p. 145), for example, regard these parameters as choices between two ends of a continuum, some of which are pre-determined by particular situations of the setting while some are decided by the ESP practitioner. Each ESP course is positioned along these continuums depending on their specificity; some central parameters will be briefly mentioned below, following the outline by Dudley-Evans and St. John (1998, p. 145):

The issue of intensive or extensive course content.

Most of EAP and EOP courses are intensive as the course suppliers consider it essential that learners of ESP courses reach a certain degree of proficiency to perform particular tasks in English. In such courses, as learners are more focused and have fewer distractions due to time availability, a variety of activities can be done and each learner can get feedback individually, which leads to effective use of time spared for English. However,

without enough reinforcement, intensive courses, when instructed too long, can also become ineffective as learners may lose motivation due to lack of academic or professional activities; in such cases, Dudley- Evans and St. John (1998) suggest keeping such courses more specific to the academic or professional domains of the learners as the course progresses. Regarding extensive courses, as they may be run simultaneously with other academic courses or occupational tasks, or at least can be related to them, they could be adaptive to learners' constantly changing needs and experiences. Such courses increase the motivation of learners as they aim at appealing to immediate language needs of learners. However, it should be born in mind that if an extensive ESP course is handled regardless of the content of other academic courses or occupational tasks, a sense of discontinuity emerges, which leads to inefficiency in the ESP course. Therefore, the choice of whether or not to hold an intensive or an extensive course depends on the specific circumstances of the setting.

The issue of teaching ESP before or in parallel with experience.

ESP practitioners do not always decide on this parameter as institutions mostly demand ESP courses before learners gain much professional and/or academic experience. In such cases, courses are less subject-oriented. On the other hand, ESP courses provided to learners who are already experienced in their fields are more advantageous for instructors in that the learners may supply instructors with content specific materials and examples of tasks from their profession and/or discipline, which also makes the teaching of particular subjects or professional skills in English easier. As learners are familiar with certain topics, skills of expertise and terminology related to their field, it becomes easier for them to learn their English equivalents in their areas of expertise. Generally, extensive courses are handled in EAP situations, while in EOP situations intensive courses may help due to time constraints. Similarly, Dudley- Evans, and St. John (1998) suggest considering the immediacy of learning needs as well. They state that any pre-experience course deals with delayed needs while the case is opposite for those courses that run in parallel with experience or post-experience. As learners need English towards the end of their education more, or once they have graduated, it is more logical to handle EAP courses at the final years of college, especially in EFL contexts, when learners may be about to write a dissertation for graduation in their final year, or when they need English to apply for a job upon graduation. Therefore, it is suggested to run short intensive skill-based courses, such as academic writing or presentation skills in the final year, depending on which one has a priority in terms of immediate needs of learners.

The issue of narrow or broad focus in content.

The issue of specificity in ESP course design has been widely debated for decades in ESP world, and there has been an ongoing controversy on either to hold a narrow or broad focus on the specificity of the target discipline linguistic demands (e.g. Basturkmen, 2010; Basturkmen & Elder, 2004; Belcher, 2006; Dudley-Evans & St. John, 1998; Johns & Dudley-Evans, 1991; Trace, Hudson, & Brown, 2015). Dudley-Evans and St. John (1998, p. 150) propose that deciding between the narrow or broad focus on specific content determines the scope of the course design. In broad focus, course content covers a series of target skills, or genres, and includes studying a range of skills rather than only concentrating on one. Basturkmen and Elder (2004) state that the broader focus depends on the idea that under all language use lie a series of core linguistic structures and vocabulary; and thus, supporters of broader focus suggest that L2 learners have to learn the generic skills in L2, and only then can they learn additional items, such as those widely used in the target situation. In other words, learning basic elements is “a prerequisite for learning additional specific purpose elements" (Basturkmen & Elder, 2004, p.676). Other specific registers depend on this basic structure. A wider view of ESP asserts that narrower view has the possibility of presenting non-functional language due to the low expertise of ESP practitioners to teach target content and strategies (Trace, Hudson, & Brown, 2015, p.10). On the other hand, Belcher (2006, p. 137) argues that ESP practitioners may atone for their limited content knowledge by utilizing some certain compensatory strategies, such as team teaching via cooperating with a field expert; handling a sustained content-based approach (studying only a specific content during a term) by making use of lower-grade-level subject area materials and simulating genuine EAP courses; and collaborating with subject-area classes. Wide angled courses are recommended when learners need or welcome some general language work along with specific content knowledge or skill in English.

On the contrary, in narrow focus, the course content is based on fewer target skills or genres, such as just writing a research article or performing a specific listening skill. Narrower views of ESP avoid teaching broader content and skills in order not to treat ESP as an EGP curriculum, and thus, give importance to specificity in the first place. Such courses are found effective when learning needs are restricted, and the learners are aware that concentrating on one or a couple of skills is crucial for them. Supporters of the narrow view of ESP argue against beginning ESP courses with studying the common core of language before studying the context-specific elements, and they believe that learners can acquire both the common and specific elements by studying any variety of a language (Basturkmen & Elder, 2004, p. 676).

To this view, there is not an absolute ‘variety-less language’ as all languages are used in specific situations. Even if these specific differences may not be so explicit, and there are common features of language use among them, there cannot be a general-purpose language.

Similar to other parameters of course design, Basturkmen (2010) remarks that the terms ‘wide-and narrow- angled’ course designs may exist on ‘a continuum of specificity’; that is, courses may be narrower or wider depending on specific situations. She explains this as in the example in Figure 4 below:

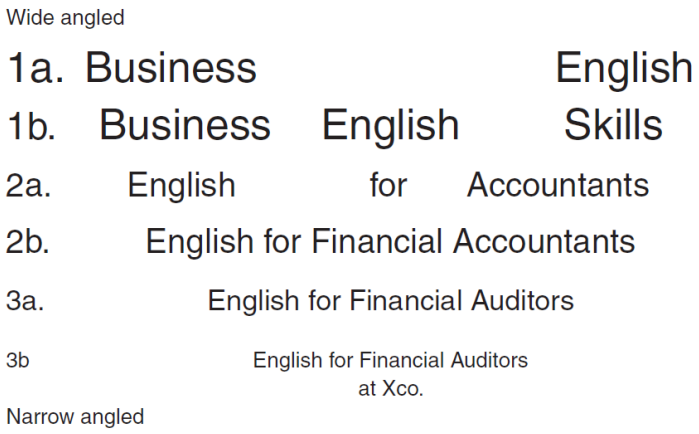

Figure 4. The wide- and narrow-angled continuum (Basturkmen, 2010, p. 55).

At one end of this continuum lie the most general ESP courses focusing on a generic series of skills and registers in a specific area while at the other end of the continuum are the narrowest courses focusing on the very specific language use of that particular area. Basturkmen (2010) clarifies the issue of specificity in ESP course design by focusing on specific circumstances of a particular group of learners (p. 55). Those meeting the needs of that particular group of learners are the ones most effective no matter how narrow or wide they are. Moreover, Belcher (2006, p. 139) asserts that the wide versus narrow focus debate is unreasonable as pedagogical considerations mostly depend on issues related to learner profiles rather than ESP teachers’ personal choices; that is, some certain learner profiles may benefit from the wider approach as in the case with low proficient learners whereas some others may take advantage of a narrower approach, such as those in a specific academic or vocational domain, for instance, graduate students, pilots, etc. Furthermore, she claims that instructors may not always hold the sound view about what motivates their learners best, and thus, learners might be given chances to have a say in content selection.

Balancing these parameters in the process of course design will map out a route for ESP practitioners in the selection of course content, scope, timetabling, materials, assessment and evaluation of the course to be designed, as is the case with the current study. Relying on these parameters, Trace, Hudson, and Brown (2015, p.8) explain the process of LSP course

design, beginning with collecting necessary information on specific course requirements depending on a variety of sources and views of stakeholders, such as present or past learners, lecturers, administrators, employers, etc. via multiple reliable methods of data collection, such as interviews, surveys, document analysis, focus groups, etc. in order to design a reasonable curriculum. Trace *et al.* (2015) point out that needs analysis evolved out of more discourse-based approaches (e.g. 'Communicative Syllabus Design' by John Munby in 1978) into more genre-based (e.g. Swales, 1990) and learners-needs driven (e.g. Dudley-Evans & St. John, 1998) approaches in time. Trace *et al.* (2015) remark that based on needs analysis, learning objectives are determined, reflecting the learning outcomes of the learners at the end of the course. Simultaneously, during the implementation of a course and beyond, the ESP teacher conducts course evaluation to verify the effectiveness of the curriculum with the help of student evaluation surveys and/or journals, outcomes-assessments, etc. Trace *et al.* (2015) emphasize that designing a course is a continuous process, in which each step influences one another rather than a completed venture.

Designing an ESP course includes similar processes to EGP course development, in that course designers begin with a needs analysis of learners. Brown (1995, p. 20) suggests core steps in the development of a course as in the following:

- needs analysis,
- formulating goals and objectives,
- [syllabus design] (Richards, 2001, 145),
- teaching,
- materials selection and development,
- assessment,
- program evaluation.

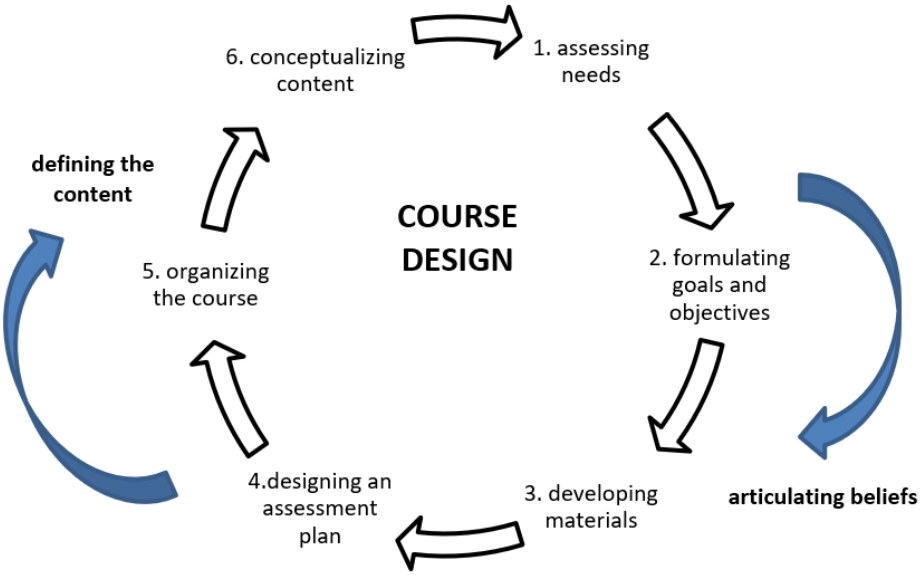

Figure 5. A framework of course development processes (Graves, 2000, p. 3).

In the design of an ESP syllabus, beginning with a needs analysis, the process advances by relying on the needs analysis results and generating learning outcomes, upon which instruction, course materials and assessment criteria may be developed. On the other hand, the course design does not follow a linear process, and whenever a need arises, it may be necessary to revise the curriculum via collecting more information and creating new learning outcomes, materials and adjusting model of instruction. Rather than holding linear hierarchy in the stages of course design, Graves (2000) suggests a flow chart model framework for the processes of course design, as depicted in Figure 5 above. What makes it different from its counterparts is that the stages of 'defining the context' and 'articulating beliefs' explicitly take place at the bottom of the chart and they serve as the basis for other processes. Graves (2000) also remarks that the model also depicts a 'systems' approach in that each component of the chart is interrelated with one another, and what you change in any one of them influences others at the same time. For instance, making changes in goals and objectives of the course brings along modifications in the content of your teaching. Similarly, when teachers make changes in material design, this will also make them think about what they teach for what purposes (p. 3).

Similarly, Basturkmen (2010, p. 143) suggests a framework to represent the three fundamental levels of ESP course development which are "analysing needs", "investigating specialist discourse", and "determining the curriculum" in addition to some important points course designers should be concerned about each level. As this pyramid-shaped figure symbolizes, it is seen that ESP courses are designed relying on the findings of needs and specialist discourse analyses. While needs analysis and specialist discourse analysis are the 'below the surface' levels of the multi-level form of the pyramid, the curriculum is the 'surface-level' structure, which depends on the foundations of the first two levels. In other words, findings gathered from the investigations into needs and specialist discourse underlie the decisions made in the process of course development, such as material selection and/or development, choice of assessment and type of delivery of the course and finally the evaluation of the overall efficiency of the course as explained in detail in Figure 6 below.

Level 1: Analysing needs

Considerations

Situation analysis: What tasks are involved in the work or study area and what are the standards for their performance? Can the tasks be divided into subtasks?

What type of needs to investigate (for example, objective and/or subjective, immediate/ long term, skills and/or tasks)?

Which language-based skills or tasks do the students find difficult?

What is the nature of the students' difficulties in these language-based skills or tasks (for example, linguistic, conceptual, cultural)?

****

Level 2: Investigating specialist discourse

Considerations

Which linguistic forms and features to investigate (for example, those the students are weak in or unaware of, those members of the community of practice stress as important)?

What data to collect (for example, do relevant literature, descriptions and corpora already exist or does primary data need to be collected)?

What approach to use in the investigation (for example, ethnography and/or text analysis)?

What primary data to collect (texts, marked scripts of students' writing, observations, self-reports, such as interviews)?

How to analyse the texts/discourse from the target community of practice or discipline (for example, whole or part of the texts, for specific features)?

How to devise pedagogical descriptions of discourse in the specialist area?

****

Level 3: Determining the curriculum

Considerations

How to focus of the course (for example, wide- or narrow-angled)

How to deliver the course (for example, web-based, classes, workshops, on-site or off-site)?

What units to include in the syllabus and how to sequence them (for example, genres, features of spoken discourse, conceptual content, easy to difficult, immediate to less immediate needs)?

How to evaluate learning (for example, with reference to the final or way-stage criteria or performance objectives used in the community of practice)?

What materials to develop and what types of tasks to include (for example, pedagogical descriptions of discourse and tasks that make use of activities of the work or study area)?

Figure 6. Representation of ESP course development (Basturkmen, 2010, p. 143).

Finally, Graves (2000, p. 10) emphasizes the ongoing assessment and decision making processes of course design, as shown in Figure 7 below, and states that course design is only an initial step of course development, which includes planning the course, teaching it, evaluating it, modifying it based on the evaluation, reteaching in the modified version, and so on. She remarks that conceptualizing the course dynamics is an ongoing process, even during the teaching period, and the circle of course development is not only applying the course design since teaching is "reshaping as you go along".

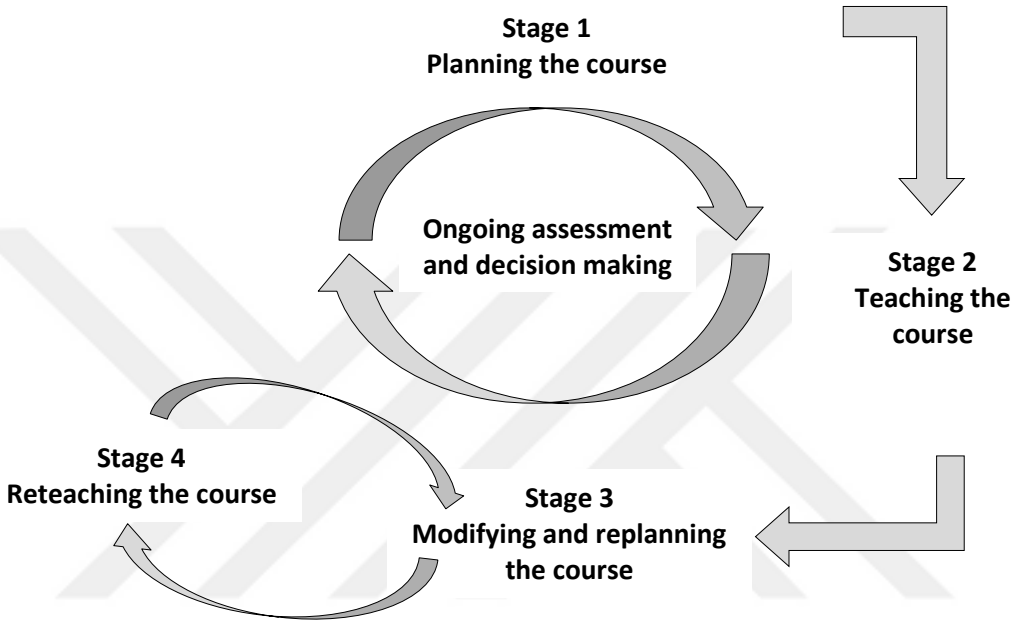

Figure 7. The cycle of course development (Graves, 2000, p.10).

In the following paragraphs, these core steps in ESP course development will be handled successively in more detail.

Needs analysis.

Basturkmen (2010) points out that since ESP is based on improving learners' specific language skills in specific contexts, determining the content of an ESP course requires a stage to define what specific language skills the learners will need; and the findings obtained at this process are also used as reference points to assess the efficiency of learning at the end of the course (p. 17). This process is defined as a needs analysis. In the early years of ESP, needs analysis was considered as a simple pre-course practice focusing on the target situation possibilities. However, in the course of time, needs analysis has developed to a great extent, including various perspectives on specific contexts. Basturkmen (2010) draws a clear picture of the improvement of needs analysis in ESP, borrowing West's (1997) metaphor of a journey to define the processes (cited in Basturkmen, 2010, p. 18). In this metaphor, the early days of a needs analysis are likened to "*the destination* of the learner's journey", referring to needs

analysis focusing on "*necessities or objective needs".* These early analyses were intended to define the most and the least important skills, situations and tasks in the target setting. Later the notion of needs analysis developed, including deficiency analyses, referring to "*lacks"* or the gap between learners' existing language proficiency and target language proficiency, which resembled "*the point of departure* for the language-learning journey". In the course of time, the notion of 'strategy analysis' improved needs analysis traditions, which referred to the choices of language learning and teaching approaches and methods, and which represented "*the means of travel*". Finally, 'means analysis', which is likened to "*the ESP journey*", is about defining the strengths and weaknesses of existing teaching settings, such as specific "classroom culture, learner factors, teacher profiles and the status of language teaching in the organization", all of which improved our understanding of needs analysis.

Depending on the developing parameters of ESP needs analysis, Dudley-Evans and St. John (1998) propose an ESP needs analysis concept, considering:

A. professional information about the learners: the tasks and activities learners are/will be using English for- *target situation analysis* and *objective analysis,*
B. personal information about the learners: factors which may affect the way they learn such as previous learning experiences, cultural information, reasons for attending the course and expectations of it, attitude to English- *wants, means, subjective needs,*
C. English language information about the learners: what their current skills and language uses are- *present situation analysis*- which allows us to assess (D),
D. the learners' lacks: the gap between (C) and (A)- *lacks,*
E. language learning information: effective ways of learning the skills and language in (D)- *learning needs,*
F. professional communication information about (A): knowledge of how language and skills are used in the target situation- *linguistic analysis, discourse analysis, genre analysis,*
G. what is wanted from the course,
H. information about the environment in which the course will be run- *means analysis.* (p. 125)

Dudley – Evans and St. John (1998, p. 125) remark that all the information gathered from the parameters mentioned above serves for identifying the learning environment of the particular group of learners, as shown in Figure 8 below. This valuable information helps ESP practitioners to generate, modify and develop the optimum environment for a specific group of learners as much as possible.

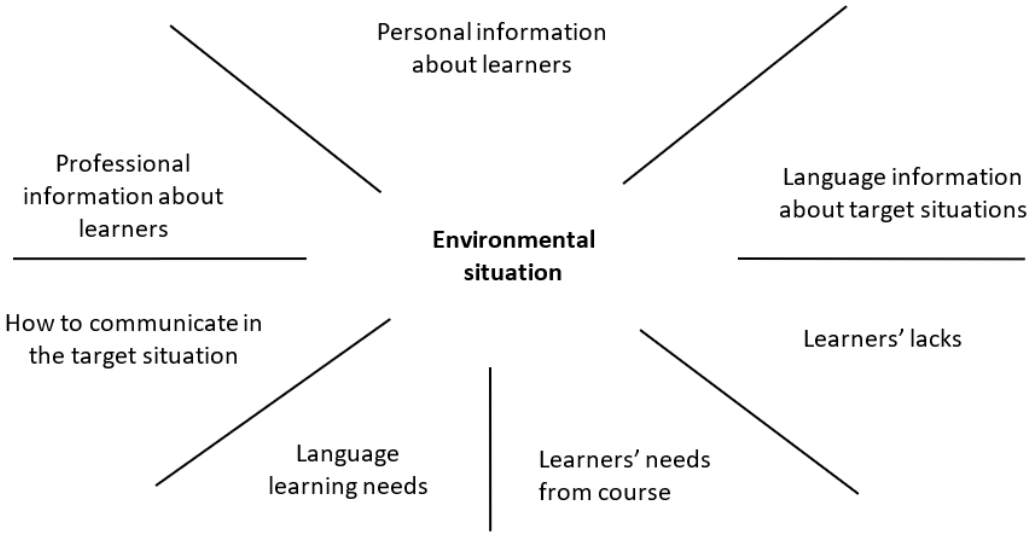

Figure 8. What needs analysis establishes (Dudley- Evans & St. John, 1998, p. 125).

As Basturkmen (2010, p. 25) remarks, needs analysis also functions to improve and evaluate ongoing ESP courses so that necessary changes may be made simultaneously as seen in Figure 9 below:

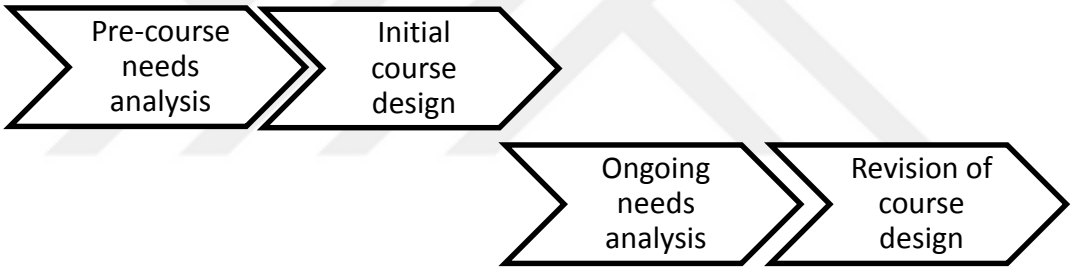

Figure 9. The role of needs analysis in course design (Basturkmen, 2010, p. 26).

Basturkmen (2010, p. 26) explains the necessity of ongoing needs analysis in that as teachers gain experience in their understanding of target situations or as learners improve their abilities in ESP courses, the need to modify the course raises. The information gathered in the processes of delivering ESP courses helps teachers to refine the content, the method and even the objectives of the course, which is on the way to a more efficient ESP course.

Basturkmen (2010) summarizes the needs analysis process, which is a course development process in itself, beginning with defining target language skills and tasks to be used in vocational and/or academic settings in relation to learners' present language proficiency and needs in addition to existing strengths and weaknesses of the present teaching environment. All the information gathered in this process may be used in both determining and improving the content and method of the ESP course (p.19).

As Trace, Hudson and Brown (2015, p.7) put it, any kind of LSP courses, irrespective of language or purpose, is developed on certain needs, such as those of "the learners, the community, the language program itself, the university, international trends, or any number of other factors, or indeed, a combination thereof". To identify the needs of the learning environment, Richards (2001) recommends consulting the target population, from which useful information can be gathered as they are also involved in the process to some extent. These may be "policymakers, ministry of education officials, teachers, students, academics, employers, vocational training specialists, parents, influential individuals and pressure groups, academic specialists and community agencies" (p. 57). Depending on each informant's responses, a needs analysis should not be seen as an objective procedure, but the one including subjective voices of each stakeholder in the present and target contexts. Moreover, the issue of whose voice should be listened to while deciding on the needs of an ESP course has also a growing interest in needs analysis studies. As Basturkmen and Elder (2004, p.677) point out, the conventional standards for needs analysis rely on relatively objective judgments of possible skills to be required in the target language settings. However, a critical perspective on needs analysis has recently attracted supporters on "empowering learners" rather than "disenfranchising" them by holding "a values- and power-based perspective" (Trace, Hudson, & Brown, 2015, p.12). That is to say, instead of relying on just target situation and possible ordinary tasks in the workplace or study field, and by doing so, limiting learners' abilities to be successful in their job or education, it is strongly suggested to focus on 'what is being valued' in these contexts in terms of learners, and other stakeholders concerned. More precisely, Belcher (2009, p.7) argues that ESP practitioners should see needs analysis as 'rights analysis' echoing Benesch's (2001, cited in Belcher, 2009) assertion that 'target communities of practice' should not only be defined by acts of those in power but also of those newcomers having been 'accommodated' in the community by appreciating the rights and needs of newcomers, which may create a critical change in ESP curriculum design.

As for the procedures of needs analysis, Richards (2001, p. 59) suggests a triangular approach; that is, collecting information from multiple sources, in order to reach a holistic view of the truth. Among the procedures for collecting information during a needs analysis, the following are commonly suggested to use: questionnaires, self-ratings, in-depth interviews, meetings, observation, collecting learner language samples, task analysis in the target contexts, case studies, analysis of available information, such as books, journal articles, reports and surveys and records and files (Richards, 2001, pp.60-63); genre analysis of spoken and written discourse of the target community and that of students' works, collection of course materials such as syllabuses and handouts, job-shadowing (i.e. the everyday language

experiences of workers in a typical day at work), analysis of learners' learning styles and modes of working, such as team work or individual work, spoken or written reflections of learners on the evaluation of the course, ethnographical researches and corpus analysis of authentic spoken or written texts (Basturkmen, 2010, p.33; pp.43-47); tests/ assessment and participatory needs analysis, (e.g. asking learners to take part in discussions on their needs and recommendations on the content of the course) (Robinson, 1991, p. 12- 14). Richards (2001, p. 65) remarks that in order to decide to what extent the information gathered from needs analysis may be used, it should be born in mind that even if all the information is useful, the needs should be prioritized as it is unreasonable to include all the needs in a language program, which is most probably restricted to a limited time frame; thus, only a portion of them should be used. Moreover, Richards (2001) recommends negotiating with each stakeholder concerned on the content of an ESP curriculum, aiming at satisfying each point of view as much as possible to a certain extent. This could be handled by taking some consultation of the stakeholders to ensure the relevance and suitability of the curriculum outcomes (p. 66).

Finally, Dudley-Evans and St. John (1998, p. 154) suggest that the choice between a fixed course design and a negotiated course design depends on learner profiles of the present course. While most learners are pleased to follow a fixed course design, some learners may welcome to have a say in what they are taught. The institutional approach also determines this decision; if the institution is in favour of giving learners the control of their own learning, a flexible design is preferred whereas if an EAP course is part of a subject course which depends on a timetable, then a more fixed course design has to be adopted. Here balancing the two ends of the continuum, Dudley-Evans and St. John (1998, p. 154) recommend a middle position on the continuum as in the case of a fixed course design, teachers may allocate some time for some topics that learners suggest themselves, or as in a negotiated course design, teachers may include some pre-planned contents before learners offer their suggestions.

Formulating aims and objectives.

Richards (2001, p. 120) identifies aims of a course as 'the description[s] of the general purposes of a curriculum' while objectives of a course as 'more specific and concrete description[s] of purposes'. From this point of view, Richards (2001) define the features of course aims as:

- providing a clear definition of the program purposes, such as 'to acquire critical thinking skills to make rational judgments',
- providing guidelines for teachers, learners, and material writers,

- derived from needs analysis, for instance, addressing the language problems of learners and/or necessary skills to adapt to target language contexts, such as 'understanding lectures', 'dealing with customer complaints', etc.,
- reflecting how the curriculum will realize the ideology of the course, such as students learning English in order to 'develop basic communication skills for use in business contexts', which reflects the communicative approach of the curriculum,
- providing a focus of instruction, such as 'to learn how to write effective business letters',
- describing realizable changes in learning, such as' students will learn how to listen effectively in conversational interactions'.

Graves (2000, p. 76) names aims as goals, and she remarks that as the class time is limited to achieve all the goals of the course, the choice is necessary. That is, even if it is possible to generate as many goals as possible, teachers and course designers have to consider the constraints of the course, i.e., the learner profile, level of proficiency, time amount and the available materials, etc.; thus, they should select among these goals to determine a reasonable set of goals that may be realistically attained with the particular group of learners and the dynamics of the learning environment within the time limit of the course (see Figure 10 below).

Figure 10. Making choices about goals(Graves, 2000, p. 76).

Richards (2001) points out that aims of a course are accompanied by more specific purpose statements, which are known as objectives of the course, in order to provide an exact focus of course aims. As Graves (2000) states, objectives depict how the aims of the course will be attained by breaking down a goal into learnable and teachable units. In other terms, by reaching the objectives, the related goal will be achieved. Richards (2001, p.123) defines the features of objectives as:

- describing the aim in smaller units of learning,
- providing a frame for organizing teaching activities,
- describing learning in terms of observable behaviour or performance, all of which help provide measurable outcomes and facilitate the planning of teaching process, such as material selection, and assessment choice, etc.

Graves (2000, p. 77) notes that there is a cause-and-effect relationship between goals and objectives; that is, achieving objectives A, B, C will lead to reaching the goal Y as illustrated in Figure 11 below:

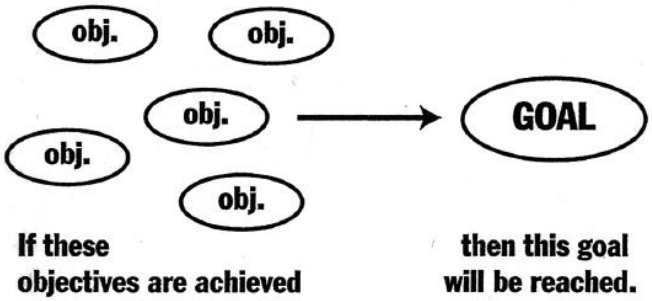

Figure 11. Cause and effect relationship between goals and objectives (Graves, 2000, p. 77).

However, Graves (2000) adds that the above illustration may not be always possible in reality as some objectives may not meet the need to achieve a particular goal. Then, it is the teachers and course designers' responsibility to refine these objectives so that related goals could be achieved.

Richards (2001) points out that effective language learning objectives rely on the understanding of:

- the characteristics of language skills, such as listening, speaking, reading, writing, being taught,
- achievable levels of learning for basic, intermediate, or advanced-level learners,
- organizing well-structured units of learning (p. 127).

Besides, while generating objectives, course planners, and/or teachers start writing sample objectives, revise and then refine them over time, and thus, these objectives cannot be considered as fixed. It is because as the instruction progresses, some objectives may require revision to better meet the need while some may be abandoned due to being impractical, or some more may be added to fulfil emerging needs (Richards, 2001, p. 127).

To help generate sound objectives, Graves (2000) also suggests thinking about objectives as three layers of specificity; that is, making each layer more and more specific. Depending on the notion that goals are more general and are aimed for long term plan when compared to objectives, and that there are several objectives to achieve a particular goal, this

three-layered specificity notion may help attain more reasonable results to achieve aims of the course, as shown in Figure 12 below:

Figure 12. Hierarchical relationship between goals and objectives (Graves, 2000, p. 77).

Finally, Graves (2000) comments that determining goals and objectives provides a basis for not only making priorities for teaching but also for generating assessment plan of the course. By formulating goals and objectives, ESP teachers are held accountable to the stakeholders for realizing the learning outcomes of the course.

Syllabus design.

Graves (1996, cited in Basturkmen, 2006, p. 21) distinguishes the term, 'curriculum' from the term, 'syllabus', stating that the former is a general statement of the issues related to the overall language program, such as rationale, purposes, design and implementation while the latter deals with the specific course-related issues, such as choosing and sequencing specific course content, etc. Similarly, Nunan (1993, p. 5) notes that the difference between a curriculum and a syllabus may be understood by a dichotomy of a broad or narrow approach to course design. That is to say, while the curriculum is composed of general statements about learning purpose, language learning, evaluation and teachers and learners roles in learning and teaching environment, the syllabus is concerned with what happens in the classroom to realize the goals in the curriculum. Therefore, syllabus focuses more narrowly on choosing and ordering course content while curriculum pertains to planning, designing, implementing, evaluating and managing programs. Basturkmen (2006) states that developing a syllabus brings along a set of theoretical views as well, and thus, teachers reflect their notions about what language is and how language is learned by making decisions about what to teach in course content, and this is depicted in the syllabus they created. For instance, if course developers hold a communicative approach towards language teaching, then the language being taught is handled as a set of communicative purposes, mainly including speech acts, such as requesting, reporting, describing, etc., as illustrated in Figure 13 below:

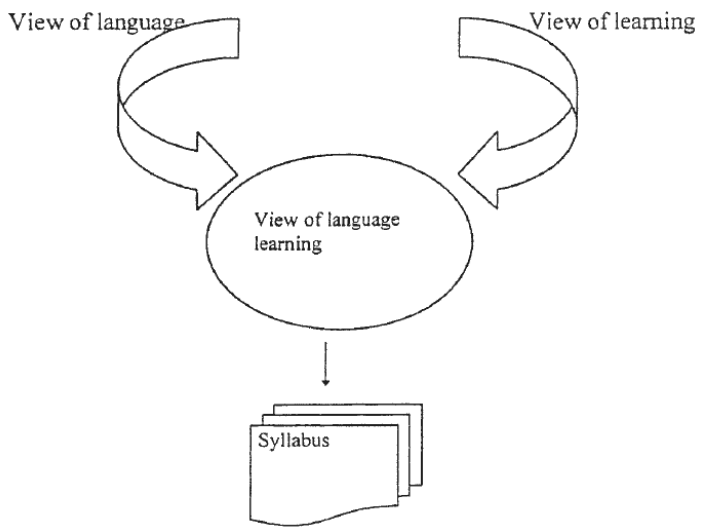

Figure 13. Views of language learning and course content (Basturkmen 2006, p. 23).

Similarly, Murphy (2018) adapts Richards and Rodgers' three-tiered framework in their cult work, 'Approaches and Methods in Language Teaching' (2001), as depicted in Figure 14 below, and suggests teachers and course designers to clarify their theoretical beliefs of language learning which influence the course design, procedures of which are also affected by pedagogical decisions in a cyclical manner as well.

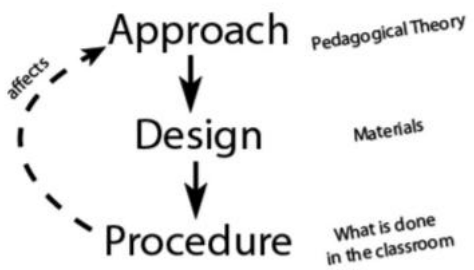

Figure 14. The dynamic effects of the approach-design-procedure framework (Murphy, 2018, p. 4).

Similar to the related literature, Murphy (2018, pp. 4-6) examines the types of syllabus in three different dichotomies: product vs process; synthetic vs analytic; and linear vs cyclical. In deciding which end of the dichotomy to choose in course design, Murphy (2018) suggests fitting both ends of dichotomies in lesson plans as they will certainly be complementary to one another. To begin with, in product syllabuses, linguistic content, such as grammar points and vocabulary, is the main focus, which is prescribed and is best suited for standardized tests, such as TOEIC, etc. This kind of syllabus may be called as a content-based syllabus or in extreme cases 'teaching for the test'. In process syllabuses, on the other hand, rather than focusing on a set of words, grammar points, or content, a set of learning processes, that is, real-world skills, are the main focus. Murphy (2018) remarks that content syllabuses strictly focus on very specific content, frequently ignoring real-world skills to use that particular content. Therefore, the combination of content and skills on a particular subject will be the

most efficient version of both types of syllabuses. Secondly, for synthetic vs analytic syllabus dichotomy, Murphy (2018) explains that synthetic syllabus corresponds to grammar-based approach in that language learning is viewed as first studying small pieces of language and then integrating these pieces into meaningful sentences. On the other hand, in analytic syllabuses, first needs are determined, and then related language usage responding to these needs is defined. Grammar instruction is of secondary importance in this model; rather, more realistic learner-centred approaches are adopted. Again it is suggested to partly adapt synthetic syllabus to analytic syllabus when needed. Thirdly, as for the linear vs cyclical syllabus types, Murphy (2018) relates linear syllabus to product syllabus in that language learning is seen as frequently gaining new information to make a collection of learning blocks. Murphy (2018) criticizes linear syllabus due to its ignoring retrieval of all the new information when needed. However, the natural process of language learning requires recycling in time, thus, a cyclical approach is needed. Murphy (2018) again recommends adopting a cyclical approach in any type of syllabus to abide by the organic features of language learning.

In related literature on syllabus design, there are several syllabus types preferred in ELT in parallel with the developments in linguistics and related second/foreign language pedagogy. Basturkmen (2006) lists the types of syllabuses with their organization of units as in the following:

- Structural (organized primarily around grammar and sentence patterns),
- Functional (organized around communicative functions, such as identifying, reporting, correcting, and describing),
- Notional (organized around conceptual categories, such as duration, quantity, location),
- Topical (organized around themes or topics, such as health, food, and clothing),
- Situational (organized around speech settings and the transactions associated with them, such as shopping, at the bank, at the supermarket),
- Skills (organized around micro-skills, such as listening for gist, listening for specific information, listening for inferences),
- Task- or activity-based (organized around activities, such as drawing maps, following directions, following instructions) (p. 24).

Among the syllabus types mentioned above, Basturkmen (2006, p. 25) remarks that contrary to EGP courses where tasks are chosen for any pedagogical concern, the task-based syllabus is widely preferred in ESP world due to its correspondence to authentic tasks in the target environments. Additionally, in task-based syllabuses, learners acquire language while trying to perform a task, and by doing so, more meaningful learning occurs. Therefore, task-based syllabuses are regarded as more appropriate for the nature of ESP courses. Similarly,

Robinson (1991) claims that the task-based approach is reasonable in ESP practices, as learners of ESP need to perform a task at work or while using English as a medium of communication. Task-based syllabuses are designed depending on a series of objectives to help learners to achieve a set of 'terminal behaviour' by the end of the course. These 'enabling objectives' are indeed tasks to be performed in class time. Additionally, it is crucial in task-based syllabuses that each task has a particular specialist content at an appropriate linguistic level of learners to a suitable performance expectation. For instance, learners practice specific skills on a specific topic within the specialist content, e.g. writing a business letter at an intermediate level suitable to learners' work demands (pp. 39-40).

Last but not the least, having conducted a thorough needs analysis and outlining learning objectives of the course, Friedenberg, Kennedy, Lomperis, Martin and Westerfield (2003, p. 62) suggest doing a communication task/language analysis to determine the language items that underlie these objectives and topics. They further state that such a language analysis does not only help to design a series of tasks, it also helps to sequence what to teach in the syllabus effectively. To organize the order of topics and tasks in the syllabus, Friedenberg *et al.* (2003) recommend to bear principles of adult learning and principles of language learning in mind and to consider more specific dimensions outlined below:

- Criticality (the criteria of urgency and frequency of specific tasks that may be on critical issues, such as safety (warnings and procedures to avoid injury or loss of life), regulatory agency requirements (e.g. about law and regulations) customer relations (to increase customer satisfaction), productivity (understanding and communicating instructions to use equipment in the workplace, and work-related benefits),
- Complexity (designing topics and related task from simple to complex),
- Talk type (who is talking to whom and about what, i.e. *task talk* to carry out work-related tasks; *work talk* about work with coworkers, involving mostly complaints about the workplace; *organization talk* in a broader context mostly on unwritten codes in organization structure, such as performance evaluation and personnel policies; and *rapport talk* to build relationships and to socialize),
- Broadening responsibility (a continuum of current to future responsibilities, for instance, starting with tasks required for current position and continuing tasks required to get promoted in a workplace),
- Degree of specificity (integrating supplementary topics, such as personal learning objectives and needs, into syllabus) (pp.64-66).

Here the point is that the ESP syllabus should remain flexible as learners and institutions' needs and demands may change over time, and therefore, some modifications in course content, or at least in the sequence of the topics may be required either by adding and/or dropping components or reorganizing the course outline. It is mostly because as teaching advances, new information may be available in the learning context; learners'

preferences, motivations and attitudes may also change; and some new tasks may emerge due to specific situations (Friedenberg *et al.*, 2003, p. 68).

On the issue of adding content to ESP syllabus, Basturkmen (2010) states that teachers and course developers should consider the following elements while deciding on what to include in a syllabus:

- types of units, such as skills, vocabulary, genres, functions, notions and disciplinary, professional or cultural content,
- items in the units, such as genres, semantic sets and functions,
- sequencing, such as immediate and less immediate need, level of difficulty with easier items before more difficult items and logical flow (p.61).

In order to deal with the issue of language analysis in ESP context, Dudley-Evans and St. John (1998, pp.74-120) handle the language analysis of ESP courses in two broad headings: *the language issues*, i.e. grammar, vocabulary, discourse and genre analysis; and *the language skills* in EAP and EOP. Similarly, Basturkmen (2006, p. 35- 67) treats language analysis from two perspectives: *language systems*, i.e. grammatical structures, core vocabulary, patterns of text organization; and *language uses*, i.e. speech acts, genres, social interaction, and words used for discipline-specific meanings. Finally, even if needs analysis is the primary source to determine course content, teachers' theoretical considerations on the nature of language learning, such as integrating skills, also guide the organization of the course content.

Teaching.

It is controversial whether ESP teachers use a typical methodology or not. Robinson (1991, p. 47) asserts that both EGP and ESP methodologies inevitably borrow developments from one another, and differ a little in applications in class. What may be unique to ESP is that ESP can (but not necessarily) rely on learners' specific areas of interests to design activities and that these activities can (but not necessarily) have an authentic purpose relevant to learners' target needs. On the other hand, Dudley-Evans and St. John (1998, p.187) suggest that ESP methodologies differ from those of EGP in that ESP methodologies depend on the specialist knowledge of learners; learners bring their experiences of learning and/or working in a specific area to the class, which may also affect their learning processes, and the activities done in class are composed of specific purpose concepts and activities. All in all, Basturkmen (2006, p.133) addresses the issue of what is distinguishable in ESP by sorting out the objectives in ESP teaching as in the following:

- ‘to reveal subject-specific language use’ by showing the forms and features of English in target contexts,
- ‘to develop target performance competencies’ by enabling learners to carry out the occupation or discipline-related skills to the standards in target contexts via providing appropriate speech acts, genre studies and social interaction among individuals,
- ‘to teach underlying knowledge’ by familiarizing learners with specific language use and genres in the occupation or discipline-related contexts, and in turn, with ways of thinking of the discourse communities, necessary for comprehending and producing specific language use,
- ‘to develop strategic competence’ by enabling learners to consciously utilize language knowledge and specific content knowledge in specific purpose communication. This refers to promoting learners to rely on their specific content knowledge, which is higher than that of their ESP teachers, by offering them opportunities to encounter their familiar content in ESP reading and listening texts. Learners are expected to correlate their content knowledge with the language knowledge they gain in ESP classes, which will improve their ability to use language appropriately in certain conditions.
- ‘to foster critical awareness’ by encouraging learners to critically analyse the communicative norms in their target contexts in order to change the conditions of non-native speakers to find a place in better positions. This means modifications mostly in needs analysis phases in favour of non-native speakers or at least not much biased toward institutional expectations while deciding on the learning outcomes of ESP programs by aiming at fairer positions in either academia or professional world.

Additionally, Basturkmen (2006, pp. 113-131) discusses the methodologies in ESP around four macro strategies for teaching, which are input-based strategies: *predominantly input* and *input to output*; and output-based strategies: *predominantly output* and *output to input*. The first (predominantly input) focuses on exposing learners to samples of language use in the form of either written or spoken terms in specific workplace, academic or professional target settings. Here language input is considered sufficient for learning, and learners are not expected to produce language in order to learn. It is crucial for learners to be exposed to target language samples in multiple forms as much as possible (input flooding) so that learners develop their knowledge of them over time, and it is instructors’ responsibility to highlight certain language features (input enhancement) via awareness-raising activities. The

second one (input to output) requires learners first to notice the forms and uses of language, and then use them consciously on their own. Here the input is believed to be followed by learners' output for learning to occur, and therefore, instructors decide in advance on the linguistic items to be noticed and thus learnt by learners in teaching materials. What is important in this strategy is not to expect more than learners' language proficiency without supplying sufficient input. The input provides examples of the use of language, and the learners realize the gap between how they use language and what the target language forms are. The learners are expected to produce samples of targeted language use typically in the same lesson or the following lesson.

As for the output-based strategies, in the predominantly output strategy, it is thought that learning occurs when learners struggle to use the language (producing output). Here the learners are expected to realize their actual language proficiency by being pushed to produce language, as a result, learners' L2 or FL is triggered. For example, the use of deep-end-strategy in ESP refers to making learner performance as the starting point for lessons without giving learners any preparation time, which typically resembles real-life target events in learners' workplace and/or academic settings, in which performance is the point of departure without any preparation. Robinson (1991, pp.49-51) associates role-play and simulations, case studies, project work and oral presentations with the deep-end-strategy, which fosters learners' second/foreign language repertoire to produce language. In the output to input strategy, on the other hand, it is believed that learners acquire the language only when their output is supported by instructor supplying feedback/input. In this strategy, learners feel a deficiency in their linguistic proficiency when their proficiency is challenged, and the input given after their production straightens and/or strengthens their knowledge of language use. Here, the feedback stage may be optionally followed by learners' reperforming the task. Instructors may collect samples of learner errors and give feedback on them to the whole class, to individual learners, or in pairs and groups.

Materials selection and development.

EGP and ESP teaching materials development have a lot in common in terms of the parameters of material design, such as evaluating, adapting, etc. What makes the difference is that ESP instructors are expected to be familiarised with some particular content knowledge related to learners' specific area of interest, either for work or study, and they have to catch up with the latest innovations in the target discipline (Bocanegra-Valle, 2010, p.157). Therefore, in ESP, use of authentic materials and related suitable activities in class is very typical and crucial and makes it easier for learners to transfer the skills they have learnt in ESP class via

authentic experiences to actual situations they may experience in their target contexts. However, Basturkmen (2010, p. 64) calls attention to the fact that when the information in authentic texts is beyond the comprehension of learners, use of authentic materials in class will cause learners to get disappointed with their proficiency which may result in ineffective instruction. Similarly, Bocanegra-Valle (2010, p. 147) warns against altering language and making the texts inauthentic while trying to simplify them. In order to prevent such cases, Basturkmen (2010) recommends ESP instructors to adapt authentic materials and/or to create their own instructional materials relying on the authentic texts. Friedenberg *et al.* (2003, p. 72) suggest developing instructional materials from the authentic ones in the workplace by gathering written materials to be used for work-related reading and writing tasks and observing the spoken interactions among individuals in the target settings to be used as model dialogues and role-plays, etc. They further assert that gathering information on language use in the target setting; using such real-life materials in ESP class; and collecting data on potential learners' language proficiency levels enable ESP practitioners to generate ESP materials pedagogically and culturally appropriate to learners' needs. Bocanegra-Valle (2010, p.145) presents a flow chart for the process of ESP materials development as shown in Figure 15 below.

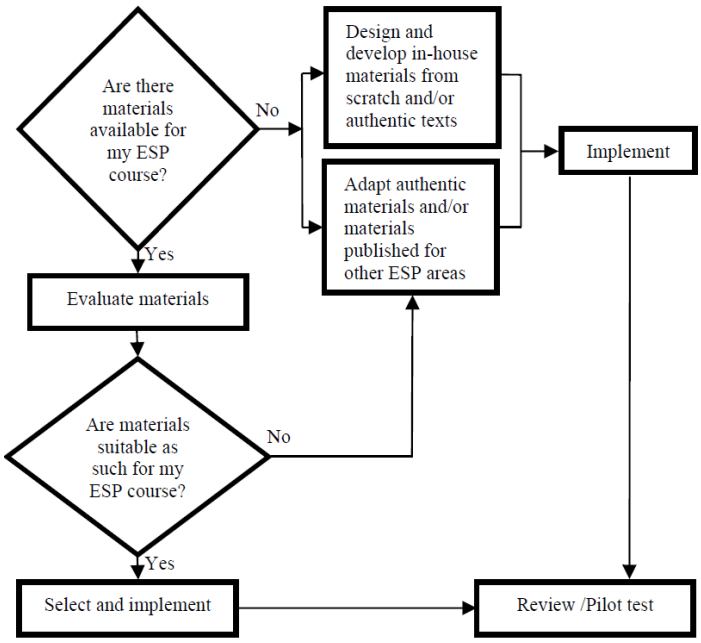

Figure 15. Flowchart on the process of ESP materials development (Bocanegra-Valle (2010, p.145).

Bocanegra-Valle (2010, p.144) describes the process of ESP materials development, firstly by reviewing and evaluating existing materials relying on the necessities of particular ESP area. Secondly, if current materials are not appropriate to the needs of the course, then

instructors will need to adapt materials for their own specific learning situations. A similar process is also followed for additional materials for self-study, or supplementary reference. Finally, instructors will also need to adjust materials over time to increase their adaptability to future implementations. That is to say, generating materials for ESP courses is an ongoing process, and it should be born in mind that ESP materials suitable for particular contexts, groups of learners, and target areas will most probably not be efficient for other ESP courses and related parameters.

Additionally, Friedenberg *et al.* (2003, p. 73) recommend integrating published instructional materials with those developed from the target settings as supplementary for teaching some certain topics of grammar, pronunciation or some generic vocabulary. Similarly, Dudley-Evans and St. John (1998, p. 152) find it beneficial to integrate some specific materials into ESP classes either as the main focus of the course or as the supplementary. Additionally, the decision to add more specific work relies on the timing of the course, institutional restrictions, and learners' motivation. For example, if the ESP course is pre-experience, as learners have mostly generalized knowledge of their discipline/profession, the tasks and topics of the course will be limited when compared to those of experienced learners. Dudley-Evans and St. John (1998, p. 153) emphasize that if it is possible, it is more advantageous to have homogenous groups for ESP classes as more content-specific work could be handled due to the homogeneity of learners' professions, disciplines, and levels of proficiency. In heterogeneous groups, on the other hand, it is more difficult to concentrate on similar topics and activities; thus, it is reasonable to focus on common subjects and tasks that are more familiar to several profiles in the group. Within heterogeneous groups, it is also possible to bring out some homogeneous groups at least some of the time. If this is the case, then, the ESP practitioner gains more flexibility while deciding on specific content materials, or balancing content-specific materials with common-core materials.

Since the majority of ESP practitioners are not experts in the specific content areas they will be teaching, they generally have difficulties in understanding subject-specific materials that their learners have to deal with in their target contexts. In most cases, ESP instructors tend to adopt published course books to compensate for their low level of content knowledge. However, as Bhatia, Anthony and Noguchi (2011) signal, the problem with the off-the-shelf course books is that publishers aim at more general domains, such as 'science and engineering' which have largest markets, rather than the specific fields, such as 'computer science, chemistry, etc. Therefore, learners of these particular fields are deprived of specific content knowledge and skills, which are superficially treated in the pool of generic content

and skills in general ESP courses. Additionally, Bhatia *et al.* (2011) define another problem with the published ESP materials as they do not serve for freshman and sophomore students' needs, whose language proficiencies have to be taken from high-school English level to junior or senior English level, supported with technical and/or academic skills. Therefore, in order to overcome the problems with ESP materials, Bhatia *et al.* (2011, p. 145) argue that ESP materials should not necessarily be distinguished from general English materials; rather, ESP materials should be placed in between among the continuums outlined below as in Figure 16. They further explain that materials for freshman and sophomore students should be designed as general ESP, including both off-the-shelf materials and in-house materials, in which EAP skills, such as listening to the lectures, taking notes, and writing reports, etc., are dominant while materials for junior or senior students, including dominantly in-house materials developed by faculty, subject experts, etc. should focus on more specific skills related to particular fields, such as technical reading/writing and presentation skills, etc.

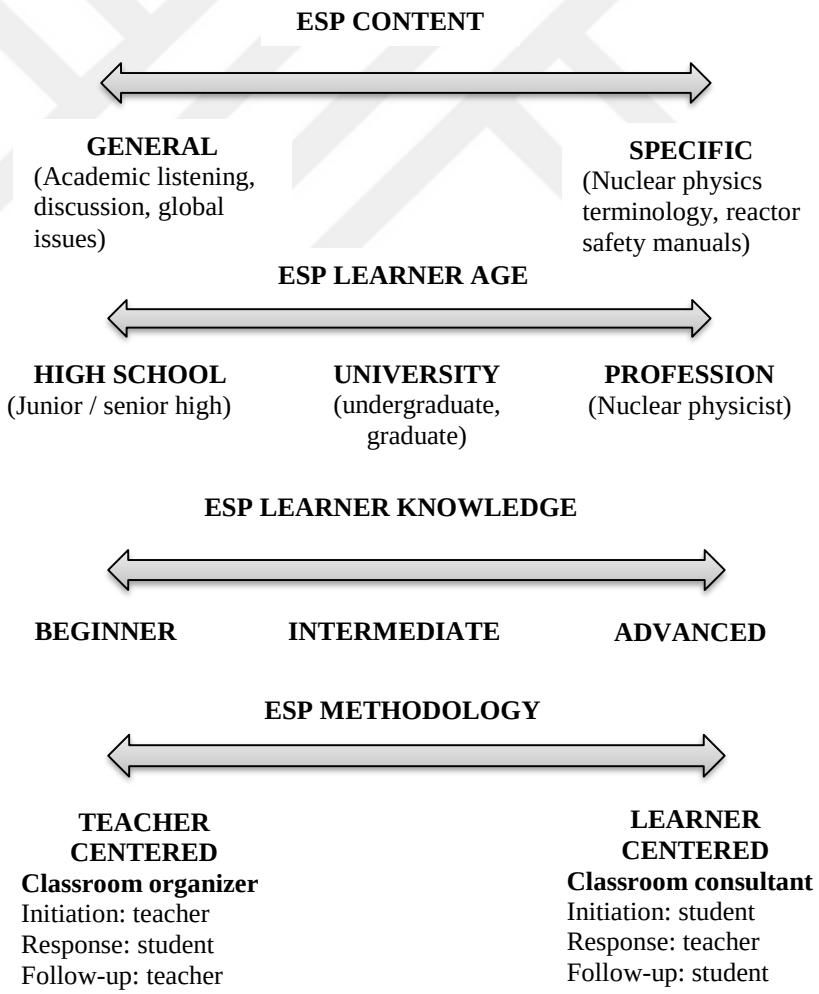

Figure 16. The ESP specificity continuum (Bhatia, Anthony & Noguchi, 2011, p. 145).

In order to overcome the difficulty of truly reaching out and understanding the subject-specific content of target contexts, learners may also support ESP instructors by supplying the typical samples of target content, genres and activities. Dudley-Evans and St. John (1998, p.180) suggest using 'framework materials', which set a context in the form of a diagrammatic display, within which learners complete 'the carrier content' (i.e. 'the subject matter') and production of language. Framework materials are useful for comparison, contrasts, or listing advantages and disadvantages, and learners fill their specific content into the framework by using their language production. Similarly, Dudley-Evans and St. John (1998, p.180) also suggest using a flow diagram, in which learners describe a process, or a classification tree, which may be useful for explaining the interrelationships among specific subject matter concepts. Such materials may be used as supplementary ones at practice stages while learning a new topic, and they may be used either as individuals or in pairs and groups in class. Additionally, for teaching specific vocabulary; Dudley-Evans and St. John (1998, p.184) recommend asking learners to develop their own sets of specific words in their target area, and challenge their peers on learning these by matching, grouping activities; for practising comprehension of specific listening and reading texts. They also suggest enabling learners to exchange comprehension questions they generated and ask and learn from one another either as individuals, in pairs and groups. Besides, Bocanegra-Valle (2010, p.150) proposes gathering perceptions and feedback from learners as actual users of the materials and from subject-matter colleagues as experts on the content of the in-house materials. Such knowledge will help ESP practitioners to match the specific content to authentic content as much as possible.

Moreover, technology supports developing ESP materials as well by providing a platform for learners to practice some technology-related tasks required in their target settings; to practice oral tasks by options of audio and videotaping tools; and to send their writing tasks to their instructors via an LMS for practice and feedback (Friedenberg *et al.*, 2003, p. 79). Similarly, Bocanegra-Valle (2010, p. 148) favours the advances in technology use in ESP class, which enables ESP instructors to integrate the outside world and the classroom via varied and more accessible forms of authentic media, such as video, audio, pictures and texts. Additionally, García Laborda and Litzler (2015, p. 46) suggest adding social networks and mobile learning materials to the list of available sources to use in ESP courses. Considering current trends in e-materials development for ESP, García Laborda (2011) classifies online materials available as podcasts; video sharing websites; chat and e-pals; blogs; dictionaries; Wikipedia; and other online reference tools, such as concordancers,

translators and encyclopaedias in addition to mobile learning materials and learning via virtual worlds, as depicted in Figure 17 below.

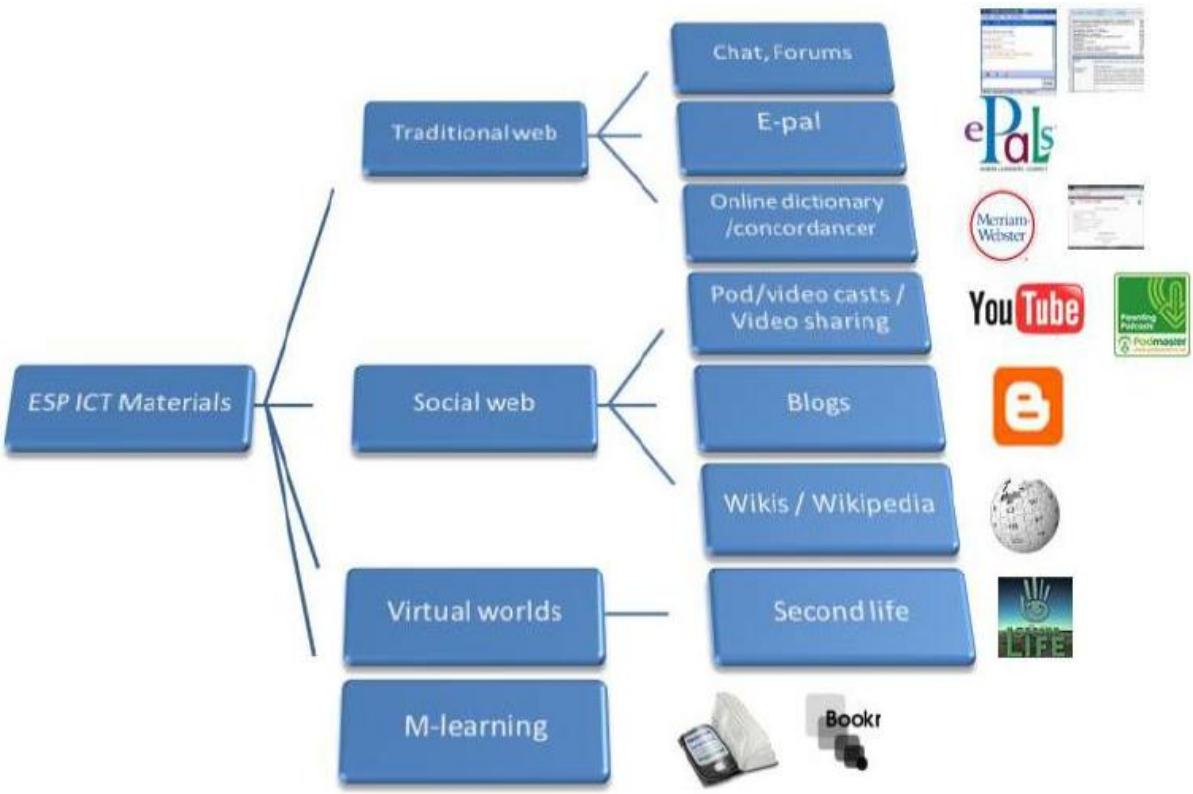

Figure 17. A classification of ICT-based ESP materials (García Laborda, 2011, p. 108).

Technology use in ESP class is inevitable in the 21st century, in which the majority of social interaction takes place online via social platforms, media and/or communication tools, and it is the ESP practitioner's job to provide such environments to learners in instructional sessions.

Assessment.

While the parameters in testing do not change at all between EGP testing and ESP testing, what differentiates ESP testing from that of EGP is, as Robinson (1991, p. 73) asserts, that ESP learner has a certain target to perform occupation or discipline-related tasks efficiently, and therefore, the key in ESP testing is to determine to what extent an ESP learner will achieve required performance in their target contexts. Robinson (1991, p.73) makes a further distinction between ESP and EGP testing by referring to norm-referenced and criterion-referenced tests. Via the former, instructors gather knowledge on an individual's proficiency when compared to others taking the test while the latter provides information on an individual's proficiency on particular content knowledge and related performance in relation to some criterion determined beforehand. Thus, EGP tests are mostly norm-referenced by nature while ESP tests are typically criterion-referenced. It is the ESP

instructor's responsibility to decide on which criteria they will seek while assessing learners' performances and knowledge, which will also require consulting experts' opinions in the particular occupational or academic area. Similarly, Basturkmen and Elder (2004, p.680) define EGP proficiency tests as those generally focusing on core components of language, such as vocabulary and grammar, and as those giving information on learners' proficiencies across various domains to make generalizations about the student populations. They distinguish ESP testing, on the other hand, as those focusing on learners' communicative performances instead of language ability to use core elements of language, and giving information on learners, who are more homogeneous by group dynamics, aiming at similar specific purpose task performances in particular contexts.

Additionally, Douglas (2013, p. 367) remarks that the essential difference of ESP testing from other areas of language teaching is the language proficiency and content knowledge relationship, in which 'content knowledge may sometimes compensate for language deficiency' (Robinson, 1991, p. 75). Douglas (2013, p. 370) warns against underestimating ESP testing as just being focused on specific subject knowledge, but rather, it should be considered as testing the abilities to use English for specific purpose contexts. Thus, the focus should be on the proficiency of language skills, which is not much different from EGP testing parameters in that sense. Douglas (2013) defines the focus of ESP testing as testing the specific purpose of language knowledge in the performance. Therefore, ESP testing should be built upon specific purpose language knowledge as well as the background knowledge necessary for the communicative contexts individuals contact.

ESP tests applied in class may be conducted as part of present situation analysis in order to 'place, check progress, or to measure proficiency' (Dudley-Evans and St. John, 1998, p. 213). Placement tests may give information on learners' proficiencies to decide on how to group learners to lead them to attend particular language classes in terms of proficiency if there will be any. Progress tests help determine to what extent learners have mastered classwork until a certain time in the course of instruction contrary to achievement tests that give information on learners' mastery of the overall syllabus. As for proficiency tests, they help discover how adequately learners will perform in target language tasks, which is most suitable for ESP testing. ESP proficiency tests, however, will evaluate learner proficiencies as a whole, rather than as separate items, and they will assess learners' performances on a series of multiple skills integrated with communicative tasks as in real life. Here, Dudley-Evans and St. John (1998, pp. 225-228) remark that EAP and EOP settings may require different approaches to the design of test questions due to the differences between communicative tasks

of target settings. For instance, while EAP reading tests may require longer texts, which is typical in academic settings, in EOP tests there may be relatively shorter texts, related questions of which may be on giving short information on a certain professional/technical topic. The case is similar with the design of writing, speaking and listening tests. Here the key is the design of the tasks on the tests should reflect the target performances- what learners are supposed to be able to do in their target contexts.

As is the case for ESP instruction, ESP testing relies on various areas of specific knowledge, and thus, is related to specific uses of language in these particular settings (Basturkmen & Elder, 2004, p.681). Therefore, Basturkmen and Elder (2004) claim that these tests have positive washback effects in that as learners are involved in real-life communicative tasks derived from specific purpose knowledge while being tested, the performances they have in these tests are supposed to indirectly improve their target language proficiency as well. Accordingly, ESP testing is considered to increase the motivation of learners and to be more desirable for stakeholders to see learners' proficiencies as the tasks on the tests are directly associated with the tasks in professional and/or academic contexts, and thus, give more exact suggestions for learners' future language performances in target settings.

Program evaluation.

Friedenberg *et al.* (2003, p. 90) define program evaluation as linking program outcomes to program goals, which also functions as an example for future instruction. They determine the fundamental areas for evaluation as:

- 'participant learning' to gather feedback on the effectiveness of instructional methods and areas of improvement needed,
- 'logistical effectiveness', to determine the physical obstacles in terms of timing and learning environment, and sentimental values in terms of relationships among stakeholders of the program,
- 'instructor effectiveness', to define instructional efficiency of ESP teacher(s) in delivering courses,
- 'cost-effectiveness', to determine the balance between the training costs and the benefits gained from the instruction to decide on whether to continue the program in the future.

In order to collect information on course evaluation from various stakeholders, Friedenberg *et al.* (2003, p. 94) propose the following: carrying out *participants' assessment* of their learning specific content and transferring what they have learnt in ESP instruction to

their simulated target settings, either on a more authentic assessment (i.e. performing occupation or discipline-related target tasks) or with certain standardized tests on demand; *conducting questionnaires and interviews* aimed at obtaining participants' feelings about the content of the ESP course, the method of instruction, the instructor, and any area of interest as well as supervisors/ customers or any stakeholder's suggestions considering areas of improvement in course implementation and/or participants' performance after the course to be used for future training*;* and finally *gathering instructors or clients' (in workplace situations) feedback* on issues about program logistics. Similarly, Robinson (1991, p. 71) further suggests *keeping records* of initial documents on planning the course, needs analysis phases as well as instructors' evaluation checklists of individual sessions of the course during implementation, and instructors and learners' journals on their experiences about the course; *classroom observation* to see learners and instructors' actual performances during implementation, and finally, *class discussions with learners* on different parameters of ESP course, such as review of activities and/or content of the past week, or the general methodological approaches in the course. The valuable information gathered from evaluation mechanisms for ESP program evaluation is generally asked for being written as a report for future training either for practitioners' own sake or for clients demanding evaluation report on the educational effectiveness of the ESP course (Friedenberg *et al.,* 2003, p. 96). The report consists of the description of learning environment, course goals, the efficiency of the course on to what extent these goals have been reached, and the areas that may require improvements necessary for future instruction.

Additionally, Robinson (1991, p.66) differentiates among four evaluation types possible while evaluating the efficiency of an ESP program. The first distinction is between formative and summative evaluation, the difference of which is about the timing of evaluation; the former being handled during the implementation of the course, results of which will be used to modify any necessary dimension needed to be changed during the lifetime of the course while the latter is carried out at the end of the course, upon which decisions will be made about repeating the course or not, relying on the cost-effectiveness parameter. A second distinction is made between the process versus product evaluation. As the name suggests, process evaluation is concerned with the decision making processes of learning, teaching and administration of a course. Product evaluation, on the other hand, deals with learner products, such as exam results, essays, etc. All in all, it is asserted that these evaluation types should better be thought as complementary rather than alternatives as all the perspectives may suggest valuable considerations about an ESP course under examination. Moreover, different stakeholders of an ESP program may be interested in different areas of

evaluation. For instance, while instructors and material designers may be interested in the efficiency of course materials, the institutions hosting the ESP course may ask for being informed about learners' performance and the overall effect of the course. Therefore, considering these parameters, ESP practitioners are responsible for handling multiple versions of course evaluation.

Finally, it is worth mentioning that in order to achieve a truly efficient course evaluation, the evaluation process should have periodic follow-ups. Friedenberg *et al.* (2003, p. 97) recommend having 3- or 6-month intervals for a year or two for gathering important considerations of program evaluation to be used for further implementations. This review will supply the course organizers with long-term effects of the instruction, which are learners' transfer of learning specific content knowledge and related skills to target contexts. Relying on the outcomes of the course evaluation, course organizers will be able to learn about the strengths and weaknesses of the ESP course and make necessary arrangements to raise the quality of instruction for further implementations.

The Development of ESP Course Design and Pedagogy

The modern ESP history has been evolved as a result of the dynamic relationships among learner needs, the target discourse communities and applied linguistics; and as the instructional activities and related research in ESP pursue advancements and emerging needs in all of the three parameters above, this resulted in different periods in ESP history (Johns & Price, 2014, p. 475). Below are the development of ESP course design and pedagogy handled under fundamental chronological periods:

The mid-1960s and early 1970s were defined as the period of register analysis stage, in which the grammatical and lexical features of target disciplines (e.g. Electrical Engineering, or Nursing) were identified, and teaching materials were developed around these linguistic features. Hutchinson and Waters (1987, p. 10) explain the chief rationale behind register analyses as the instructional purpose of relating ESP courses to the needs of learners on sentence-level by regarding the language forms and vocabulary that would be used in the target language with a higher priority, and by disregarding the language forms and vocabulary which would not be met in learners' target language use. In other words, relying on the target discipline, related structures which take a larger portion in target disciplines are given a higher priority in ESP syllabuses, and therefore, the language forms and vocabulary varied among different ESP syllabuses. Due to the expansion of the new world into scientific, technological and commercial activities after the end of Second World War, leading to a demand for an international language, which is English due to the economic power of the USA at that time,

in order to engage in these activities on a global scale, most ESP research focused on English for Scientific Purposes (EST) and English for Technical Purposes (ETT) registers, and therefore, scientific and technical English registers dominated that period in the syllabus content of ESP courses (e.g. Close, 1965; Dudley-Evans, 1977; Ewer & Hughes-Davies, 1971; Ewer & Latorre, 1969; Halliday, Mclntosh & Strevens, 1964; Herbert, 1965; Huddleston, Hudson, Winter & Henrici, 1968; Swales, 1971). Additionally, other varieties of English, such as medical English (e.g. Allwright & Allwright, 1977; Candlin, Kirkwood & Moore, 1978) and business English (e.g. Eckerley and Knufmann, 1973) were of the first attempts, focusing on the teaching of specific registers, in specific purposes language instruction. As Alousque (2016, p. 196) remarks it was the first time for learners' needs to be taken into consideration in teaching English beginning with the early years of ESP, and there appeared a growing interest in course design, focusing on needs of learners with particular purposes to learn English. However, ESP in those early days was equalled to form-focused EST with less communicative purposes in language teaching and learning.

The mid-1970s and mid-1980s witnessed fundamental changes in the field of ESP: First, the focus of attention in ESP syllabus design moved beyond sentence level in register analysis to textual patterns in targeted disciplines in the lenses of the new communicative language learning approach. As ESP practitioners got interested in determining textual patterns of the organization by studying the related linguistic signals, the ESP syllabuses changed from structural types to syllabuses composed of rhetorical functions (e.g. Allen, 1978; Bley-Vroman, 1978; Lackstrom, Selinker & Trimble, 1973; Trimble, 1985; Widdowson, 1978; 1983). As Hutchinson and Waters (1987, p. 12) put it, teaching materials of this period were focused on the discourse approach by teaching learners how to distinguish the textual patterns and discourse markers of their target disciplines mostly via 'text-diagraming' exercises (e.g. *Focus Series* by Allen & Widdowson,1975; *Nucleus Series* by Bates & Dudley- Evans, 1976). In this period, the functional approach to ESP course design added another dimension to ESP practices as well as the grammatical-lexical examination of target texts. However, the criteria for which functions, structures and vocabulary have to be selected were still questioned.

Secondly, this period was also remarked by relating learners' purposes for learning English more extensively to ESP course syllabuses via 'target situation analyses' (the term being coined by Chambers, 1980), through which the situations that learners would use language in their prospective discourse communities are determined. Via target situation analyses, the ESP course design process was composed of analyses of linguistic features of

these targeted situations. ‘Communicative Syllabus Design’ by John Munby in 1978 is a remarkable needs analysis processor, which produces a detailed learner profile based on setting, means and reasons for the targeted communication as well as the related linguistic structures, functions, and skills. It is from that time on with this new understanding that ESP course designers started designing syllabuses first by the analyses of target situations and related language forms and functions, focusing on the linguistic demands of such particular situations. Hutchinson and Waters (1987, p. 12) remark that this period enabled to set existing knowledge of language analyses on a more ‘scientific basis’ by formalizing the steps of needs analysis, even at the simplest level, and placing learners’ needs as the centre of attention for decision making processes in ESP course design.

The last change was centred on teaching skills and strategies that underlie all target language use rather than focusing only on the surface structures. The thinking processes and interpretive strategies that help learners to understand the surface forms of written and spoken discourses started to gain importance in ESP syllabuses, and in order to understand how meaning is constructed, learners were expected to use these strategies, such as ‘guessing the meaning of words from context’, and ‘using visual layout to determine the type of text’, etc. without any kind of specific subject register (Hutchinson & Waters, 1987, p. 13), as in the example of the book called ‘Skills for Learning’ (1980) by an ESP project held by Malaya University in Malaysia; or in the following works of Alderson and Urquhart (1984), Grellet (1981), Nuttall (1982), and Widdowson (1979), specifically on reading skills, which was the centre of the ESP projects at that time where learners were supposed to read a series of specialist texts in English. As Hutchinson and Waters (1987, p. 13) remark, the main reasoning behind focusing on skills-centred approach is that use of interpreting strategies is thought to be the key skill to enable learners to make sense of target language discourses, disregarding the structural forms which are not unique to any subject register. Similarly, the reason for such a skill-centred approach may be due to the fact, as Orr (2002, p.1) points out, that ESP is not only compromised of knowledge of a particular use of English language but also competency in the skills necessary to use this language in addition to the understanding of the target contexts the language is used.

The mid-1980s and 1990s were identified by the two remarkable routes in ESP practices: a pedagogic movement based on the learning-centered approach and a linguistic movement focused on genre analysis. Firstly, as Hutchinson and Waters (1987, p. 14) state, in the previous stages of ESP practices, the focus was either on the descriptions of language use or on skills and strategies. From this point on, they emphasize that the main concern should be

learning the language in ESP domain by relying more on individual differences, needs and wants of particular groups of learners rather than a language-centred methodology. Alousque (2016, p. 200) defines this shift as a shift from 'an end-product definition of needs' (i.e. target needs) to 'a process-oriented definition of needs' (i.e. learning needs).

Additionally, a genre-based perspective has become dominant in ESP needs analysis research, especially regarding learner needs since the mid-1980s. As Johns and Price (2014, p. 475) remark, John Swales' 'Creating a Research Space Model (the CARS model)' in his pioneer publication on written language, 'Genre Analysis: English in Academic and Research Settings (1990)' increased the popularity of genre studies in ESP world. The model had a move-based approach, in which writers of academic papers justify their reasoning to handle their work in the specific research area via following the three main 'moves' and a series of 'steps' among them. Since then, ESP researchers have followed Swales' pioneering work on genre studies rather than studying pure spoken or written discourses necessary for learners' needs (e.g. Bhatia, 1993; Dudley-Evans, 1987, 1994, 1997; Eggins & Martin, 1997; Swales, 1988). Most research done in this period was specifically related to the field of EAP, particularly focused on academic writing (e.g. Dudley-Evans, 1995; Fortanet-Gomez & Dudley-Evans, 1998; Hopkins & Dudley-Evans, 1988; Swales, 1981; Swales & Feak, 1994). In the course of time, as Johns and Price (2014, p. 475) define, a series of purposeful genres emerged as well, which are academic genres (e.g. research articles, proposals, abstracts, lab reports), professional genres (e.g. legal briefs, business letters, resumes), or vocational genres (e.g. application forms, accident reports, work schedules). Finally, the discourse structures, the surface structures, such as grammar, vocabulary, and visual features of these genres may be examined to design course syllabuses and related teaching methodologies (Paltridge, 2001, as cited in Johns and Price, 2014). With reference to the developments in genre studies, genre-based pedagogies also emerged in time. As Lesiak-Bielawska (2015, p. 11) remarks, genre-based pedagogy evolved from context-driven genre pedagogy, focusing on genres as rhetorical text-types, such as argument, exposition etc., to regarding genres as living concepts shaped by a community of practice (e.g. Coe, 1994; Freedman & Medway, 1994; Hyon, 1996; Johns, 1997). In the core of this pedagogy lay the notion that raising the awareness of learners of 'genre-specific' linguistic elements, rhetorical structures, and communicative uses via studying examples of particular genres in the ESP classroom improves individuals' target performances on either written or spoken discourses.

In the 2000s, as Badea (2016, p. 127) observes, the notion of 'genre' continues to be adapted to recent communicative needs via 'updated, complex, embedded and hybrid genres'

due to social and technological advancements of time while traditional genres are evolving and getting more diversified. Similarly, Belcher (2006, p. 142) remarks that genre is seen as more contextual, dynamic, and varied than the previous perception of genre as a template or a taxonomy, and it is being shaped by communities of practice in the course of time (e.g. Bhatia, 2004, 2008; Flowerdew, 2000). In parallel with this, the recent advancements in corpus linguistics also attracted ESP practices. With specifically Hyland's influential publications (e.g. 2000, 2004), in which he dealt with how individuals use genre within larger communities of discourse, corpora have become a worthy endeavour in ESP research (e.g. Biber, Conor, & Upton, 2007; Cheng, 2010; Gavioli, 2005; Lee & Swales, 2006; Seidlhofer, 2010). Belcher (2006, p. 142) points out the potential efficiency of corpus-based studies for providing evidence to specific uses of language. Similarly, Lesiak-Bielawska (2015, p. 14) suggests a series of pedagogical applications for use of corpora in ESP teaching, ranging from presenting commonly-held examples of language use, also suitable for gap-filling and matching exercises, to holding a 'data-driven learning (DDL)' approach, i.e. one-to-one writing counselling, in which the learners and their instructor study online corpus data to find answers to learners' language problems. Lesiak-Bielawska (2015, p. 13) also states that when future corpus-driven studies improved by further advances in software are integrated with genre analysis, and 'ethnographic approach to data interpretation', this leads to significant developments in ESP research (e.g. Connor & Upton, 2004; Flowerdew, 2004; 2005; Swales, 2004).

Studies Related to Course Design to Teach English for Pharmaceutical Purposes

There are indeed some basic differences in ESP studies conducted in either ESL or in EFL settings as depicted in the related literature. Johns and Price (2014, p. 477) point out these differences regarding the variety in contexts (i.e. ESL or EFL setting) and related purposes (i.e. work or study). That is to say, while ESP practitioners mainly work in English-speaking countries and design EOP courses for populations of immigrants, refugees, business people and learners; or EAP courses for non-native speakers in the academic sector, a growing number of ESP practitioners work in EFL countries and design courses for learners who have their personal motivation to learn English for academic or occupational purposes to follow their studies or careers in English in an international scope, which is very common in China, Middle East and Latin America. Similarly, García Laborda and Litzler (2015, pp. 41-43) emphasize differences of ESL and EFL contexts when delivering an ESP course. First of all, the low overall level of proficiency in English is a very common issue in EFL countries. In such cases, it is suggested to handle some sections of the ESP content as an EGP course as

in the example of a business English course which may include an integration of language points, such as an overview of the verb tenses, and some occupation-related situations, such as participating in meetings, etc. In these cases, ESP tasks incline to be more language-based when compared to more advanced level classes in ESL settings. Secondly, for learners in ESL contexts, ESP refers to occupational or academic survival in an English-speaking country, if not in international scope. Such ESP courses focus on improving learners' immediate job- or study-related proficiencies in English. As for learners in EFL settings, on the other hand, they need English to meet international requisites of their professions. Thus, ESP courses in an EFL context need to involve some cultural issues and global uses and forms of English. García Laborda and Litzler (2015, p. 43) remark that learners with low competence in English are deprived of practising and improving English they learn in ESP classes in EFL settings. Similarly, the ESP materials reached out in ESL and EFL contexts also influence the ESP course design and related activities. García Laborda and Litzler (2015) observe that ESP courses in ESL contexts have more direct practice than those in EFL settings as they are naturally genuine while those in EFL settings are often replicas generated to compensate learners' limited access to use of English out of class (p. 43). Additionally, the tasks and activities in EFL contexts are often limited to time constraints; and learners have limited access to authentic conditions related to their disciplines. However, in recent years, the wider range of internet access has made it easier for learners and ESP teachers to reach real-life materials via various sources online, which leads learners to focus more on language skills rather than linguistic structures alone.

Similarly, concerning the scope of the current dissertation, the studies for designing an ESP course for pharmacy professionals and/or students at university show differences in syllabus content in terms of being conducted either in English-speaking countries, where the international participants of such courses live, work and/or study in ESL settings, (e.g. ESP is handled as "content-based instruction" in the U.S.A., and English for the workplace (EWP) in Australia) or in EFL countries, where learners are prepared for prospective international communication for pharmaceutical purposes either in their own countries or in ESL settings. As Johns and Dudley-Evans (1991) state, even if more than half of the articles are written by ESP practitioners in EFL contexts, most of the local ESP projects do not receive much importance in international publications, which is a major loss for ESP practitioners worldwide (p. 303). Below are the examples of ESP course design studies conducted for pharmaceutical purposes, firstly in ESL settings, and then in EFL contexts chronologically.

One of the first examples of designing an ESP course for ESL pharmaceutical settings was found in Graham and Beardsley's (1986) team-teaching ESP course for a group of ESL pharmacy students at Maryland University, USA. The course was designed around pharmaceutical communication principles and extralinguistic communication skills with an ESL approach by two instructors: a pharmacist specialized in pharmaceutical communication and an ESL specialist. As is the case with any ESP course, the learning outcomes of their course were driven from a needs analysis, which was composed of the students' needs and demands; the professional knowledge of the pharmacy expert on pharmacy counselling; and information gathered from videos and books generated by pharmaceutical companies to serve for improving pharmaceutical communication. The course aimed at improving students' efficiency of oral communication in their professional settings in pharmacy stores. Therefore, the syllabus was designed according to specific speech functions for pharmacists. Each speech function was first illustrated either by ready-made videos by companies or by a live demonstration by the instructors. Next, the related expressions in the role-plays were studied and also supported by additional expressions elicited from the students. When necessary, some grammatical forms were practised as well. Then, the role plays were practised by the students and analysed by the whole class. In addition to studying the speech functions, extralinguistic behaviours to support these speech acts, and to use some grammatical forms in specific functions, idioms and colloquial terms for parts of the body and bodily functions were also studied for vocabulary development. Supporting the role plays, the classwork was composed of listening comprehension exercises on some articles on pharmacy counselling, pronunciation work, discussions about role-playing and the linguistic and extralinguistic elements in role-plays. The study was meaningful as it demonstrated the collaboration of two experts behind ESP methodology in implementation. While the ESL instructor's role was supporting learners' language learning processes, the pharmacy professional acted as the specific content consultant during the design and implementation of the course and attended some courses as well. The authors suggested such collaboration was meaningful, but it is also possible to handle the course by an ESL instructor alone as long as the health professional and the ESL specialist work closely during the design of the syllabus, materials, and assignments; and if the health professional is consulted during the course when necessary. Here the ESP specialist has to invest in specific content knowledge and convince the faculty on the necessity to meet the ESP learners' language needs in their professional settings with the collaboration of ESL instructors.

In Australia, Kokkinn and Stupans (2011) designed a curriculum for extracurricular classes for students of English as an additional language (EAL) at the department of

pharmacy at a university in collaboration with content experts in pharmacy domain. They conducted a needs analysis to reach out the learning outcomes related to the communication needs of international pharmacy students in the Australian context. To do so, they made a review of the existing course books to use in an EAL course for pharmacy students; and they realized a conversational analysis of the workplace language of pharmacy counselling in educational experience records of the department in order to find out the communicative tasks undertaken by pharmacists and the contributions of a pharmacist and a patient in their interactions at a pharmacy store. In the context of pharmacist-patient counselling, the researchers used an interactional sociolinguistic approach, which defines "the participants, their roles, the flow of topics, ways of speaking and decision making processes" for interpreting the spoken data to determine the dynamics of pharmacist-patient interaction. To serve for this purpose, the researchers observed 15 classes of "simulated pharmacist-patient interactions" (SPPI) between students and tutors/actors, pretending the interactions at a pharmacy store. After the observations, the researchers also had discussions with the tutor of the course about on which criteria they evaluated their students' counselling performances, which were added to the pool of learning outcomes, and they also held some informal discussions with the students to decide on what kind of difficulties they faced in their experiences, which were also added to the learning needs of students. According to the conversational analysis of the SPPIs and the analysis of the discussions with the tutor and the students, a need analysis was done. As a result, the following learning outcomes appeared in the syllabus: understanding and adapting to Australian language variation and pronunciation; using pharmaceutical terminology appropriately; using explicit discourse markers during their interactions with patients; building collaborative relationships with patients via politeness strategies and effective turn-taking in conversations with patients; gathering the necessary information on patients' health problems via appropriate questioning; giving advice to patients on how to deal with their health problem and how to take medicine, and dealing with sensitive topics during information-exchange. The researchers suggested collaboration across disciplines in which pharmacy expertise and language expertise worked together in order to search for the specific language needs in patient-pharmacy counselling context; and they recommended extracurricular activities for ESP courses to exactly address the language needs of EAL students of pharmacy.

Similarly, Berardo (2017) conducted a study on how to enable EAL learners to adjust their spoken English to be more intelligible for local people in a community pharmacy setting. Designing a course for increasing EAL students' comprehensibility in spoken English, he focused on improving a special set of EAL communication skills by practising some aspects

of pronunciation, which was probably the main cause for miscommunication. These speech acts were greeting a patient and engaging in small talk on learning the patient's reason for the visit; explaining the treatment, how to use and store medicines, side-effects, precautions, drug interactions, what to do in case of an overdose or a missed dose, other tasks and products related to specific medical conditions, such as blood pressure, diabetes, etc.; and finally, checking patient comprehension. He conducted his research as a pilot work, in which the only learner of the pilot course was informed about the language concepts and was asked to practise them in class, and to record herself out of class as homework in order to serve for a course to be handled in the near future, named as "English for International Students in Pharmacy". The researcher provided feedback to the learner's recordings. By the end of the course, the learner was observed to be able to monitor her speech, pronunciation, and grammar when performing the speech acts determined in the needs analysis phase. Finally, relying on the results of his needs analysis study, Berardo (2017) suggested teaching pronunciation (prosody and segments); vocabulary (common medical terms for body parts and medical conditions and idioms typically used in conversations); grammar; listening comprehension, and finally, cross-cultural communication and perceptions (p. 22) for an ESP course syllabus for pharmacy.

Again in Australia, Hussin (2013) made use of reflection strategy in stimulated recall interviews with 20 third-year Malaysian EAL pharmacy students on their pharmacist-patient simulations in order to gather insights for the problematic aspects of their patient counselling, the results of which led to pedagogical change in ESP course design. In the simulations of patient-pharmacy interactions, the student participants in the study practised being pharmacist while pharmacy staff members at university acted the part of patients. To collect data for the current study, the pharmacy students were asked to reflect on their videoed performances of patient counselling simulations in stimulated recall interviews while the pharmacy staff members commented on their performances as well as all being interviewed in focus-group interviews a year later on to discuss the findings of the research to suggest pedagogical implications in future implementations. The result of the analyses showed that in advice-giving strategies, students used indirectness to compensate for the deficits they have in their English. The indirectness had a negative influence on professional communication, reasons of which were found as 'difficulty in finding the right words to express themselves; culturally-based attitudes and communication behaviour; and teaching-induced errors and pragmatic overgeneralisation'. The researcher suggests teaching ESP learners how to use a reflective approach via strategies of raising awareness as in the cases of stimulated recall interviews, reflective journals, and teaching learners to be their own professional ethnographers by

collecting videoed data on their counselling practices etc. about the correct use of directness in pharmacy communication. Finally, the researcher strongly recommends the collaboration of ESP practitioner and specific content expert to deal with learners' language necessities and skill of reflection in their professional communication.

In addition to the syllabus design studies, there are also some corpus-driven researches conducted for ESP courses for pharmacy students in ESL settings. For instance, Diaz-Gilbert (2004) made a 105-word survey with 25 pharmacy students at the Philadelphia faculty of pharmacy at the University of the Sciences in Philadelphia (USP), USA, to determine their knowledge of words in isolation, and a 10-sentence survey to ascertain their knowledge of words in context. As a result, the participants showed a lack of knowledge of common pharmacy and health-related words both in isolation and in context; and they confused words that are phonemically, graphemically and morphologically similar. The researcher suggests using the results of the study as a base for integrating vocabulary-building skills into the pharmacy curriculum in collaboration with ESL instructors and pharmacy professionals at universities, as well as lecturers' adapting the language of lectures by giving guidance to learners who are non-native speakers of English on learning pharmacy and health-related vocabulary through the delivery of the courses. In addition to vocabulary building activities, the researcher also suggests teaching of pronunciation and spelling skills as some learners confused words due to mispronunciation and misspelling as well. Similarly, in her book, 'English for Pharmacy Writing and Oral Communication', which is outstanding among few ESP pharmacy resources with its huge amount of pharmacy dialogues and writing tasks that are thematically organized around the chapters of the book, Diaz-Gilbert (2009) concentrates on teaching pharmacy-related words and terminology via exercises either in texts or in pharmacy dialogues that are categorized according to patient complaints related to anatomical components, such as mouth and nose, or cardiovascular system, etc. Each unit of the book is composed of two main halves; the first half is devoted to written language skills and related exercises, which are about medical vocabulary, typical medical conditions, patient complaints, medical vocabulary comprehension and relevant chapter writing exercises while the second half is composed of aural, oral and pronunciation skills and exercises embedded in pharmacist-patient dialogues, recordings of which are accessed online via 'the Point' platform. Finally, the last chapter of the book is dedicated to pharmacy documentation skills, including pharmacy documentation vocabulary, medical and pharmaceutical abbreviations, and pharmacy documentation forms. In addition to its comprehensible content covering written and oral communication skills in pharmacy counselling practice, Diaz- Gilbert's

(2009) coursebook may be called by far the most outstanding and easiest to achieve ESP coursebook for pharmacy students in the ESP coursebook market.

As a second typical example for corpus-driven research, Grabowski (2013) conducted a study from a register perspective, aiming to determine the recurrent 'vocabulary, phraseology, keywords, lexical bundles and phrase frames' used in two particular pharmaceutical texts; patient information leaflets (PIL) and summaries of product characteristics (SPC), originally written in English. As a result of his study, Grabowski (2013) found out that the two text types differ in patterns of language use. That is to say, in PILs, keywords are mostly related to pharmaceutical forms of medicines, and more advisory keywords are preferred. SPCs, on the other hand, include keywords related to chemical substances in medicines, medical conditions, side effects and measurements keywords. Secondly, in PILs, stance bundles, such as obligation or desire bundles, are mostly used while in SPCs, referential bundles, such as identification or procedural bundles, and discourse bundles, such as clarification or elaboration, are preferred more. Finally, discourse-organizing phrase frames are more preferred in PILs while stance frames are mostly used in SPCs. Grabowski (2013) asserts that these differences are due to functional and situational features of text types. He suggests using the findings of the study in ESP syllabus design and in educating translators for future implications.

Relying on the examples of ESP studies conducted for pharmacy settings in ESL countries, it is observed that the major trend in the methodology of the ESP courses in ESL contexts is to handle ESP courses via a team-teaching approach, in which content experts work closely with ESL instructors in delivering the course content and practising the pharmacy-related skills in in-class sessions, and secondly, to focus on international students' immediate needs related to typical pharmaceutical spoken interactions, and accordingly, listening comprehension needs by using the advantage of extracurricular activities to foster learners' pharmacy communication skills. It is definitely due to the contextual advantage that ESL learners have when compared to EFL learners, who have limited opportunities to practice pharmacy-related communication skills outside the ESP classes, where only simulations of such interactional communicative scenarios are available. However, the ESL studies may still inspire ESP instructors in EFL countries in that team-teaching methodology may be applicable in ESP courses by inviting actual pharmacists as well as faculty members at universities to classes in order to support the design and/or to implement more realistic simulations of pharmacist-patient communications in EFL contexts either in class settings or in exact pharmacy stores, laboratories, etc. Teaching beyond the walls of the class by creating

learning environments as if teaching in an ESL environment, may be the key motivation for ESP practitioners in EFL countries to help their learners to catch up with the international standards of discipline-specific communication skills in the target language.

As for the studies conducted in EFL settings, Mayo, Antón and Vasco (1995) designed a project that composed of four stages aiming at an ESP course for pharmacy in Spain. To achieve this, first, they conducted a needs analysis via structured interviews with pharmacy specialists and a 50-item questionnaire applied to pharmacy students at a university in Spain to decide on the English language needs of pharmacy students for generating an ESP course for pharmacy. In the first phase of their study, it was found out that pharmacy specialists suggested improving reading and writing skills of learners in order to read specialized texts, analyse the structure of technical abstracts in international journals, and produce such abstracts in contexts such as academic pharmaceutical conferences or workshops to meet foreign laboratory representatives. As for learners' suggestions, they reported that they need English in order to understand and write specialized texts published in English and to reach a proficiency level at their listening and speaking skills to be able to spend time in the overseas laboratory. Upon the results of the needs analysis, Mayo *et al.* (1995) decided on designing a four-skills-based syllabus to respond to the participants' demands but giving more emphasis on reading and writing skills. They stated that they would also follow a content-based approach to syllabus design in which they plan to teach pharmaceutical content by improving overall English proficiency at the same time. Mayo *et al.* (1995) reported that they also planned to add the dimension of teaching "genre skills" in order for learners to write efficient textual products appropriate for the conventions of their discourse communities. According to them, the ideal syllabus for an ESP course for pharmacy would be a combination of the three types of syllabuses: content-based, skills-based and a weak view of task-based syllabuses due to the issue of large classes.

In the South African multilingual setting, Van de Poel, Van Dyk, Gasiorek and Blockmans (2015) report on how they managed the development of an LSP course and related course materials for communication with 255 pharmacists via a needs analysis. In the study, a questionnaire was conducted with the participants to determine the barriers and needs for pharmacists' effective communication with their patients in order to serve for the theoretical framework for an LSP course for all the five common languages in South Africa, which are English, Afrikaans, isiZulu, isiXhosa, and Setswana. Relying on the needs arisen out of the analysis, the learning outcomes of the LSP course, and accordingly, the syllabus and the course materials were designed. As the learners of the prospective LSP course will be pharmacists with limited time to spare for a face-to-face instruction, the researchers designed

the course in a blended learning environment, in which learners will have chances to practise the course content via the online platform called 'Communication for Professionals-Pharmacists' in addition to contact hours of teaching. In the designed syllabus, learners are supposed to meet 80% accuracy in the five languages while performing the learning outcomes of the course via using the target language in the clinical setting. The topics of the course cover 10 different communicative functions embedded in particular pharmacist-patient dialogues in clinical practice. In addition to the communicative functions necessary in a clinical setting, learners-pharmacists- will also be able to practise the sounds, word meaning, and language structures of the target language, which is supported by the training materials on the online platform. On this platform, learners will complete the typical utterances in a clinical setting, and listen for hints and tips for effective communication. After completing an exercise, learners will receive feedback, and remedial training will be provided by the instructors in face-to-face sessions. As a result, by depicting a comprehensive example of generating a blended learning environment for pharmacy students from an LSP perspective, this study is valuable. ESP instructors may follow the needs analysis process of the study, which is consulting pharmacists' actual problems when giving pharmaceutical consultation, in order to deal with real-life obstacles in syllabus design as well as creating an online platform for enabling learners to practise pharmacy-related communication skills, structures, vocabulary and pronunciation.

In Indonesia, Dewi and Chakim (2017) explain in details the processes of needs analysis and syllabus modification for the development of an ESP course material for pharmacy students in a vocational high school setting. The researchers conducted a needs analysis with the teacher and the learners of the course on what to include in the ESP course material, also aiming at modifying the 2013 version of the pharmacy syllabus, which is delivered as an EGP course syllabus in practice, and at creating real-life materials by adapting the existing pharmacy-related ESP material. As a result, the ESP material was developed, relying on the needs analysis and the modifications on the 2013 ESP syllabus, covering all four skills and pharmacy-related content, which are about illness and medical treatment. As for the implementation of the course syllabus, researchers followed 'the scientific approach steps', which they named as 'warmer, observing, questioning, collecting data, associating, creating and reflection'. During the teaching procedures, the researchers made use of authentic materials, simple texts and audio monologues and dialogues, upon which the training sessions were handled via discussing the content of the input supplied to learners; writing simple texts; translating the terminological vocabulary, and imitating the teacher pronunciation. Finally, after the implementation of the renewed course syllabus and related

material, the course instructor responded positively to the material developed by the researchers. By showing the procedural example of designing ESP course materials, this study is meaningful for ESP practitioners who wish to conduct needs analyses in addition to adaptations and/or modifications to their current ESP course materials, and accordingly, content, and instructional processes.

In Saudi Arabia, Khan (2017) conducted descriptive research to assess the effectiveness of the existing pharmacy-based ESP syllabuses, course books, other resources and teaching methods to determine the curricular and pedagogic obstacles of ESP learning environments in EFL contexts through ESP teachers' point of view. The researcher applied a questionnaire to 41 ESP teachers from various universities who had experiences in teaching ESP courses for pharmacy students. As a result of the study, the researcher suggests that there is a need for a curriculum change relying on the pedagogical and professional needs of the current learners in addition to the need for better trained ESP teachers in specific disciplines. Although such studies do not provide any empirical research findings, they may be helpful to consider the underlying factors of the obstacles in the implementation of ESP courses in pharmacy context in EFL settings.

For senior Japanese pharmacy students, Kobayashi, Yazawa, Saguchi and Tanaka (2018) prepared an English program and manual booklets composed of common phrases in pharmacy settings. The researchers aimed at reaching the Objective Structured Clinical Examination (OSCE) level, the standards of which was determined by the Association of Pharmaceutical Students in Japan. The researchers prepared their booklets, which are finger-point and phrase booklets, depending on a survey with actual pharmacists to decide on which are the most common reasons for foreigners to consult a pharmacist in their region, the East of Japan, which would be the touristic spot for Olympics and Paralympics in Tokyo. The researchers also searched for the over-the-counter (henceforth, OTC) medicines that are mostly sold in the region to the foreigners. As a result, they found that the most common health problem is fever, in addition to pain and nausea/vomiting. Depending on the OSCE English phrasebook, the researchers created their own original finger-point and phrase booklets, including sections on pharmacy counselling. Having examined the 22 universities' curriculums in the region for any topics related to communicating with foreigners for pharmacy counselling in English, and analysing the 6 universities' curriculums that offered such courses in English, they decided on the course objectives. Accordingly, 10 sessions were found to be ideal for the course to achieve those objectives. The course objectives were: 1) "greeting patients", 2) "conducting interviews", and 3) "concluding the interaction with the

foreign patients". Depending on the learning objectives, the researchers conducted a trial, lasting for 3 days composed of ten sessions divided into 3 cases of fever. In the trial, the performances of six final year students in the school of pharmacy were assessed by two Thai incoming students, who acted like patients in simulated cases, as well as being self-assessed in terms of the pharmacy students' effectiveness in pharmacy counselling via a 4-level scaled questionnaire. As a result of the trial, the pharmacy students were satisfied with the chance of being evaluated by their actual interactions with foreigners as well as having the possible variations in pharmacy communication with foreigners with the booklets prepared by the researchers. The foreign students also stated that the use of booklets on the most common phrases at a pharmacy store was effective to communicate well with pharmacists at a store. Using visuals while giving pharmacy counselling to foreigners on specific conditions via phrase and finger-point booklets as in this study may be useful for EFL learners who may have fewer chances to get into contact with foreigners in daily life, and this may be added to ESP course materials as supplementary, especially on the continuum of controlled activities and independent ones.

Differently from the typical examples of ESP studies conducted in EFL countries, Woźniak and Acebes de la Arada (2018) recount the implementation of a pharmacy ESP course taught in the CLIL degree program in Spain, in which the medium of instruction is English. The study is different from its counterparts because the ESP course partly functions as an EAP course as well since the researchers' institution approaches English teaching both from ESP-based courses specifically designed for each undergraduate degree and also from CLIL perspective in specific content subjects. This brings a necessity for collaboration between content lecturers and ESP lecturers to be in agreement with the syllabuses of the courses. In order to determine to what extent English is present across the subjects at the degree program, and therefore, to define the actual needs of CLIL program that are not exactly met during the instruction period and to balance between content and language subjects, the researchers conducted interviews with content lecturers as subject area experts at the department of pharmacy within the scope of an ESP course designed for chemistry and pharmaceutical care. The expected learning outcomes were identified as using the four main skills within the contexts of pharmacy and healthcare. Their ESP course was composed of two main parts: the first part included chemistry topics synchronized with practical classes in laboratory and the second part covered topics in pharmaceutical care. In this way, the ESP course was composed of eight short blocks covering the two main areas of chemistry and pharmaceutical care: 'Introduction to Pharmacy, Lab Safety, Chemistry, Experiments, Herbal Medicine, Drugs and Medicines, Illness and Disease, and Pharmaceutical Care'. As is often

the case, the instructors of the ESP course did not find the commercial course materials contents of which matched with the specific purposes of these ESP learners. Thus, authentic materials were dominantly used. On the whole, the course relied on discipline-specific tasks that learners will be engaged in pharmaceutical communication. For the first "English for Chemistry" part of the course, learners were expected to complete tasks related to chemistry and chemical experiments. As for the second "English for Pharmaceutical Care" part of the course, which is of interest of the current dissertation, learners were first individually asked for producing an audio recording for a consultation to a patient suffering from a specific health problem. Relying on particular patient information leaflets, learners explained how to use specific medicines, covering all the points in the checklist provided in the rubric. In other words, learners adjusted the written information from the leaflets to the audio format using an everyday language to communicate with patients in their audio recordings. Secondly, students were asked to record a video in pairs on a patient-pharmacist dialogue, referring to OTC medicines for which a prescription is not required as their learners, who were in their first year at college, did not study prescription drugs at that time. Learners created their dialogues around common problems and their treatment, and they were provided with a checklist of the most important parts of the dialogue, such as asking questions, giving advice, and interaction. Moreover, in addition to topic-based tasks, learners were also taught strategies for learning pharmaceutical vocabulary, such as differentiating among pharmaceutical prefixes and suffixes in terminological words, and looking up words in genre-specific dictionaries in pharmaceutical contexts to avoid translation problems, etc. As a result of the study, the researchers emphasized the need for 'a language-focused ESP course', and asserted that ESP and CLIL complement each other to strengthen meaningful learning. It was found out that learners could acquire English when engaged in performing disciplinary tasks in English better. As Woźniak and Acebes de la Arada (2018, p. 274) assert, it is ESP practitioners' challenge to decide on the balance between learners' needs, pharmaceutical language skills, and the pharmacy content that may require the use of English while designing an ESP course for pharmacy professionals and/or students.

Considering the examples of ESP studies conducted for pharmacy settings in EFL countries, it is seen that in ESP course designs in EFL countries, more language-based approaches are adopted; that is, for instance, ESP training materials mainly contain more supplementary resources for teaching language structures, vocabulary and pronunciation in addition to activities to improve pharmacy-related communication skills. It is due to EFL learners' low level of proficiency in English when compared to ESL learners. What is similar between ESL and EFL-based ESP course designs for pharmacy is the use of simulations in

class settings, which is inevitable as such courses are EOP courses that are based on practising work-related communication skills, indeed even not held only for professionals but also for pre-professionals, i.e. learners at a university setting, as well. As mentioned earlier, Belcher (2009) remarks on the combination of EAP and EOP courses in 'hybrid' versions in such EFL situations as in the examples of "EAMP, English for Academic Medical Purposes (for health science students); EABP, English for Academic Business Purposes (for students majoring in business), and EALP, English for Academic Legal Purposes (for law students)" (p. 2). As Belcher (2009) states the disciplines and sociocultural needs overlap, as is the case with teaching professional ESP skills to undergraduates at universities, who may also need EAP skills no matter whether they get instruction in the medium of English or not, in either case, such EAP skills include more language support activities. Therefore, English for Pharmaceutical Purposes (EPP) courses at universities are indeed to be called English for Academic Pharmaceutical Purposes (EAPP), especially in EFL settings. Additionally, as Robinson (1991, pp. 49-51) states, in disciplines like pharmacy, law or medicine, in which particular patient or client cases are the medium of professional practice; role-play and simulations, case studies, project work and oral presentations are the most common types of teaching techniques used in almost all the English for pharmaceutical purposes course design studies either held in ESL or EFL environments. Accordingly, ESP courses tend to be implemented in task-based teaching methodology due to its nature of performing professional communication skills in the immediate and/or prospective target contexts, which is the case with ESP studies conducted for pharmaceutical purposes mentioned above. Last but not least, in ESP course design studies for pharmacy, it is observed that the use of blended learning environment is scarce even if technological and/or online tools are used for reaching out authentic input related to target discipline. In blended learning environments, however, online platforms are used as complementary, where course materials are stored, and/or some pre-course activities are demanded before the class, as in the case with flipped learning strategy, with face-to-face teaching sessions, where active learning takes place. In language education today, where individualised learning is the main focus of attention as ESP learners have easier access to information related to their specific discipline, teaching methodologies are to be adapted to this emerging learning culture as well in order to catch up with the interests, learning tendencies, demands and renewed needs of 21st century ESP learners. From this point on, regarding the scope of the present dissertation, the implementation of one of the recent versions of blended learning, the flipped learning will be contextualized with references to its integration with studies in ESP literature in the following paragraphs.

The Rise of 'Flipped Learning' Strategy

The historical seeds of flipped learning model were planted back in 1993 by an article titled 'From Sage on the Stage to Guide on the Side' by Alison King. In this article, King suggested instructors reconsider their roles in education by switching their roles from the central figure, 'the sage on the stage' to the facilitator, 'the guide on the side'. In the traditional transmittal model of teaching, the instructor acts like the ultimate source of knowledge and he/she delivers that knowledge to the learners who are passive in their learning and are expected to memorize that knowledge and asked to reproduce it without taking any ownership of their learning. King (1993, p. 30) argues that way of learning does not meet the expected qualifications of the 21st century, which requires learners to produce knowledge using critical thinking skills and to engage in collaboration with others by asking questions and solving complicated problems in their contexts. On the other hand, in the constructivist approach to learning and teaching, the instructors facilitate learning via active learning strategies, which places the learners at the centre of learning. The instructors are still in charge of delivering the course content; however, their role is mostly on designing learning environments to allow their students to interact with the content and with one another in class to make meaning out of the material through collaborative tasks. Therefore, the learners in active learning environments engage in reformulating information by making connections with their prior knowledge and new knowledge, which, in turn, leads to their applying new knowledge in new situations. King (1993, p. 31) believes that instructors have to offer chances for active learning to occur by following one global principle: each concept should be structured around some activity, and thus, learners produce knowledge by interacting with course materials about that concept while being engaged in that activity. In order to achieve such active learning experiences in class, she suggested instructors slowly transfer their lecture methodology to the facilitation of deep learning strategies via 'guided reciprocal peer-questioning' and 'cooperative learning' surrounded around target learning outcomes of courses. The significant point of this article was that King pointed at the mismatch between the current century requirements and the educational application in practice, and she triggered the idea of using active learning strategies in face-to-face instruction, rather than lecture, in order to educate populations of critical thinkers and creative problem-solvers that are capable of handling challenges of the 21st-century requirements.

In 1997, Eric Mazur, a professor of physics at Harvard University, published a book entitled 'Peer Instruction: A User's Manual'. In his book, Mazur suggested the use of peer instruction to facilitate learning through learner-centred activities based on the assimilation of

new information via the practical application of learning in class. Therefore, class time is not devoted to the transfer of information, but rather focuses on constructing new knowledge via pair discussions, enabling the instructor to use ‘just in time teaching’ approach, which helps the instructor decide whether or not more explanation is needed before continuing. Relying on learners’ feedback on their learning of the content, Mazur suggested instructors adapt the classroom activities to best meet students' needs. Mazur’s model of peer instruction combined blended learning with technology and increased learning during classroom time and encouraged learners to come prepared beforehand for class time via pre-class work online, and it has been adopted in various disciplines, now beyond physics, in many parts of the world. Eric Mazur contributed to the idea of flipped learning model with his proposal of delivering course content out of class sessions and emphasizing peer learning as an active learning strategy to be used in valuable in-class time.

In 2000, Maureen J. Lage, Glenn J. Platt and Michael Treglia published an article on an undergraduate economics course designed by a group of professors by adding a multimedia component and called it ‘the inverted classroom’. They described the inverted classroom as a learning environment, in which “events that have traditionally taken place inside the classroom now take place outside the classroom and vice versa” (Lage, Platt & Treglia, 2000, p. 32). In their model, instructors present alternatives to learning strategies that appeal to common learning styles of learners while still being in charge of content coverage. Learners view course content outside the class via videos and web sites while assignments based on the content are done in groups in class sessions. Lage *et al.* (2000, p. 32) advise instructors provide ‘a menu of options’ for learners to use in their learning and it is the instructors’ role to focus on whether the desired learning outcomes are achieved or not while allowing learners to decide on their own way of learning to attain those outcomes. By this way, the learners are given the responsibility of their own learning by being given options according to their own learning styles. Definitely, what this article proposed was giving learners options to learn course content rather than imposing lecturing on them, which again underlined the use of active learning in class time.

In 2000, Baker used the term ‘the classroom flip’ for the first time to refer to a course model he designed for tertiary level students. He offered to use new information technologies as tools for presenting course content in addition to retaining the strengths of the traditional teaching model in a way that the opened up classroom time will be dedicated to cooperative tasks, placing the learners at the centre of the learning process. By this way, he brought active learning strategies and technological trends together in an innovative learning approach. He

emphasized the active role the students should take in their own learning while engaging in the learning materials and collaborative tasks with their peers. He described that classroom flip model having two main components as out-of-class work and in-class work. For out-of-class work, he made use of web pages as reading material to use instead of lectures in class time, quizzes and threaded discussion while for in-class work, he utilized active learning tasks, in which the learners will use higher-order cognitive skills to engage in. All in all, it is seen that the term 'flipped learning' started to evolve around placing learners at the heart of learning process by having them engaged in course content via active learning tasks in collaboration with others.

In 2011, Salman Khan, the founder of Khan Academy-a non-profit educational organization that provides free online education on various content using instructional videos-, made his famous TED Talk on Khan Academy entitled, 'Let's use video to reinvent education' about the use of videos in education, by using the expression, 'flipping the classroom' to refer to the change of the delivery of instruction in education. His talk gained so much popularity that using videos as the medium of instruction became known as a worldwide issue, and to a large extent, contributed to the evolution of flipped learning idea. One year later, he published the book entitled 'The One World Schoolhouse: Education Reimagined' (2012) and allocated a chapter on flipped learning. In his book, he stated that the notion of 'flipping the classroom' existed before Khan Academy was founded, but the reputation of Khan Academy video library made it a well-known issue in the education world, and he emphasized that flipped learning transforms the classroom into more interactive learning environments for everyone.

At around the same time, two high school chemistry teachers in Colorado, in the US, Jonathan Bergmann and Aaron Sams, started to record their slideshow lectures using screencast software in order to support their students who missed their classes due to extracurricular activities. Their students watched the course videos at home and caught up with their peers when they came to class sessions. Meantime, their videos became quite popular among student populations beyond their own classes who watched them as many times as they wanted to comprehend course content. As time went by, they realized that by taking the lecture outside class time via instructional videos, it became possible for them to allocate more time to hands-on activities, such as experiments or projects, in face-to-face sessions. Additionally, they observed that it became possible to give more one-to-one attention to each student, and consequently, students' engagement and achievement increased. As a result, the idea of flipped learning was born. In 2012, Jonathan Bergmann and Aaron

Sams wrote a book on their best practices of flipped learning: 'Flip Your Classroom: Reach Every Student in Every Class Every Day' (Bergmann & Sams, 2012), which has been translated into 13 languages, and they started presenting their flipped learning model throughout the US. In a short time, they founded a non-profit organization called Flipped Learning Network (henceforth, FLN) as an online hub where educators across the world can share and access resources and tools on flipped learning. In 2014, Bergmann and Sams pursued with another publication, 'Flipped Learning: Gateway to Student Engagement' (Bergmann & Sams, 2014). Moreover, as flipped learning community grew, Flipped Learning Global Initiative (henceforth, FLGI) was founded in 2016, as a platform to exchange ideas on flipped learning applications in various educational contexts throughout the world. The goals of the FLGI are determined as "to fill the growing global need for collaboration across borders in three domains: research curation and distribution, evolving best practices in flipped learning, and technology selection and implementation" ("Purpose of FLGI", n.d.). Today FLGI is accepted as the leading body of flipped learning movement and offers accredited certification training on the implementation of flipped learning across various disciplines in order to achieve their purpose of the foundation.

The definition of 'flipped learning'.

In traditional teaching and learning method that has been in use since very ancient times in education, a lecturer is in charge of delivering course content in face-to-face sessions while the students are required to remember and understand the knowledge by taking notes or asking questions to the lecturer who is treated as the only source of information. After class, the students are asked to use higher cognitive skills by using the information they have been exposed to. In this approach, content is the main drive but application of the content in new situations is not. Şahin and Fell Kurban (2016, p. 16) maintain that here lies the weakness of traditional approach to learning in that the students lack the opportunities to take support from their peers and instructors while being engaged in higher cognitive skills outside the class. Thus, the best use of instructors or students' time in class should include activities to interact with one another while being supported by collaborative activities in class, as is the case with the prospective employment market of the 21st century.

The flipped learning approach changes the application of the stages of Bloom's taxonomy of the cognitive domain in traditional learning approach by switching the sequence of in-and out-of classwork, as seen in Figure 18 below. That is, in flipped learning, students are exposed to the content delivery before class time through course videos and/or other supplementary materials prepared and shared by instructors on an LMS, in this way, the lower

stages of 'remembering' and 'understanding' are realized prior to class via interacting with course videos and/or text, and via being tested on content knowledge through online mini-tests to make sure of their understanding of the content. Students can have access to course content using any media devices they have whenever, wherever, and as many times as they want. Therefore, students come to the class being prepared and ready to engage in higher-level cognitive tasks in deeper learning strategies supplied by their instructors, and the class atmosphere turns into a more interactive and lively one. Şahin and Fell Kurban (2016, p. 17) remark that learners take ownership of their learning in flipped learning model, and that the instruction in class becomes more personalized as the flipped model provides instructors with extra time to communicate with each and every student in the class, and by doing so, responding to individual learning needs in mini-talks between instructors and learners during class time.

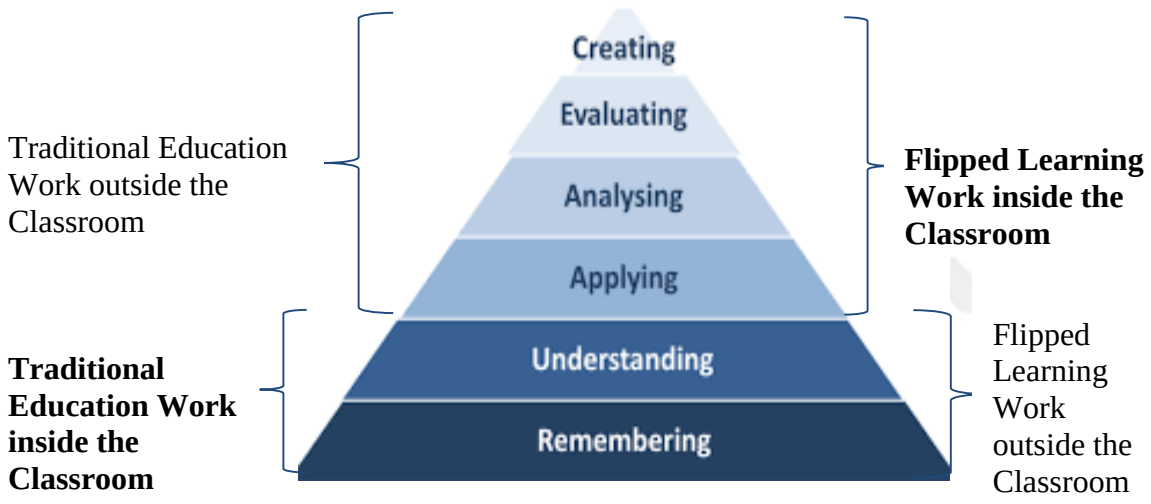

Figure 18. Aspects of traditional and flipped learning mapped against Bloom's Taxonomy (Şahin& Fell Kurban, 2016, p. 16).

FLGI identifies flipped learning as in the following:

> Flipped learning is a framework that enables educators to reach every student. The flipped approach inverts the traditional classroom model by introducing course concepts before class, allowing educators to use class time to guide each student through active, practical, innovative applications of the course principles." ("International Definition", n.d.)

In parallel with the above definition, Bergmann and Sams (2012, p. 11) emphasize that flipping the classroom is basically about a change in the mindset by attracting attention away from the teacher, as the only source of information, towards learners and their learning. Similarly, Mehring (2016, p. 2) underlies that 'flipped mindset' switched the responsibilities

of teachers and learners by interacting learners with course content initially before face-to-face sessions, and providing them with opportunities in class for more advanced tasks to deal with content in collaboration with their peers. As for teachers, they find time to clarify any confusion for low achievers and challenge high achievers to perform more complicated tasks, and by doing so, they provide more individualized instruction for each student via instant feedback in class. As Sakulprasertsri (2017, p. 133) points out, the flipped learning derives from 'the constructivist learning theory' that emphasizes students' active role in their learning while being engaged in deep learning strategies in classrooms. Here lies the value of flipped learning which transforms lecture time in class into that of rich experiences where learners interact with content and related skills to use that knowledge via applied learning activities with their peers and their teacher. Additionally, Mehring (2018, p. 1) remarks that it is also possible to flip a class without the use of technology rather than identifying it with only instructional videos. Even though technology has paved the way for creating videos, online discussions and quizzes for a flipped class, the key focus in flipped learning is a pedagogical change rather than a technological one. The main idea behind flipped learning is to create learner-centred environments where active learning is the medium of instruction. What technology eases is making course content more accessible to learners, which, in turn, leads to learners' taking ownership of their learning, reflection on their learning and critical thinking on course content. As a result of having learners interact with mostly teacher-created instructional videos and/or text outside of scheduled class time, flipped learning makes it possible to enrich face-to-face time with deep active learning strategies.

Staker and Horn (2012, p. 10), on the other hand, classify flipped classroom as a subset of blended learning, which is categorized with four different models: the 'Rotation Model', 'Flex Model', 'Self-Blend Model', and the 'Enriched-Virtual Model'. In this taxonomy, while the 'Rotation Model' happens in a physical school, the 'Enriched-Virtual Model' takes place in a complete virtual online platform, thus, the two models are at opposite ends of the continuum. Table 1 depicts the four blended learning models.

As seen in Table 1 below, under the 'Rotation Model', learners do not only attend a physical school, but they also rotate through a variety of activities, such as tasks carried out as a group or individually in a lab, in a class, or at home. Here, the 'Flipped Classroom', which leads learners to study course content online at their own pace and to spend class time by mastering content via active learning strategies, is treated as one kind of the rotation model. Strayer (2012, p. 172) remarks that what makes blended learning environment efficient is to use well-structured face-to-face time of high quality with the corresponding online component

so that learners realize learning outcomes of the course. Strayer here focuses on the importance of the class time that the instructors have with their learners in blended learning models, in which instructors create interactive learning atmosphere for learners to put what they learned prior the class time into practice in an active learning community in class time, by making references to the flipped learning model.

Table 1. *The Classifications of Blended Learning Models(Staker & Horn, 2012, p. 10)*

Rotation Models	**Flex Model**	**Self-Blend**	**Enriched-Virtual**
Students attend a physical class and rotate between different modalities such as individual/group activity, individual tutoring, and pencil-and-paper assignments. At least one of these activities is done online. The Rotation model includes four sub-models: 1. Station-Rotation model - Students rotate *as a group* through different activities in one classroom. 2. Lab-Rotation model - Students rotate *as a group* to a lab at a different location on campus that supports online learning. 3. Flipped Classroom model - Students learn online at their own pace and do exercises in the physical classroom. 4. Individual-Rotation model - Students take turns rotating through different activities *alone* in the same physical classroom.	This is a model where content and instruction are delivered primarily online, and students are directed by an individually customized, fluid schedule. The "instructor-of-record" is on site to provide face-to-face help.	This is a model where students are allowed to take supplementary courses online either at a brick-and-mortar school or at home. This model does not provide a "whole-school" experience.	This is a model in which the entire school operates almost entirely online. Students meet face-to-face with their instructor only during the first-course meeting. Students do not have to attend the brick-and-mortar school daily. This model does provide a "whole school" experience.

Additionally, Mehring (2018, p. 3) points out that for a long time computer applications in learning were composed of digital versions of course book drills being used as supplementary or self-study material rather than tools for meaningful learning. Now, in environments that are enriched with web 3.0 tools of learning and interactive sessions of face-to-face time, students have opportunities to receive instant feedback from their teachers and their peers to avoid misconceptions of course content and to form perceptions, which leads to new learning opportunities. Reflecting on the feedback they received from their teachers and/or peers in interactive sessions of flipped learning, learners construct new knowledge. Scaffolding the learning from content delivery before class and eliminating teacher lecturing in class, the flipped classroom creates such active learning environments for learners. In order to differentiate between the flipped classroom and other technology-supported learning environments, Correa (2015, p. 116) remarks that flipped classrooms do not simply allocate time for peer interaction in class, but also 'humanize' the classroom. Moreover, she makes references to socio-constructivist theories of learning which redefine the role of teachers as 'facilitators' rather than transmitters of knowledge. These theories propose the necessity of 'experienced people' to construct gaps in a learner's knowledge which, otherwise, cannot be filled when worked alone. Contrary to the transmittal model of instruction, learners construct

their knowledge via reflection and interaction with such people in socio-constructivist classes. Correa (2015, p. 119) indicates the parallels between socio-constructivist classes and flipped classrooms by pointing out the social-constructivist features of flipped classrooms as in the following:

1. 'The classroom as a place for learning rather than a place for teaching': In a flipped classroom, lecturing is reduced by assigning content delivery out of class while learning is increased through interaction in class.
2. 'Scaffolding': Socio-cultural theories suggest that learning is constructed with scaffolding support from others (teachers and/or peers) via negative or positive feedback. Learners need to test what they acquire while being engaged in learning opportunities. The flipped classroom enables learners to form hypotheses about learning a new content at home, and the learners gain time in class to test these hypotheses with others in the class.
3. 'Learner autonomy': In a flipped classroom, learners have more chances of personalization of activities in class as lectures are assigned to do in individual space. In group space, therefore, learners take ownership of their learning depending on their needs and inclination about course content, and in-class time is designed in a more flexible way considering such possibilities.
4. 'Accessibility': The flipped classroom makes it possible for all students to reach the same course materials in case of their absence in face-to-face sessions. In a flipped class, the instructor enables learners to practice what they have learnt individually more in or outside the class.
5. 'Functioning knowledge instead of declarative knowledge': Rather than memorizing or verbalizing an understanding of new content as is the case with transmittal method of learning, in a flipped class, course content is acquired at the 'performative level' via putting new knowledge into practice in active learning environments.

Relying on the above principles, Correa (2015, p. 120) remarks that flipping a classroom is, in fact, about a change in pedagogical approach rather than simply integrating lecture with technology. She further suggests that the main principle behind these socio-cultural theories of learning and flipped learning is to expand the learning capacity of students by giving them the responsibility of taking ownership of their learning via more meaningful practice in class. It is the students' responsibility to form the ground knowledge by internalizing the new content before class and to practice this new knowledge in meaningful

tasks in class, as is the case with real life. The instructor now becomes a facilitator who scaffolds (in socio-cultural pedagogical terms) and "guide[s] them in the discovery of knowledge" (Bergmann & Sams, 2012, p. 6).

In 2014, FLN differentiated between the commonly interchanged terms, 'a Flipped Classroom' and 'Flipped Learning'. They suggested that these terms should not be used exchangeably. 'Flipping a class' may, but not definitely, result in flipped learning since instructors may already flip their classes by having students prepare for the course before the class time via asking them to read some texts, or watch some content-related videos before coming to class. However, in order to involve in flipped learning, FLN proposed the following four pillars of flipped learning for instructors who want to integrate flipped learning into their practice:

1. 'Flexible environment': Instructors design flexible learning spaces where learners are free to choose whenever and wherever they prefer to learn and be assessed. Additionally, flipped learning enables instructors to switch physical arrangement to adapt to tasks handled as either individual or group work in class sessions, which results in a variety of learning fashions in face-to-face sessions.
2. 'Learning culture': Contrary to the traditional lecture model, which places the teacher at the centre of instruction as the primary source of information, in flipped learning model, the centre of instruction is shifted towards learners by allocating in-class time to having learners internalize content in greater depth through active learning strategies. Consequently, learners participate in building knowledge as they are actively involved in the learning process in a more meaningful way.
3. 'Intentional content': In order to embrace learner-centred strategies to develop learners' 'conceptual understanding' and 'procedural fluency', instructors adopting flipped learning approach frequently deliberate on what to teach and through what materials and/or media to use as tools to provide active learning environments.
4. 'Professional educator': Contrary to popular belief that instructor is in the secondary role in class, in flipped learning strategy, professional instructors' role is more crucial than ever as they play an active role to provide instant feedback and assessment, following the just-in-time teaching methodology, and relying on learners' response on their learning. Thus, flipped learning educators are good observers of their learners and of their own teaching practice, mostly in professional connection with colleagues on how to handle flipped learning strategy, that is, they are reflective in their professional practice (FLN, 2014).

In 2018, with contributions from an international delegation of 100 flipped learning practitioners from over 49 countries, the academic body of FLGI, Academy of Active Learning Arts and Sciences (henceforth AALAS), announced a framework for 'the global standards', including certain benchmarks for flipped learning practitioners to reach and adopt the most current international best practices. The global standards are composed of 187 international best practices. Using the core AALAS Global Standards framework as a base, AALAS also introduced an interactive 'The Global Elements of Effective Flipped Learning Table (henceforth GEEFL)' to be used as a roadmap to flipped learning professional development, as shown below in Figure 19. GEEFL divides the AALAS Global Standards framework into 12 colour-coded families of best practices with unique symbols as is the case with the periodic table in chemistry in order to make global standards more user-friendly and actionable. Thus, GEEFL is proposed to build a common vocabulary, a tool for planning, troubleshooting when instruction goes wrong and self-assessment for professional development for flipped learning practitioners worldwide.

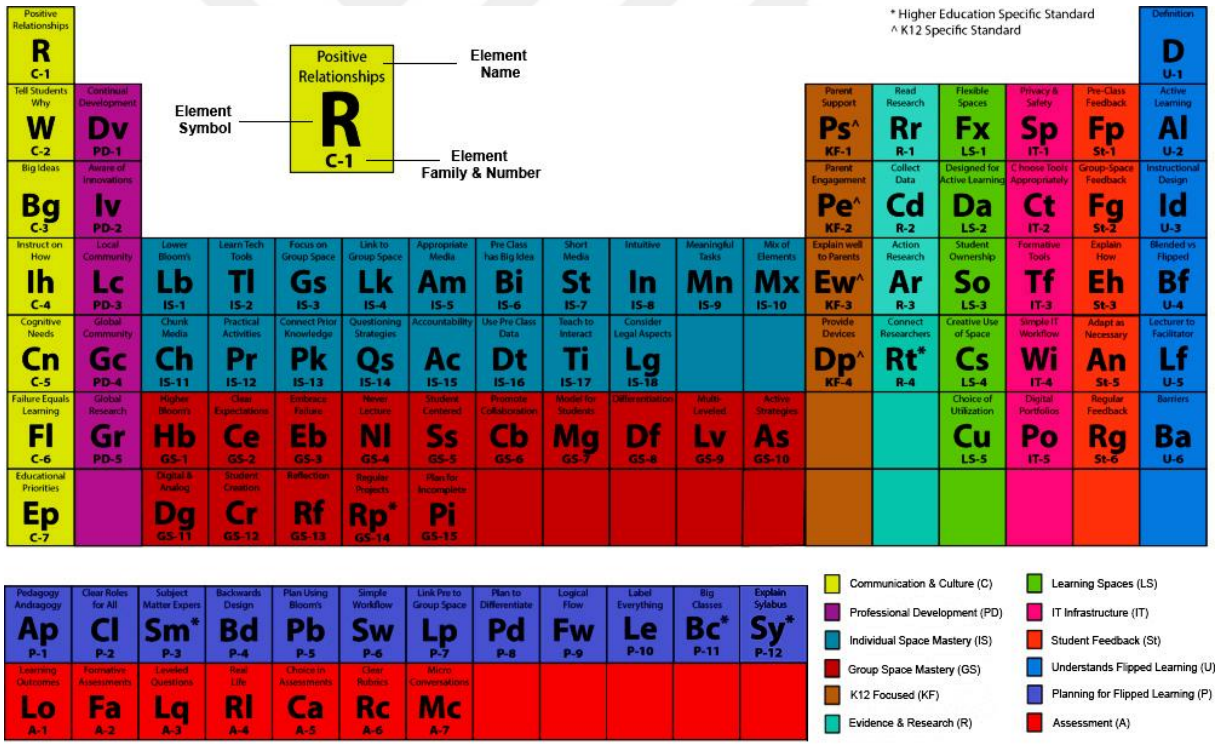

Figure 19. The global elements of effective flipped learning table ("GEEFL", n. d.).

The Design of a Flipped Learning Environment

In 2014, FLN had announced an earlier version of the modern definition of flipped learning:

> Flipped Learning is a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter ("Flipped Learning Network", 2014)

Even though FLGI later announced an updated definition of flipped learning by eliminating some pedagogical terms from the above definition generated by FLN (2014), to achieve a more universally understood definition, the two pedagogical terms, 'individual space' to refer to pre-class work, and 'group space' to talk about in-class work, which were first appeared in the initial definition, have been in use by many flipped learning practitioners in order to talk about the learning spaces of the flipped learning course design. Therefore, these two terms will be used in this dissertation to refer to the two fundamental portions of flipped classroom design and implementation for the following parts.

In flipped learning practice, the planning of the course relies on the backward design, which was offered as a framework for lesson planning by Grant Wiggins and Jay McTighe (1998, as cited in Bowen, 2017). The core idea of the framework is to consider the desired results for students in mind first while planning. When learners finish a course, the desired results are the knowledge and/or skills the instructors expect learners to be equipped with. Thus, according to the three fundamental stages of backward design; first, the instructors decide on the learning outcomes of the course; second, they consider the assessment methods to provide evidence of learners' mastering knowledge and their proficiency of skills; and finally, instructors consider how to teach the course content via various instructional techniques, tools and media. Therefore, as Bowen (1997) suggests backward design is an intentional approach to course design, which is compatible with one of the flipped learning principles, *'intentional content'*, and therefore, appropriate for flipped learning.

Following the backward design framework in mind, Kim, Kim, Khera and Getman, (2014, p. 44) suggest nine design disciplines, as seen in Figure 20 below, for the implementation of flipped learning, building upon four elements that are required for successful student-centred learning environment: teacher presence, learner presence, social presence and cognitive presence. This framework suggests that knowledge is built as a result of the collaboration of active learners and instructors especially in blended learning environments, as is the case with the flipped classroom. Keeping these four dimensions as the base and pursuing the related nine principles, practitioners of flipped learning may build their classes adding associated aspects to their course design accordingly.

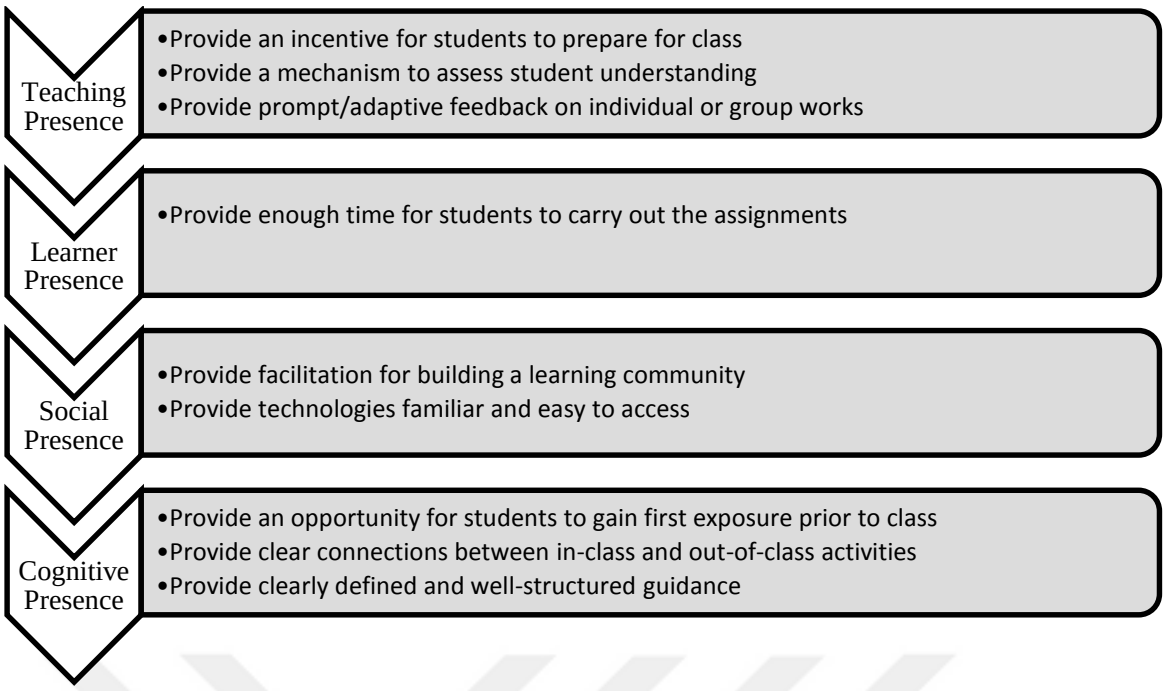

Figure 20. Nine design principles of the learner-centred flipped classrooms (Kim *et al.*, 2014, p. 44).

As abovementioned in the nine disciplines of designing a flipped course suggested by Kim *et al.* (2014), Brown (2018, p. 15) recommends reflecting on potential learners' readiness to study in the flipped learning model before starting flipping a course; this may be in terms of their transition in their roles from being a passive learner to an active learner; and their accessibility to the internet, related technology, and the course materials. Most importantly, Brown (2018) suggests that teaching learners to become active learners in a student-centred learning environment either in individual or in group space is the key issue to involve them into the flipped learning experience. In order to transform passive learners into those who take ownership of their learning by actively participating in each step of the flipped learning experience, Brown (2018) suggests the following:

> (1) build in options from which students can choose for assignments, assessments, etc. (2) include opportunities for them to seek out and contribute to course content, (3) design some activities around students presenting, to their workgroup and the whole class, about what they are learning (p. 15).

Having taken the basic principles of flipped learning course design into consideration, there are some common stages of implementation to be followed by practitioners. Relying on the existing literature on flipped learning course design, Erlinda (2018, p. 28) modifies the stages of implementing flipped learning in a class and proposes the following cycle of flipped learning implementation, as seen in Figure 21 below, which is the transfer of design disciplines into practical instructional actions:

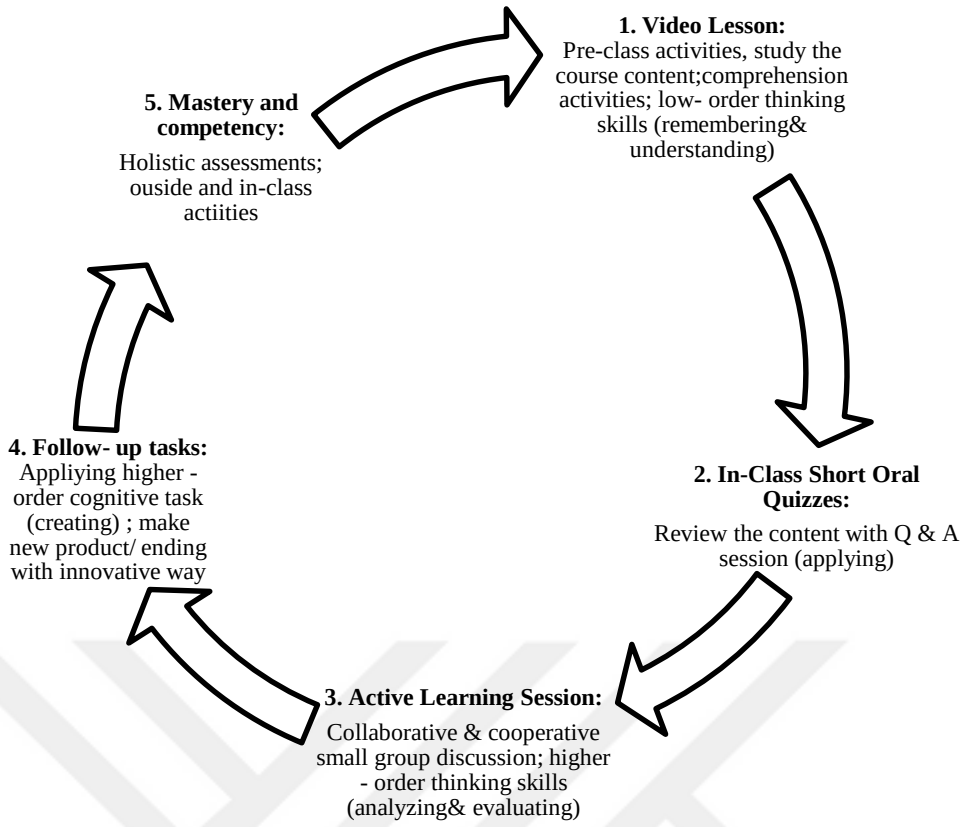

Figure 21. Cycle of flipped classroom implementation (Erlinda, 2018, p. 28).

These stages begin with preparing individual space activities, in which learners initially interact with the course content, most popularly, through screencast videos, videotaping the instructor while lecturing, and/or using YouTube and TeacherTube videos, which is ideally about 10 minutes long, or content-specific texts, such as discipline-specific websites of professional organizations if possible (Roehl, Reddy & Shannon, 2013, p. 47). Brown (2018, p. 16) suggests that learners appreciate instructor-made videos more, the creator of which they know from classroom every day; therefore, such teacher-created videos tend to be more efficient as learners establish a personal bond with them. Bergmann and Sams (2012, p. 106) also stress considering making an original video or an audio clip even if there may be some other options available online, as searching for appropriate sources of information may also be as time-consuming as creating one's own. Next, instructors share course content on an LMS and assign it to the learners. Cunningham (2016) suggests directing struggling and high-achieving students to study different pre-class materials; accordingly, the related activities in class can be also differentiated for such different learner profiles. In individual space, the key point is to make learners interact with the course material rather than only having them watch course videos or read texts passively. Therefore, instructors build in interactivity into online course content to make sure of learners' comprehension via having them summarize content, take Cornell's notes, etc., or take short online quizzes, results of which are generally sent to

the instructor through an LMS. The quizzes in individual space are meant to check the first two stages of Bloom's taxonomy, which are 'remembering' and 'understanding, in other words, the low-order thinking skills are aimed to be addressed to realize assessment for learning.

Secondly, in group space, instructors start the lesson by checking whether learners have any misconceptions on the course content through either having an in-class short online or oral quiz; responding learners' questions on specific parts of information, or an instructor-led whole-class discussion of the course content learners studied prior to the class, which refer to the third stage of Bloom's taxonomy, 'applying'.

Thirdly, active learning takes place in group space, where learners are encouraged to apply what they learned prior to the class into the practical experience through individual and/or collaborative tasks. The key here is to link foundational information in individual space with the activities in group space so that learners can perform more complicated tasks when they get involved in the active learning strategies in the group space. These strategies may include various combinations of active learning strategies, such as 'audience response, open questions, individual or paired quizzes, pair and share activities, and student presentations and discussion' as well as 'collaborative learning, cooperative learning, and problem-based learning, etc.' (Bishop & Verleger, 2013; DeLozier & Rhodes, 2016, p. 143). At this level, learners are engaged in higher-order thinking skills, 'analysing', and 'evaluating', and here by observing learners' knowledge transfer to practice, teachers conduct assessment as learning. As for the timing of the activities in a flipped class, Bergmann and Sams (2012, p. 15) point out that the class time is restructured in the flipped learning model. Learners generally ask for time to get answers to the questions they have about the content on the course video prior to the class time. Therefore, the beginning of the lesson is used for answering students' questions. Bergmann and Sams express that the question-answer sessions are very valuable to correct any misconceptions before their incorrect application in activities. By this means, the rest of the class time is spared for more active learning strategies, as seen in Table 2 below contrasting the time spared for the activities in class time of a typical flipped classroom and a traditional classroom:

Table 2. *Comparison of Class Time in Traditional versus Flipped (Bergmann & Sams, 2012, p. 15)*

Traditional Classroom		**Flipped Classroom**	
Activity	*Time*	*Activity*	*Time*
Warm-up activity	5 min.	Warm-up activity	5 min.
Go over previous night's homework	20 min.	Question & answer time on video	10 min.
Lecture new content	30-45 min.	Guided and independent practice and/or lab activity	75 min.
Guided and independent practice and/or lab activity	20-35 min.		

Cunningham (2016, p. 45) advises using the additional in-class time more thoughtfully. In a flipped class, especially the struggling students should be provided most of the teacher support, either individually or in small groups in group space as well as high-achievers who also need specific support to master their proficiencies.

Fourthly, if possible, a follow-up task is demanded. The learners are asked to review their peers' performance or work relying on the rubric that instructors supply, and then, what follows is the higher level 'creating' skill; that is, learners are asked to create new work or perform a skill individually or in groups, such as in the form of a longer-term project. At this point, Brown (2018, p. 19) strongly advises 'weaving together of in- and out-of-class activities' to achieve a well-structured flipped classroom, and by doing so, drawing the roadmap for learners to follow in their flipped learning experience. Therefore, for the next class session, learners will mentally get ready to link between the workflow.

Finally, mastery and competency are assessed. That is, on the one hand, instructors perform a continuous formative assessment throughout the academic year, and on the other hand, learners' performances on exams and on inside and outside the class tasks are evaluated. Here, teachers conduct assessment of learning. Similarly, Sakulprasertsri (2017, p.140) suggests designing both ongoing formative and summative assessments to assess learners' understanding and observe how learners form concepts while learning related to specific learning outcomes of the course. On the other hand, summative assessment is fundamental in terms of checking to what extent learners have learned the content knowledge or improved certain skills throughout the course.

The Impact of Flipped Learning Model on Higher Education

Flipped learning model in higher education has proved to have various benefits in the related literature. Fundamentally, these advantages are concerned with self-regulated learning;

differentiation in teaching; active learning; academic achievement and skill development; classroom interaction; professional development of instructors, and some administrative advantages, which will be mentioned below.

To begin with, well-designed pre-class tasks in flipped learning can lead learners to self-paced learning (Bergmann & Sams, 2012; Correa, 2015; Cunningham, 2016; Filiz & Benzet, 2018). Lo and Hwang (2018) remark that it is because learners have the opportunity to engage in learning by pausing and replaying the instructional videos to grasp the essence of the learning material as many times as they want depending on their need. Accordingly, if an online follow-up exercise is supplied to learners after watching instructional videos, learners are able to practice the new content as well as receiving instant computerized feedback on their understanding of the content, which will help them evaluate their own learning. As for teachers' side, they obtain necessary information on their students' learning the new content by checking their scores on the online platform, which will also help them design their in-class activities accordingly, such as discarding some elementary tasks the learners have already been proficient at or explaining common misconceptions (p. 444). Bergmann and Sams (2012, p. 23) suggest working with struggling students individually or in small groups in class in case of any difficulties they may have while learning the new content. As learners in a flipped classroom are given the freedom to interact with the pre-course content according to their own learning style, flipped learning directly promotes self-regulated learning (Aydemir, 2019; Fulton, 2012; O'Flaherty & Phillips, 2015; Sakulprasertsri, 2017; Shyr and Chen, 2018). In a flipped classroom, learners become more conscious of their own learning process since they have more time to reflect on their own learning in class, which should also be considered and given feedback by their teachers for assessing their learning (Roehl, *et al*., 2013, p. 47). Additionally, as learners are able to use course materials whenever and wherever they need, learner autonomy is empowered. The flexibility to choose among the activities in a teacher-curated video library helps learners to be independent of their teachers at certain times; and teachers can present different materials to different learner profiles depending on their level of proficiency (Cunningham, 2016, p. 49).

In addition to leading to self-regulated learning, other benefits of individual space learning activities have been mentioned in previous research: the instructional videos speak the language of today's students who grew up with the internet and digital resources, such as YouTube or social media, to reach knowledge (Bergmann & Sams, 2012); videos free up the in-class time to advance in deeper learning in class (Filiz & Benzet, 2018; Gilboy, Heinerichs & Pazzaglia, 2015); thanks to a readily-prepared archive of course content in instructional

videos, in a flipped classroom, student and teacher absences can be overcome; thus, courses can proceed as scheduled without any delays and absent students can work ahead for early compensation of their absences due to illness or any extracurricular activities (Alvarez, 2012; Bergmann & Sams, 2012; Cunningham, 2016; Roehl, *et al.* 2013).

The nature of group space learning in a flipped learning model leads to many other advantages in a flipped classroom. To begin with, flipped learning enables teachers to conduct activities for real differentiation (Correa, 2015; Cunningham, 2016; Filiz & Benzet, 2018; Gilboy *et al.*, 2015; Mehring, 2018). Bergmann and Sams (2012, p. 23) emphasize the availability of reaching specifically the struggling students and suggest that the only measure in assessing their learning is to look for whether or not they understand the key concepts of course content. By this way, such learners will learn the essential parts of a subject while not being confused by more advanced topics. As for students who grasp the content quickly, Bergmann and Sams (2012, p. 28) suggest asking such learners to prove their understanding of particular learning objectives so that the number of tasks they have to submit will be decreased, which will communicate learners that learning is appreciated rather than busywork. These students may be engaged in more advanced topics in less number of activities. Using the face-to-face time to walk around the room to support students along a wide range of abilities help teachers personalize the learning for all.

All in all, flipped learning allows efficient use of class time, which leads to active learning (Bishop & Verleger, 2013; Correa, 2015; Çevikbaş & Argün, 2017; Elmaadaway, 2017; Fulton, 2012; Karagöl & Esen, 2019**;** Lo & Hwang, 2018; McNally *et al*., 2017) Utilizing digital technologies that provide content delivery outside the class, more time is dedicated to active learning tasks based on constructivist theories; therefore, the in-class time is available for inquiry-based activities that engage learners in rich interaction in their learning processes (Çevikbaş & Argün, 2017, p. 195)**.** The active learning tasks performed in class increase retention of learning materials and allow for engaging in higher-order thinking skills, such as applying, analysing or creating (Correa, 2015). The active learners, who attend in higher-level critical thinking, task-based and interactive problem-solving activities and skill development by accessing peers and teachers' support at the same time, get engaged in deep learning of subject matter (Karagöl & Esen, 2019; Roehl *et al.* 2013; Wang, 2017).

Owing to all these gains mentioned above, flipped learning promotes learners' academic achievement and skill development as well (Zainuddin, Haruna, Li, Zhang & Chu, 2019). Within this scope, the research has mostly been conducted by comparing the academic performance of learners in a flipped classroom and a traditional classroom, and as a result,

students in flipped classroom achieved significantly higher test scores than the students in a traditional classroom in the related literature (Lee & Wallace, 2017; Lin & Hwang, 2018; Schwarzenberg, Navon, Nussbaum, Pérez-Sanagustín, & Caballero, 2017; Shyr & Chen, 2018; Thai, Wever & Valcke, 2017). It is because, through flipped learning, learners internalize the essence of concepts, improve their critical thinking skills, and follow their developments in their learning, which lead to achievement in academic knowledge and skill development (Çevikbaş & Argün, 2017, p. 195).

Moreover, flipped learning increases student-teacher interaction. The time obtained by removing content delivery from face-to-face sessions enables instructors to engage personally with their students; and thus, they gain insight into their students' learning (Correa, 2015; Filiz & Benzet, 2018; Lo & Hwang, 2018). As a result of the one-on-one interaction, struggling students who hesitate to ask questions in class take chances to receive teacher support during individual feedback sessions they have with their teacher (Roehl, *et al*., 2013, p. 47). Bergmann and Sams (2012, p. 25) emphasize that the minilectures held with struggling groups, who have difficulty in the same content, result in just-in-time instruction when learners feel exactly ready to learn. As a result, students learn better because teachers know their students better and build better relationships with them.

Furthermore, flipped learning reinforces peer interaction as students generally attend in-class activities through cooperative learning activities in a flipped classroom (Bergmann & Sams, 2012; Filiz & Benzet, 2018; Fulton, 2012; Lo & Hwang, 2018; Schwarzenberg *et al.*, 2017; Strayer, 2012; Wang, 2017). In such learning environments, learners improve the habit of working in a group and benefit from their peers in the learning process. Therefore, students see various alternative perspectives and problem-solving strategies (Bergmann & Sams, 2012). Additionally, as Wang (2017, p. 89) suggests, such peer interaction may be also built via preparing a rich source of online material and an online forum for sharing and interacting asynchronously through LMS systems. Along with facilitating individual content mastery, group activities can also promote leadership skills, teamwork, and social support among peers, all of which provide benefits not only to retain course content, but they also contribute to achievement in the prospective workforce (DeLozier & Rhodes, 2016, p. 148).

As well as encouraging learners to become active learners, flipped learning promotes teachers to become active facilitators (Çevikbaş & Argün, 2017; Elmaadaway, 2017; Sakulprasertsri, 2017). Teachers in flipped learning model renovate themselves by shifting their dominant roles in content delivery, and rather they become active facilitators who support learning and give learners their own responsibility to learn; therefore, flipped learning

contributes to teachers' professional development in that sense (Alvarez, 2012, p. 21; Fulton, 2012). Similarly, teachers in the flipped learning model not only facilitate students' learning, but they also challenge themselves with introducing technological and pedagogical innovations in class as well as conducting research to improve their professional development (Sakulprasertsri, 2017, p.140).

Aside from all the academic and social benefits, the flipped learning model also supplies administrative advantages, such as compensating for student and teacher absences (Alvarez, 2012); and reducing discipline problems. In a flipped learning atmosphere, as the teacher does not only stand and lecture, most of the problems related to classroom management disappear because students are no longer bored as everybody in the class participates in hands-on activities or works collaboratively, and thus, becomes willing to engage in their learning (Bergmann& Sams, 2012, p. 29).

Notwithstanding the benefits mentioned in previous research, some evidence has also suggested that flipped learning may also have some challenges for practitioners. To begin with, if not designed and implemented appropriately, it can lead to student frustration or excessive workload on them; therefore, the enormous time commitment is required to design a course for flipped learning. As Lo and Hwang (2018, p. 445) suggest, instructors' technological and pedagogical design proficiencies and course management skills will determine the efficiency of flipped learning. Especially, in case of a lack of pedagogical integrity between pre-class work and face-to-face activities, and if formative assessments are not linked with in- and out-of-class activities, learners are less likely to participate in either dimension of flipped learning (O'Flaherty & Phillips, 2015, p. 94). Thus, instructors should have sound knowledge on how to design and implement their flipped courses. To meet this need, instructors can also apply certain design principles or base their classroom design on some course design frameworks. Similarly, instructors may also hesitate to engage in the time-consuming and challenging tasks of preparing course videos and designing in-class active learning tasks while developing a flipped classroom (Roehl, *et al.*, 2013). Erlinda (2018, p. 26) suggests that such challenges will only take place in the first year of flipping, the existing archive of course videos can be used for the following years with an only small portion of modification. Similarly, collaboration with other teachers of the same discipline is profoundly recommended by the existing literature (Çevikbaş & Argün, 2017; Long, Cummins & Waugh, 2019) so that teachers can make use of shared lesson plans, course materials and readily available resources to overcome this challenge. Therefore, time invested

in designing a flipped classroom will be mitigated after the first experience for future implementations.

From the learners' point of view, increased workload inside and outside of the class, when compared to traditional routine of a passive learner, is a challenge for learners (Long, Logan & Waugh, 2016; McNally *et al.*, 2017; Zainuddin *et al.*, 2019). Therefore, learners can show some resistance to change due to established passive learning habits, and they may have some adoption problems as well. Thus, Long *et al.* (2019) suggest helping learners form flipped learning habits by teaching them some self-directed learning strategies. For instance, Chen, Wang, Kinshuk and Chen (2014, p. 26) propose to give rapid praises and instant feedback to learners' study efforts and/or after the completion of an assignment while they are at home, which may help them to develop such skills as they will feel that their efforts are appreciated. To deal with the issue of learners' adoption to flipped learning habits, Mehring (2018, p. 4) recommends that a gradual transformation from passive to active learner profile should be taken into consideration. To do so, the pre-class assignments or activities in class have to be less in the level of difficulty or number for the first time, and then the number and level of difficulty may be increased slowly, taking into consideration of learners' progress. In case learners do not come to class having done the pre-class work or are reluctant to participate in activities in class, Mehring (2018) also suggests assigning online discussions or surveys in order to determine which students are not doing the pre-class work. Similarly, as pre-class work is used as a foundation for face-to-face activities in class, the instructors should avoid reviewing the course content in class so that learners feel obliged to study pre-class work in order to attend activities in class without prior exposure. Similarly, Long *et al.* (2019) propose that the problem of learners' lack of pre-class learning may be solved by dedicating the beginning of in-class time to refer to pre-class work via question and answer sessions or clicker quizzes so that learners get engaged in group space active learning activities. Finally, as for economically or technically deprived learners who have no or limited individual access to internet technologies, or for contexts where specific technological infrastructure is not efficient, learning in a flipped class seems to be a challenge as well (Akçayır & Akçayır**,** 2018; Çevikbaş & Argün, 2017; Roehl, et al, 2013). To overcome such difficulties, Bergmann and Sams (2012, p. 98) suggest sharing course content via flash drives for those who have computers but do not have an internet connection at home while for learners who have neither a computer nor an internet connection at home they advise to share content videos on school or university campus district server so that learners will be able to interact with course content whenever they want and wherever they are. Similarly, in contexts where educational institutions are not capable to provide either internet connection or

computer lab, Bergmann and Sams (2012, p. 97) recommend applying for grants to supply necessary infrastructure in order to prevent a digital divide among students.

Studies related to teaching EGP and ESP in the flipped learning model in EFL higher education context.

The implementation of flipped learning in EGP research conducted at tertiary level, which is the scope of the dissertation has been growing rapidly, and so far flipped learning in ELT context involves some certain areas of research interests, including teaching grammar via flipped learning (e.g. Abu Bakar, Abidin, Ali, Isa & Sahar, 2018; Kang, 2015; Li, H.- M. Wang, D.- G. Wang & Jia, 2017; Meléndez & Iza, 2017; Özkurkudis & Bümen, 2019; Pudin, 2017; Webb & Doman, 2016), teaching vocabulary via flipped learning (e.g. Alnuhayt, 2018; Suranakkharin, 2017; Zhang, Li, Jiao, Ma, & Guan, 2016), teaching EFL learners listening and speaking skills in a flipped classroom (e.g. Amiryousefi, 2019; Ahmad, 2016; deBoer, 2018; Haghighi, Jafarigohar, Khoshsima & Vahdany, 2018; Hung, 2017b; Jafarigohar, Haghighi, Khoshsima & Vahdany, 2019; Leis, 2016; Li & Suwanthep, 2017; Lin & Hwang, 2018; Quyen & Loi, 2018; Teng, 2018; Wang, & Liu, 2018; Wu, Chen Hsieh & Yang, 2017; Zhang, Du, Yuan, & Zhang, 2016; Zuo, 2016), teaching writing in a flipped class (e.g. Ahmed, 2016; Basal, 2015; Buitrago & Díaz, 2018; Elfatah & Ahmed, 2016; Engin, 2014; Engin & Donanci, 2014; Fauzan, & Ngabut, 2018; Güvenç, 2018; Jehma, 2016; Leis, 2015; Leis & Brown, 2018; Leis, Cooke & Tohei, 2015; Norazmi, Dwee, Suzilla & Nurzarina, 2017; Soltanpour & Valizadeh, 2018), teaching reading in a flipped class (e.g. Abaeian & Samadi, 2016; Brown, 2018; Chavangklang & Suppasetseree, 2018; Graney, 2018; Karimi & Hamzavi, 2017; Mo & Mao, 2017) teaching integrated skills (e.g. Bauer- Ramazani, Graney, Marshall, & Sabieh, 2016; Boyraz & Ocak, 2017; Choe & Seong, 2016; Doman & Webb, 2016; Evseeva & Solozhenko, 2015; Guy & Marquis, 2016; Hung, 2017a; Lee & Wallace, 2018; McKeown, 2016; Mehring, 2015; Nguyen, 2018; Öznacar, Köprülü & Çağlar, 2019; Sözler, 2018; Sun, 2017; Wagner-Loera, 2018; Webb, Doman & Pusey, 2014; Zainuddin, 2017), technological tools and applications to use in flipped EFL/ESL classes (e.g. Asri & Rochmawati, 2016; ElDeen & El- Sawy, 2018; Kostka & Brinks Lockwood, 2015; Lee, Nakamura & Sadler, 2016; Mehring, 2016; Shannon-Chastain & Fell Kurban, 2016; Zainuddin, Habiburrahim, Muluk & Keumala, 2019), effective teaching and learning strategies to use in flipped EFL classes (e.g. Khalil & Fahim, 2017; Patterson, 2018; Prabawanti, Sumardi, Supriyadi & Fauzi, 2019), and the influence of flipped learning approach on learner autonomy and motivation to learn (e.g. Alsowat, 2016; Chuang, Weng & Chen, 2018; Han, 2015; Homma, 2015; Santikarn & Wichadee, 2018; Suo & Hou, 2017; Zainuddin & Perera, 2019). Relying on the empirical studies on teaching EGP at tertiary level

in EFL context, it is seen that flipped learning is practised mostly in integrated skills, followed by speaking, writing, and grammar classrooms, which is consistent with the previous reviews surveyed EFL research in flipped learning model (e.g. Filiz & Benzet, 2018, p. 78; Turan & Akdag- Cimen, 2019, p. 9).

Analyzing the existing literature on empirical ESP research conducted in flipped learning approach, it is observed that related research is scarce when compared to those related to EGP, and there is not even an example of empirical research on a flipped ESP course for pharmacy undergraduate students in the literature, which is the scope of the dissertation. However, the existing research is still functional for ESP practitioners who desire to handle an ESP course for their unique learning environments due to the linguistic approach handled from ESP perspective. The ESP literature on the flipped learning includes a flipped academic writing course for freshman science students (Kirk & Casenove, 2015); an advanced EAP writing course for tertiary level students (Pavanelli, 2018); a discussion on using flipped learning to teach EAP (Soliman, 2016); a flipped content-based EAP course for international freshmen at a university in U.S (Han, 2018); a clicker-aided flipped writing class for undergraduate students majoring in business English (Zhonggen & Guifang, 2016); a flipped ESP course for teaching Business English to the students majoring in Economics (Karapetian, 2020); a flipped contextual game-based writing course for undergraduate business students (Lin, Hwang, Fu, & Chen, 2018), the application of flipped classroom to an undergraduate Business English course (Zhang, 2015); a flipped writing course for junior business majors (Tri &Trang, 2019) ; a flipped ESP course for students of banking and finance (Nhat, Lee & Dung, 2019); a flipped functional writing course for developing the higher-order skills of junior business majors (Salem, 2018); a semi-experimental study conducted at an English for engineering course for sophomore students from various majors in engineering (Kvashnina & Martynko, 2016); application of flipped classroom in medical oral English teaching with sophomore medical students (Li& Zhang, 2016); a flipped preparation course for TOEIC test with junior students (Lee, 2017); a content- based ESL course for Japanese sociology students in a preparatory class (Oki, 2016); using flipped class approach to teach sophomore students environmental sciences English (Rudneva & Valeeva, 2017); a discussion on the medical English teaching based on flipped learning (Liu, 2017); a suggestion of a flipped ESP course for teaching medical English (Yang, 2019); a semi- flipped ESP course with freshman cultural tourism students (Păcurar, 2018); a flipped ESP course to increase intercultural communicative competence of master's degree students majoring in international tourism (Bahlai, Machynska, Matviiv-Lozynska, Senkovych & Voloshyn, 2019); designing and implementing an online tourism English teaching platform for tourism practitioners and

university students majoring in tourism (Duan & Chen, 2019); flipping an ESP sports course for sophomore student-athletes from various sports branches (Kang, 2018); a business English course for junior students conducted with flipped learning approach and project-based learning (Nickerson, 2018); a flipped ESP course for 'specialized texts annotation and abstracting' conducted with first-year ecology master's students (Pavlova, Valeeva, Rudneva & Nigmatzyanova, 2019), and designing a flipped class ESP supplementary online material for students of accounting (Nghi, 2014).

Relying on the previous research on EFL flipped learning, some certain characteristics are observed. To begin with, as for teaching language skills, flipped learning is considered to provide EFL teachers with many advantages. For instance, Temizyurek and Ünlü (2015) suggest teaching grammar via online tools outside the classroom so that EFL teachers can use in-class time to carry out communicative activities more, which is also in parallel with other studies (e.g.Nguyen, 2018; Webb & Doman, 2016). For instance, Correa (2015, p. 120) suggests doing mechanical drills in individual learning space after the exposure to grammatical structures via instructional videos; and thus, class time is devoted to interpreting meaning through meaningful activities, and in this way, what is learned at home is practised in group learning space. As for teaching vocabulary in a flipped class, Suranakkharin (2017) declares that in a flipped classroom, learners' collocation learning outcomes remarkably improved, as is the case with other studies conducted in flipped vocabulary instruction (e.g. Alnuhayt, 2018; Zhang, Li, Jiao, Ma, & Guan, 2016). Additionally, Cunningham (2016, p. 46) remarks that online video lessons in flipped learning are specifically efficient for low-achievers, who probably feel anxious when they cannot use appropriate grammar, vocabulary or use of certain genres in communicative or productive activities in class. Through such lecture videos that are suitable for focus-on-form instruction, it may be very useful for low-achieving learners to catch up with their high-achieving peers. Besides, flipped classroom makes it possible to use authentic content for reading and listening, such as podcasts, in pre-class work so that learners find extra opportunity to be exposed to linguistic input outside the class as well (Cunningham, 2016, p. 52). Then, flipped learning takes language learning further by engaging students in learning materials before class and continuing mentoring through higher cognitive level in-class tasks in which authentic use of language is possible (Mehring, 2016, p. 9). As well as using authentic language in class, holding content-based activities, as is the case with ESP teaching, facilitates learners to expand their real-world knowledge and specific uses of language in task-based activities in class (Sakulprasertsri, 2017, p. 139).

As for practising the speaking skill in an EFL flipped class, Hung (2017b) found out that flipped learning integrated with peer instruction and student response system provides an interactive learning environment that enhances learners' willingness to communicate, which improves their speaking skill. Similarly, Lin and Hwang (2018) implemented an online community-based flipped classroom using Facebook as the platform for interactions among peers, and as a result, flipped learning environment is proved to facilitate learners' pre-class learning participation and preparation, and to improve their in-class speaking performance. Flipped learning pre-class session may enhance learners' readiness to attend speaking activities in a class by providing authentic listening prompts to start conversations in class or some pronunciation drills to improve the articulation of language. Additionally, flipped learning makes it possible to practice English via several active learning tasks, such as role-plays, simulations, games, discussion, and presentation (Sakulprasertsri, 2017, p. 139). As a result, learners participate more in the learning atmosphere as active learners (Hung, 2015, 2017; Lee & Wallace, 2018). Accordingly, flipped learning also had a significant impact on EFL listening skill; for instance in Ahmad's study (2016), learners listened to pre-class videos to gain a background content to attend in classroom discussions since flipped videos provided learners with native speaker speeches. In another study conducted by Leis (2016), learners' listening skill proficiency increased in a flipped class due to the high number of chances to listen to English in videos provided in individual space. As is the case with Ahmad's (2016) study, the learners' self-confidence in listening contributed to their attendance at in-class speaking tasks.

As for teaching reading in a flipped classroom, Chavangklang and Suppasetseree (2018) conducted a flipped cooperative classroom model in their studies, and they found out that flipped learning enhanced learners' reading comprehension as well as the learning culture of the class. Similarly, in Karimi and Hamzavi's (2017) study, learners' reading comprehension improved as a result of learning in individual space via videos and reflecting on what they read and attending related discussions in class. Practising writing skill in an EAP flipped classroom, Pavanelli (2018) claimed that flipped learning facilitated learners' composition skills as they could receive constructive feedback from their teacher in class sessions. Similarly, Engin and Donanci (2014) stated that the video input their learners received before class freed the class time for practising writing in class through question-answer sessions in student-teacher interaction.

As for other benefits of flipped learning in EFL context, the related studies confirmed the efficiency of flipped learning in EFL settings. To illustrate, flipped learning model boosts

EFL learners' proficiency and academic achievement in English (e.g. Basal, 2015; Engin, 2014; Evseeva & Solozhenko, 2015; Hung, 2015; Hung, 2017a; Lee & Wallace, 2018; Sözler, 2018). In addition, flipped learning gives learners more time to internalize knowledge before applying it, and thus, it encourages deeper thinking (e.g. Boyraz & Ocak; 2017; Choe & Seong, 2016; McKeown, 2016; Sun, 2017; Zainuddin, 2017).

Flipped learning also promotes the learner characteristics related to autonomy, motivation, positive attitudes towards learning (e.g. Boyraz & Ocak; 2017; Güvenç, 2015; Han, 2015; Kvashnina & Martynko, 2016; Nguyen, 2018; Santikarn & Wichadee, 2018; Zainuddin, 2017), active participation in the learning process (e.g. Evseeva & Solozhenko, 2015; Hung, 2017a; Lee & Wallace, 2018; Mehring, 2015), and viewing teacher as a guide rather than the ultimate source of knowledge (e.g. Doman & Webb, 2016; McKeown, 2016). Instead of being transmitted the sources of information passively, learners can reach course content at any place and at any time via an LMS in a flipped class, which helps them take ownership of their learning (e.g. Öznacar, Köprülü & Çağlar, 2019). Accordingly, most of the participants in EFL flipped learning research held positive perceptions and displayed positive attitudes towards flipped learning (e.g. Choe & Seong, 2016; Hung, 2015; Webb & Doman, 2019).

Additionally, flipped learning is proved to promote student-student and teacher-student interaction as well (e.g. Choe & Seong, 2016; Cunningham, 2016; Mehring, 2015; Nguyen, 2018; Webb, Doman & Pusey, 2014; Zainuddin, 2017). Similarly, in flipped learning, instructors are also able to collect data on individual student progress, relying on the online work done before class and from formative assessments during class time, which helps instructors to gather knowledge on their learners' needs, learning styles, individual difficulties to learn so that they can adapt their instruction for in- and out-of-class sessions either individually, in small groups or as a whole class (e.g. Hung, 2017a; McKeown, 2016; Zainuddin, 2017). In addition, Cunningham (2016) remarks that it is possible to include other kinds of interactions in a flipped class, 'with virtual or physical' proficient speakers of the target language as guests, or via using social media that allows oral or written communication among other social media users (p. 54).

On the other hand, the related literature declared some certain challenges of the flipped learning model in EFL settings as well. For instance, Doman and Webb (2016, p. 130) stated that the students, as well as the teachers, struggled with various modes of technology use especially at the first phases of their study, which is also in parallel with other study results (e.g. Boyraz & Ocak; 2017; Webb, Doman & Pusey, 2014). Similarly, some learners

find student workload and allocated time for pre-class preparation in a flipped learning model as a burden (e.g. Mehring, 2015; Nguyen, 2018; Sun, 2017). Additionally, some learners may resist the flipped learning model and view teacher-led instruction superior to the online component of flipped class due to their past rigid learning habits (Webb, Doman & Pusey, 2014). In such situations, as mentioned earlier, the related literature suggests helping learners adopt active learner habits through self-directed learning strategies, such as giving prompt feedback on their submissions, and compliments upon their accomplishment, etc.; gradually switching to flipped learning model beginning with a small number of pre-class work and less challenging in-class work; and sharing course content via flash drives or on university district server at the campus, etc. for those who have limited access to basic technology (Bergmann and Sams, 2012; Chen, Wang, Kinshuk & Chen, 2014; Long *et al*., 2019; Mehring, 2018). As Erlinda (2018) emphasizes, the first year of the flipped classroom may be challenging to figure out how to design instructional videos and in-class activities. However, in the following years, the first year will serve as a foundation and some certain changes can be made if necessary within the scope of course content as is the case with learners who adapt to active learner responsibilities in- and out-of-the class each day of a flipped classroom routine. All in all, the time and effort invested in the flipped learning environment will be mitigated after the first experience.

Finally, in Turkey's context, flipped learning strategy has been studied in several EFL master and doctorate theses. Within the scope of the present dissertation, the following are the studies on teaching English in the flipped learning model in the higher education setting. To begin with, in his doctoral dissertation, Ekmekçi (2014) implemented a one-semester-long flipped writing course for ELT prep class in a school of foreign languages. The study was mixed-methods research: the quantitative model was in a quasi-experimental design with while the qualitative dimension of this study was composed of using semi-structured interviews to collect data on the efficiency of flipped writing classroom model and the attitudes of the learners in the experimental group towards flipped learning. The findings of the study revealed that the learners in the flipped classroom outperformed the learners in the traditional classroom regarding their writing performances. Similarly, most of the learners held a positive attitude towards the flipped writing model as well. As a result, Ekmekçi (2014) claimed that flipped writing class model is more efficient to teach and practice writing skill than the traditional lecture-based writing instruction.

In another doctoral dissertation conducted by Çetin-Köroğlu (2015), the effects of flipped learning on first-year pre-service English teachers' speaking skills development were

investigated in an eight-week-long period. The study had a mixed-method research design: the quantitative data were collected through a quasi-experimental method by administering pre-tests and post-tests to both experimental and control group while the qualitative data were gathered via individual student interviews and learners' weekly response papers which were administered to students in the experimental group at the end of the treatment process. The findings of the research indicated that when compared to the students in the control group, experimental group students experienced significant development in terms of fluency, coherence, lexical resource, grammar, and pronunciation skills. Additionally, learners in the experimental group had positive attitudes towards speaking syllabus based on flipped learning at the end of eight weeks treatment process.

Aydemir (2019), in her doctoral dissertation, conducted a mixed-methods quasi-experimental study in order to search for the impact of flipped learning on pre-service English teachers' reading and writing achievement and whether or not flipped learning has any impact on the classroom interaction and self-regulated learning of the learners in a one-semester-long period. The data of the study were collected through a learning experience questionnaire, pre-post-tests of advanced reading and writing and the self-regulated learning scale, focus group interviews, instructor reflective journals, and observation field notes. The findings of the study demonstrated that flipped learning led to better writing achievement, whereas no significant difference was found on reading achievement and self-regulated learning between groups. In terms of the perceptions of the participants, the findings of the study also showed that the implementation of flipped learning was beneficial for reading and writing achievement, self-regulated learning, and classroom interaction.

In his master thesis, Özkal (2019) conducted a study in a sequential explanatory mixed-method design in order to teach vocabulary to pre-intermediate EFL students attending a private language institution in two different semesters for four weeks each. The quantitative data were collected through a self-efficacy scale, a flipped learning attitude scale, and pre-and post-tests while the qualitative data were obtained from two primary sources: individual interviews and weekly reflection reports. The findings of the study revealed that the flipped class substantially outperformed the traditional class, besides, the participants in the flipped class showed a positive attitude towards flipped learning and they appreciated vocabulary instruction in the flipped learning environment.

In another master thesis, Tulay (2019) explored the perceptions of students towards flipped learning in an English preparatory program at a university. The study was held in a mixed-method research design, and the data were collected through a flipped learning

questionnaire, a pre-course and post-course digital literacy questionnaire, achievement tests, semi-structured interviews, and a teacher journal. The findings of the study demonstrated that flipped learning promoted learners' grammatical knowledge, and induced engagement and interaction via the teacher's scaffolding in class. It was also found out that learners' digital literacy skills were also improved.

In addition to the theses mentioned above, flipped learning has been studied in various master and doctorate studies in Turkey's higher education context, and involved some certain areas of research interests, including the effects of flipped learning on academic success and durability of knowledge of students in an English preparatory class (Boyraz, 2014); the effect of flipped learning on students' grammatical knowledge and their attitudes towards flipped English preparatory class (Sağlam, 2016); the influences of flipped learning on preparatory class learners' performances and their perceptions towards studying in a flipped class (Çalışkan, 2016); the effects of flipped learning on pre-service English teachers' foreign language classroom anxiety and foreign language reading anxiety (Gök, 2016); different modalities of videos in a flipped classroom for EFL writing classes (Umutlu, 2016); the effects of flipped learning on pre-service teachers' autonomy (Çibik, 2017); the perceptions of learners in an English preparatory class towards English writing skills development in a flipped class environment (Tuna, 2017); the impact of flipped learning on academic achievement of pre-service teachers of English (Öztürk, 2018); the efficiency of flipped learning on teaching grammar to learners at a vocational school (Bulut, 2018); the perceptions of pre-service English teachers towards flipped learning (Akçor, 2018); a new instructional model for B1 level grammar classes in a school of foreign languages and learners' attitudes toward it (Karakurt, 2018); the effects of flipped learning on learners' performance and their attitudes towards flipped learning in a vocational school (Çavdar, 2018); the effects of flipped learning on students' development of self-regulated learning skills in an English flipped classroom in a vocational school (Öztürk, 2018); the impact of flipped learning on English preparatory class learners' academic achievement, attitudes and self-efficacy beliefs (İyitoğlu, 2018); the influences of flipped learning on learners' achievement and perceptions in terms of writing skills in a flipped classroom environment at the department of English language and literature (Gürlüyer, 2019); and the effects of flipped learning-supported critical thinking instruction on the critical disposition and L2 writing skills in a school of foreign languages (Alpat, 2019).

As it is seen from the related literature, concerning the scope of the dissertation, there are not any studies on teaching ESP, specifically English for pharmaceutical purposes, in a

flipped learning environment in tertiary level education in Turkey. Therefore, the present dissertation is the first attempt to design and implement an ESP course for pharmaceutical purposes in a flipped learning atmosphere in a higher education setting in Turkey. It is hoped that the dissertation will satisfy the existing need in the higher education sector by providing an ESP syllabus for pharmacy students at university; and an example of an action research process on designing and implementing an ESP flipped course at tertiary level setting. In the following chapter, in order to serve for the purpose of the current dissertation, the methodology behind the study will be elaborated with justifications to the rationale of the doctoral thesis.

CHAPTER THREE

Methodology

In this chapter, relying on the qualitative research paradigm, the rationale behind the research design, the features of the participants and the setting, the data collection and analysis procedures with detailed explanations on the design of data collection tools, the ethical considerations, the issues to achieve trustworthiness in these processes and the limitations of the study will be presented in fine detail.

Research Paradigms in Educational Research

A research paradigm is defined as a basic *set of beliefs or world view* that guides an investigation (Guba & Lincoln, 1994, p.107). In other words, this worldview is the researcher's perspective, stance or school of thought to interpret the research data. As Kivunja and Kuyini (2017, p. 26) suggest, a paradigm is *a conceptual lens* and *philosophical orientation* the researcher uses in deciding methodological aspects of their research, and in interpreting the research data in a particular discipline. Therefore, the paradigmatic stance of research is a strong determinant of research design as the mirror of a particular researcher's philosophy in dealing with the research issues. According to Guba and Lincoln (1994, p. 108), the basic philosophical beliefs behind inquiry paradigms can be characterized by the responses to the three interwoven questions of ontology, epistemology and methodology of a specific research study as in the following. Firstly, ontology deals with "*what constitutes reality?"*. Here, researchers have to be clear about their perceptions on *how things really are and work* in order to call them a reality. As for epistemology, it is concerned with the question of *"what is the nature of the relationship between the would-be-knower and what can be known?"*. Scotland (2012) states that researchers need to decide on their views about how knowledge can be created, acquired and communicated. The answers to these two fundamental questions determine the last methodological question of *"how can the inquirer go about finding out whatever they believe can be known?"* Here, researchers deal with why, what, from where, when and how data are collected and analysed (Scotland, 2012). As Grix (2004, p. 64) mentions, it is the researchers' differing ontological, epistemological and methodological stances that lead to different research approaches towards the same phenomenon. Therefore, taking all these perspectives in mind, a researcher tends to apply a particular research design relying on their choice of a specific paradigm.

In educational research, there are three fundamental paradigms with different approaches to these issues. Firstly, in *the positivist paradigm*, we see the ontological perspective is naive realism; that is, an external reality exists in the universe, and its epistemology is objectivist in that only a value-free researcher is said to study this reality and the aim of a study is to reach generalizable knowledge by covering laws, of which findings are validated by measurement (Coghlan & Brannick, 2005, p. 5). From this stance, the positivist methodology is an experimental/manipulative one that focuses on the verification of hypotheses set by the researcher (Guba & Lincoln, 1994, p. 111). That is to say, in positivist methodology, the research involves the manipulation of an independent variable to see whether changes in that variable lead to changes in a dependent variable. This methodology is applied in contexts where researchers can control what happens to variables, and it is used for rejecting and/or accepting hypotheses set earlier by researchers to generalize findings for larger populations (Kivunja & Kuyini, 2017, p. 31). However, in educational contexts, the positivist view is not appropriate as context often limits this methodology, and isolating variables is almost impossible because many contextual variables may not be taken into consideration by the treatments in a study (Scotland, 2012, p. 11). Additionally, empirical generalizations lack participants' perspectives to understand their intentions behind their actions. Finally, as Melrose (1996, p. 42) suggests it is impossible to find "an objectively correct answer" for each particular educational research question.

Contrary to the positivist view, the relativist ontology and the subjectivist epistemology of *the interpretive paradigm* argue that there are multiple realities of individuals that are socially constructed through interactions between the researcher and the participants of the research and among the research participants themselves (Kivunja & Kuyini, 2017, p. 33). Here the emphasis is on listening to the individuals and interpreting the world around them from their perspectives (Bogdan & Biklen, 2007, p. 25). Coghlan and Brannick (2005, p. 6) contend that as the researcher is an integral part of the research process in human interactions with the participants, this insider look to the data inherently provides rich and deep data gathered in the nature of the social world. Relying on these assumptions, the naturalist methodology of the interpretive paradigm gathers data with the researcher as a participant-observer, trying to understand individuals' perspectives in interactions with them in natural contexts (Scotland, 2012, p.12). However, even if the interpretive paradigm suggests rich data to understand a phenomenon, it has limited transferability to educational contexts because the methodology does not offer practical ways to improve the teaching and learning processes through satisfying suggestions for educational policy and practice (Uztosun, 2013, p. 64).

Unlike the positivist and interpretive paradigm that do not serve effectively the aim of fostering educational systems and social norms (Melrose, 1996, p. 43), the *critical paradigm* is preferred as a search for "human emancipation to liberate a human being from the circumstances that enslave them" as defined by Horkheimer (1982, p. 244, cited in Asghar, 2013, p. 3123), one of the leading figures of the Frankfurt School and founders of the Critical Theory. In other words, as Cohen, Manion and Morrison (2007, p. 26) assert, the aim in critical research is not just to understand social phenomena but to change them; as for educational settings, research studies are realized to provide onsite solutions to problematic situations and to improve the learning conditions for learners in action rather than just describing the situations.

Conceptual framework: The critical paradigm.

The underlying ontological tenet behind the critical paradigm is historical realism that suggests reality is shaped by different social constructs, such as politics, ethnicity, gender, and culture, etc. (Scotland, 2012, p. 13). Accordingly, Cohen *et al.* (2007, p. 27) explain the subjectivism in critical epistemology as "what counts as knowledge is determined by the social and positional power of the advocates of that knowledge"; that is to say, knowledge is thought to be socially constructed under the influence of power dynamics within a society. Therefore, in the critical paradigm, reality and the essence of knowledge are believed to be stratified and create unequal conditions for those powerless and/or voiceless segments within the pre-existing system of a society, and research interests are influenced by such issues. Thus, this worldview judges reality, and reality is thought to be changed by human action (Scotland, 2012). In contrast to the positivist paradigm, the critical paradigm is concerned with challenging the status quo and struggling for a more democratic society in terms of power relations within the society (Ashgar, 2013). Therefore, the critical paradigm places its research in social justice issues to change political, economic or social injustices within the society and to improve the social institutions in that sense (Kivunja & Kuyini, 2017, p. 35). Echoing Horkheimer's definition above about critical paradigm, Bohman (2013) suggests three criteria for a search to be realized under critical paradigm:

i. it must be explanatory on what is wrong with the current social reality,
ii. it must identify the actors and the action plan to change it,
iii. it must provide achievable practical goals for social transformation.

From this point of view, it is understood that critical paradigm is concerned with not only understanding and explaining social reality but also changing and developing it with the participation of all parties concerned (Smith, 1993, p.77). As Merriam (2013) points out

critical research in education criticizes cultural and institutional contexts and larger segments of society influencing learning environments. The questions asked are around how power dynamics affect some contexts, educational programs, and who has the rights to change educational systems and access to knowledge while some others do not. In critical methodology, participants and researchers are both responsible for critically analysing what is wrong and recreating knowledge of what has to be; that is, participants are involved in research processes to serve for the aim of transformation in their own contexts. Here Guba and Lincoln's (1994) vision is remarkable in that "[the dialogic relationship between the investigator and the participants] must be dialectical in nature to transform ignorance and misapprehension… into more informed consciousness", which is done in collective action leading to the emancipation of those from oppressive social structures. In order to achieve the emancipatory target in educational contexts, critical researchers empower practitioners who are disadvantageous in their contexts based on any bias as well as giving voice to students to receive education in the way they desire rather than top-down standardization of any teaching and learning environment (Asghar, 2013, p. 3124).

Considering the philosophical tenets of the three major research paradigms, the current thesis can be considered to be designed within the critical paradigm. The study aims at suggesting a flipped EAPP syllabus for students of pharmacy in collaboration with learners, faculty members and instructors of English in decision-making processes. First of all, the ontological stance of the study is on that reality consists of perceived realities of people in a particular context (Melrose, 1996, p. 44); therefore, here the reality is viewed from the points of learners, faculty members and instructors of English (including the researcher herself as the teacher of the course). The historical reality is composed of problems derived from learners' background knowledge of pharmacy content, English language proficiency, and learning habits in occupational English courses that hinder their language learning in pharmacy content. Relying on the subjectivist epistemology of the critical perspective, giving a voice to these learners on syllabus design is hoped to remove the unfair condition of students' having no say to take course content in the way they prefer. As the critical view sees, the reality is changed by human action, with the collaboration of the researcher and the participants, it is hoped to reach a collective understanding of the transformation of current learning environment into a flipped EAPP course, taking learners' and other stakeholders' views into account. To sum up, echoing the three criteria Bohman (2013) suggests above for research to be conceived within the critical paradigm; this dissertation is aimed at

i. explaining what is wrong with the current reality of ESP courses at pharmacy faculties,
ii. identifying the action plan to change it,
iii. providing achievable practical goals for a flipped EAPP syllabus design.

As Melrose (1996, p. 43) observes, a critical practitioner is a reflective researcher who redevelops their personal theories cyclically by putting them into practice. That means a reflection on and in action occurs on an ongoing basis in order to improve the practice. In educational contexts, Bawden (1991, cited in Melrose, 1996, p. 44) notes that the learning and research link of the critical paradigm is situated in educational action research. As McNiff, Lomax and Whitehead (1996, p. 38) suggest, action research provokes reflective thinking so that we become consistent with our idealized values in our actual actions taken in professional, personal, and social lives. Researchers may not fully solve the issues they have problems with; however, taking a few steps forward is possible via the reflective practice of action research. With each cycle taken as a step toward the ideal, researchers come closer to the overall aim of improving the quality of their work. Therefore, as the teacher who conducts research to enhance EAPP learning with the flipped learning approach at the faculty of pharmacy in her own institution, the researcher intends to collaboratively change and develop the learning environment through action research.

Research Design: Action Research

As Güler, Halıcıoğlu and Taşğın (2013, p. 259) observe, action research can be defined as research that requires 'active participation' of stakeholders that conduct research and generate solutions on how parties can mend and reform problematic situations in practice, and 'put their suggestions into practice' with 'reflective thinking' and evaluation of actions afterwards. Differently from positivist and interpretive approaches, action research does not only focus on understanding a social phenomenon, but it also aims at pragmatic solutions that take place in action, and evaluation of the experiences with a revised suggestion for further improvement of the conditions, which echoes critical paradigm principles.

Creswell (2005, p. 560) summarizes the key characteristics of action research, which are:

- a practical focus,
- the educator-researcher's own practices,
- collaboration,
- a plan of action,
- a dynamic process,
- sharing research.

These principal features of action research are similarly mentioned in many other definitions of action research. Briefly, Coghlan and Brannick (2005, p. 4) agree with Creswell's description in their explanation of action research. First, by a practical focus, they describe that in action research, researchers focus on research in action rather than about action. Second, in action research, to resolve the social issues, the educator-researchers study either their own practices or together with those having experienced these issues directly. Third, action research is collaborative in that members of the system under study participate actively and cooperatively rather than being the objects of the study as in traditional research. Fourth, action research is composed of a four-step cyclical process, which is planned consciously: planning, taking action, evaluating the action, further planning, and so on. Fifth, by the dynamic process, it is understood that action research is done concurrently, which means gathering scientific knowledge while simultaneously involving in action. Finally, in action research, the outcomes of the research are not just unique solutions to immediate problems of the study, rather they are meant to contribute to scientific knowledge and theory by sharing with others the lessons learnt from the experience and the dynamic action research process.

As the current interest of the study, Johnson (2015, p. 25) states that action research fills in the blank between theory and practice in the education sector; that is, there is always a gap between what actually happens at schools and what research reports ideally suggest, and action research aims at realizing studies that match everyday needs of classrooms. Johnson (2015, p. 25) further observes that the research reports published in academic journals do not serve their purposes as they do not reach their target audience, that is, teachers. He goes on that researchers' ignoring teachers' points of view via top-down suggestions in their papers fail to reflect actual practices in classes; therefore, they become deficient in addressing the existing issues and problems in classes, which decrease the functionality of many studies. In that sense, action research is a solution to close this gap between theory and practice.

Elliot observes that action research makes valuable contributions to educational practices, enabling teachers to invest in their professional development via making changes in their environment and to bring research and reflective thinking together (1991, cited in Yıldırım & Şimşek, 2013, p. 344). Such a scientific approach to teaching practices widens teachers' horizons on suggesting onsite solutions, which is required for efficient teaching. As each learning environment is unique to itself, solutions to specific problems are also unique to that teaching and research area. Teachers conducting action research are candidates for 'efficient teachers' (Yıldırım & Şimşek, 2013, p. 344) since they suggest solutions peculiar to

their learning environment and practise these suggestions in action for the benefit of learners. Hensen (1996, cited in Johnson, 2015) lists the benefits of conducting action research to teaching practice as in the following:

i. it helps teachers to gather knowledge about their classes,
ii. it improves critical thinking and teaching,
iii. it adds to teachers' pedagogical knowledge,
iv. it holds teachers accountable for the decisions they made in class,
v. it enhances the relation between learners' success and practice,
vi. it encourages teachers and learners to adapt to innovations,
vii. it empowers teachers to adopt the efficient practices they have.

Relying on the benefits of action research to teaching practice, it is seen that action research increases the feeling of professionalism of teachers. Through in-service training, teachers may be given chances to conduct action research in their environment, and exchange their ideas with their colleagues on a professional platform, which will contribute to teaching endeavour on a professional lifelong learning basis.

Action research can be conducted either individually or in small groups or larger organizations. Therefore, action research can be categorized as *first-person action research, second person action research,* and *third-person action research* (Reason & Bradbury, 2008, cited in Güler *et al.*, 2013, p. 264), regarding the number of people involved in the research process. That means action research, even if started as an individual enterprise, may turn into a group move and may even become a larger community endeavour by expanding research. In the first-person action research, the personal attempt to challenge one's practice and to understand how a change in practice may influence others is the main focus. As McNiff *et al.* (1996, p. 39) emphasize, the purpose of such action research is to change one's thinking, behaviours, and feelings toward a particular issue raised; and to improve their professional approaches in this influence area. To do this, action researchers keep records of their practices with the help of reflective thinking. They emphasize the practice rather than a clear and successful outcome, which may not be the case for each researcher. Thus, the action research is set as an example for other practitioners as well to learn from the challenges and good practices researchers mention and apply them to their own practices by putting reflective thinking into it. In the second person action research, the researcher works together with other people on a common problematic issue to change conditions for the better for an organization or a group. As Reason and McArdle (2006, cited in Güler *et al.*, p. 266) note, the number of people in these groups may change from 6 to 15, depending on the group size, who exchange

ideas to generate a common action. Here the awareness of the group members on a common endeavour to create changes makes it different from ordinary group work. The third-person action research is defined as a full-scale research approach concerning a larger community. Güler *et al.* (2013, p.266) remark that, even small in number, such research studies are meaningful for making and/or changing policies on a global scale with the help of improvements in social media sources.

As an additional dimension to the understanding of the action research according to different purposes, another categorisation made by Creswell (2005, p. 552) is also valuable: Practical action research and participatory action research, whose major features are shown in Table 3 below:

Table 3. *Two Types of Action Research Designs (Creswell, 2005, p. 552)*

ACTION RESEARCH	
PRACTICAL	**PARTICIPATORY**
• Studying local practices • Involving individual or team-based inquiry • Focusing on teacher development and student learning • Implementing a plan of action • Leading to the teacher-as-researcher	• Studying social issues that constrain individual lives • Emphasizing "equal" collaboration • Focusing on "life-enhancing" changes • Resulting in the emancipated researcher

Parallel to first-person action research, in practical action research, the research purpose is to search for a specific situation in educational institutions to improve teaching practice. Here through a systematic study of a small-scale problem, educators, either individually or in teams within an institution, look for opportunities to enhance learning and teaching environment. Here teachers as learners become reflective practitioners, engaging in small-scale research projects on specific issues concerning their teaching environment.

Mills (2000, cited in Creswell, 2005, p. 553) identifies the major principles of practical action research as in the following:

- Teacher researchers run the decision-making mechanisms of researching their teaching practices as an act of professional development.
- Teacher researchers are also responsible for continued professional and institutional development in their environment.
- Teacher researchers reflect on their practices to improve their efficacy, either individually or in teams of students, colleagues, and administrators.
- Teacher researchers use certain procedures in a systematic approach to reflect on their practices rather than a random design.

- Teacher researchers determine techniques for data collection, analysis and interpretation to develop their action plans.

On the other hand, in participatory action research, the purpose is to improve the quality of practices in organizations or communities at a larger scale, just like second and third-person action research types. Here what makes the difference from the practical action research is that individuals, organizations, communities and/or systems of education are empowered in educational settings by incorporating the emancipatory aim as the outcome of the research.

Kemmis and Wilkinson (1998, cited in Creswell, 2005, p. 556) define features of participatory action research as shown below:

- Researchers explore teachers working in teams as a social process to see their relationships with others.
- Individuals reflect on their understandings, values, knowledge behind their actions.
- Teachers collaborate with other colleagues and/or stakeholders to qualify practices when creating change in their teaching and learning environment.
- The constraints faced in the process of bringing innovations or change to education, whether they are institutional, political, systematic or perceptual level. are meant to remove with an emancipatory view to help teachers do their jobs efficiently.

Keeping the principles of categorization of action research according to the scopes and purposes of studies, to serve for the research purpose of designing a flipped EAPP syllabus for students at the faculty of pharmacy, where the researcher challenges her own practices as a teacher and makes a difference in her teaching environment via reflective thinking, the current study was designed as a first-person/ practical action research in that sense.

The pioneer of the term action research, Kurt Lewin (1946, cited in Larsen & Cottrell, 2006, p. 7) defines action research as a cyclical research process in which planning, action, observing and reflecting on the action results occur on an ongoing basis until researchers reach a satisfying final draft. In action research, the revised action plan is aimed to optimize the conditions via modified methods to find answers to the research questions, learning from onsite experiences from the previous action (Larsen & Cottrell, 2006, p. 8). If not satisfied, cycles continue, modifying the action and trying again (see Figure 22).

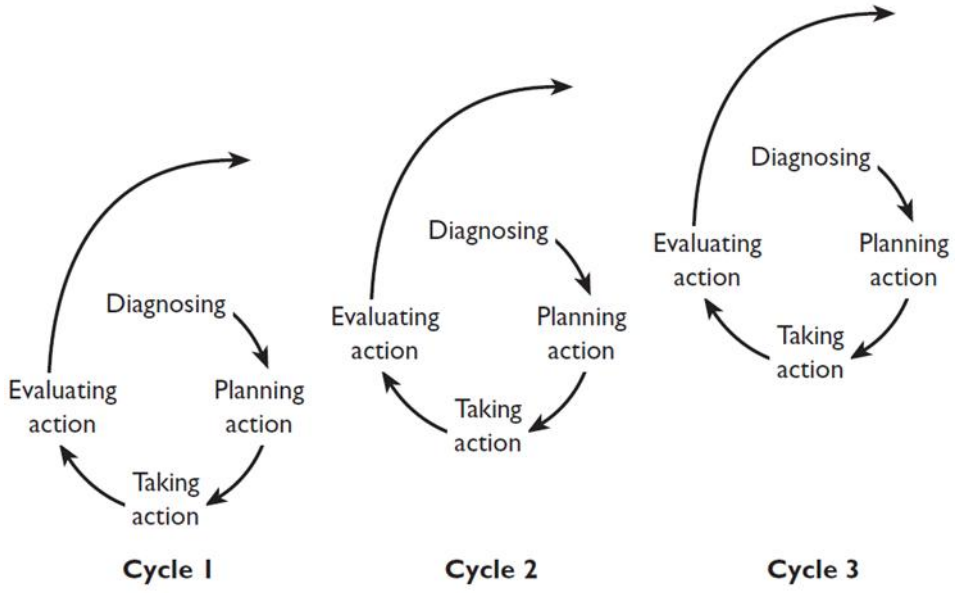

Figure 22. Spiral of action research cycles (Coghlan & Brannick, 2005, p. 24).

Here 'the clock' metaphor created by Coghlan and Brannick (2005, p.23) describes best the multiple concurrent research cycles of any action research. That is, in action research, there are cycles that have different time spans, but they operate concurrently, just like a clock composed of an hour hand, a minute hand and a second hand which take different time spans to complete their cycle of the clock. Here, the hour hand represents the whole project, which may take several years to complete; the minute hand represents phases or particular sections of the project; and finally, the second hand represents the specific actions in the project, such as an interview or a meeting. Just as in a clock, here the short time action research cycles support the medium-term cycles which contribute to the longer-term cycle.

Implementing the above concurrent cycles by nature, in this study, the spiral of the action research cycles offered by Yıldırım& Şimşek (2013, p. 336) is followed as the methodological framework of the study. Here as Figure 23 illustrates, after identifying the problem situation and defining the research questions, the researcher plans the action through related literature review, data collection and analysis. Having interpreted data to serve for generating the action plan, a follow-up plan is also generated to see whether the action plan is implemented efficiently and what kind of improvements can be done both during the action and after the action for the ideal. After implementing and following the action plan, the researcher reflects on the action plan, analysing and evaluating data gathered before, during and after the implementation of the plan. Finally, preparing a new action plan is a further step for reaching an improved version, learning from the lessons of previous experiences.

Figure 23. The process of action research (Yıldırım & Şimşek (2013, p. 336).

As Yıldırım and Şimşek (2013, p.343) point out the action research is meant to solve specific problems and reform conditions for the better; thus, this improvement and recycling process continues since new situations may appear at any time in future practices. It is the researcher's role to observe these challenging situations and adapt their practices accordingly. Following the above cyclical process in Figure 23 as the framework, the study was designed and implemented accordingly as summarized in the following infographic (see Figure 24):

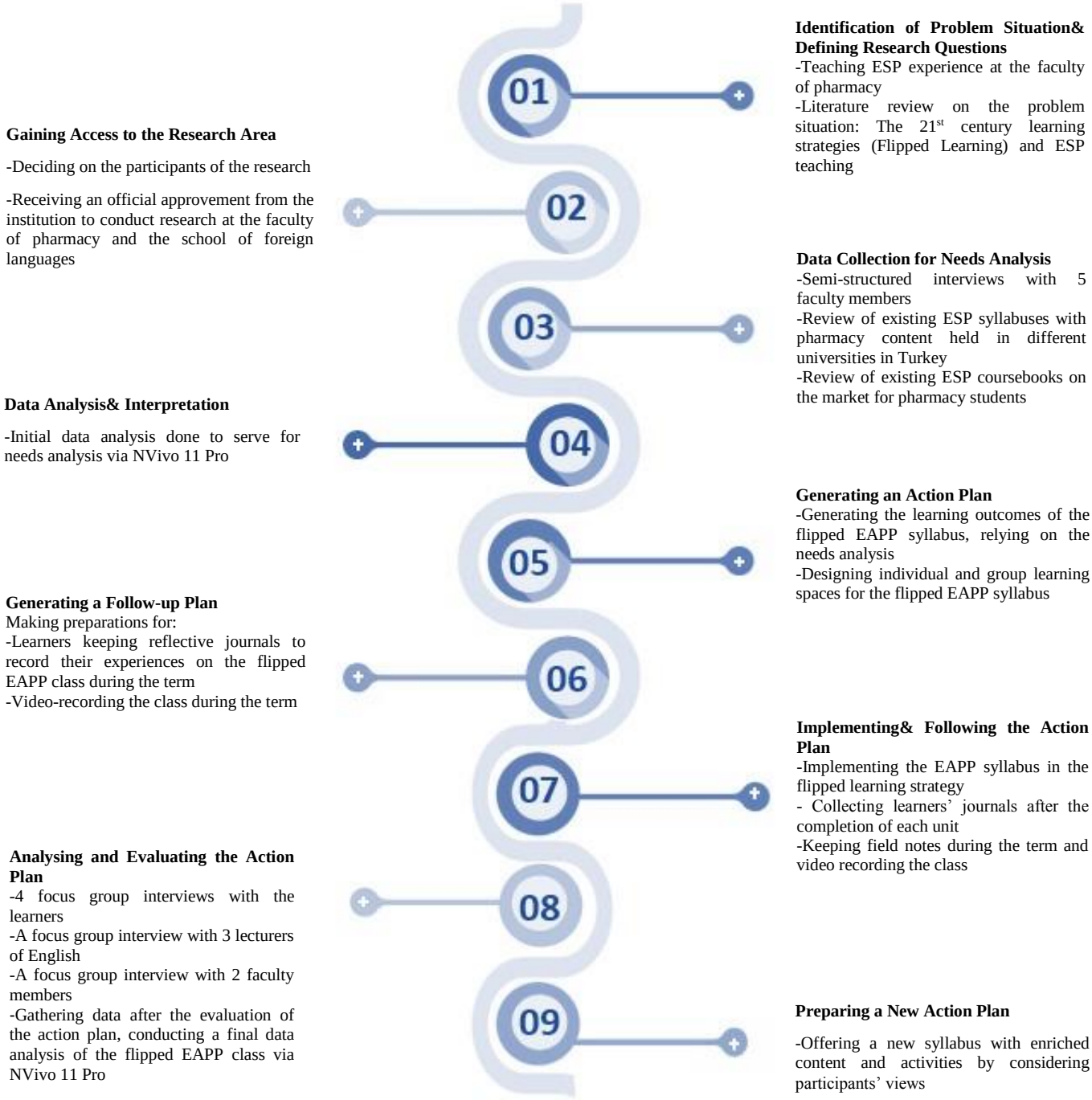

Figure 24. The action research process of the current study.

Setting

This dissertation study was conducted within the context of an occupational English course in the third year of study at the faculty of pharmacy of a medium-sized university in the eastern part of Turkey. The study was implemented in the 2017-2018 academic year; more

precisely, the needs analysis process, the design of course materials for individual and group space learning, and the design of action and follow-up plans were handled in the fall semester while the implementation and evaluation of action plan were realized in the spring semester. Even if the spring semester lasted for 15 weeks, the implementation of the syllabus lasted for 12 weeks because of three weeks off due to midterm exams, an official holiday, and the first introduction week.

The implementation of the action plan was realized in two certain platforms for learning: individual and group space. Group space activities were handled either in a classroom; or in a computer lab, depending on the course content, large enough for 38 learners to have a seat. The seat arrangement and the organization of the setting in rooms both in the classroom and the computer laboratory were the same. The seats in the class and the computer laboratory were fixed on the ground; that is, it was impossible to give the class seats a u-shape during activities, which was sometimes a drawback for some activities to be better implemented in class. The desk of the teacher was placed in the right front of the classroom, rather it should have been in the middle of u-shaped seats to serve best for a flipped class atmosphere. There was a whiteboard and a projector ready in the class and in the computer lab, which made it easier for some additional materials to be used in group space activities. The camera to record the course during the whole term was placed at the left front of the room to have a whole vision of the class dynamics. The seat arrangement of the classroom and the computer laboratory is illustrated in Figure 25 below:

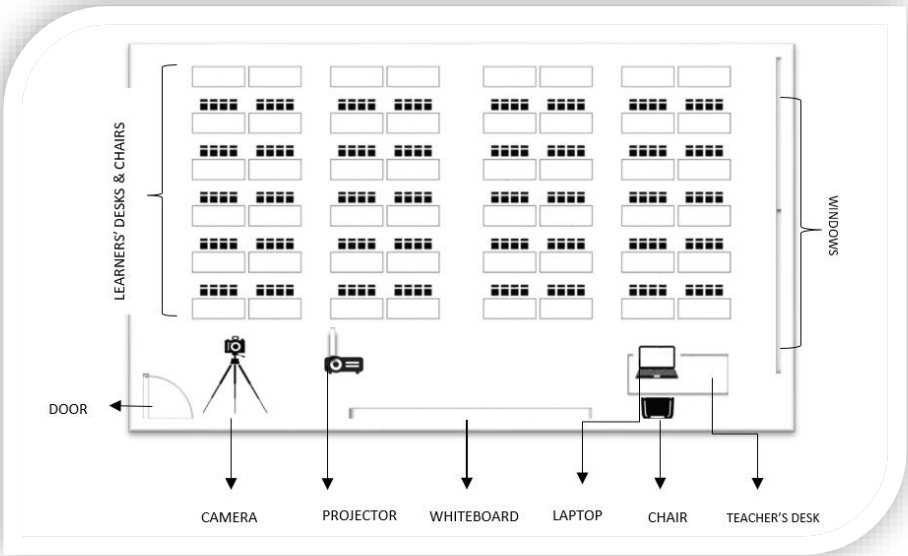

Figure 25. The seat arrangement of the classroom and the computer laboratory.

In an ideal language class, rather than the fixed arrangement of seats, which is a sign of a teacher-based instruction, the organisation of seats should be given to teachers so that relying on the nature of instruction and communication in class, necessary alterations can be made. Ideally, in a flipped class, the seats may be arranged flexibly according to individual, pair and/or group work. The following illustration in Figure 26 may be an ideal example of a flipped class:

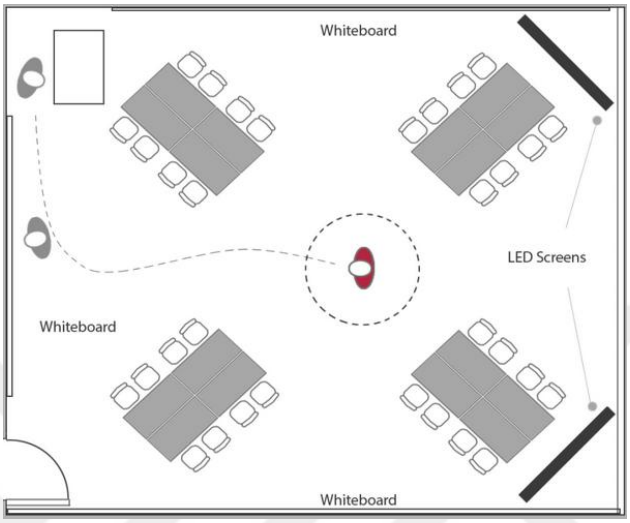

Figure 26. "Active learning lab" (2018).

In an active learning class, the teacher walks around the learners' seats to guide their work in class rather than lecturing them in the front. This type of seat arrangement is very useful in a flipped class setting, where learners mostly study in groups and ask for teacher's help whenever needed in class time.

As for the individual space learning of the flipped class, the researcher created an online class on Edmodo (see Figure 27 below), where the researcher as the teacher could communicate with learners out of the class time to share lecture videos, any necessary course materials, such as printable documents or web page links, etc., under the related course unit folders, and to receive learners' assignments online and give feedback to them.

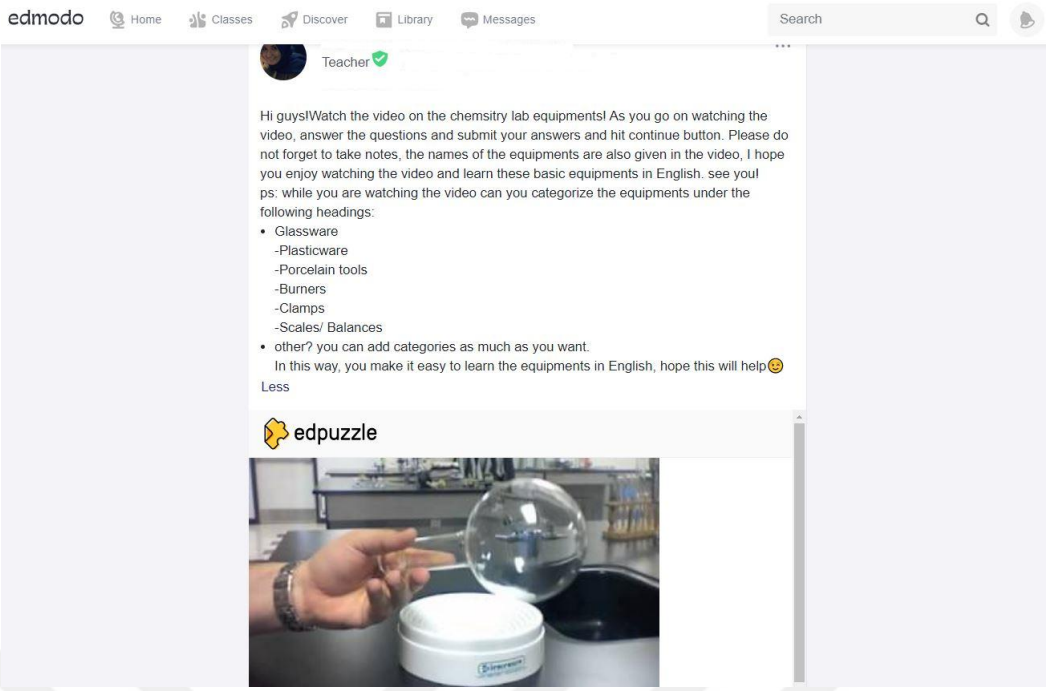

Figure 27. A sample Edmodo page of the flipped EAPP course.

In addition, the lecture videos were prepared via the Edpuzzle platform, where teachers find, upload or create videos through inserting questions, audio, text, and links to the videos via video sharing websites, and they share their lessons with students by using a class code (see Figure 28 below). Here teachers answer learners' questions on content and receive feedback on learners' video watching performances in individual learning space. In the current study, students could have access to course videos on Edmodo with an Edpuzzle link shared on the course page on Edmodo.

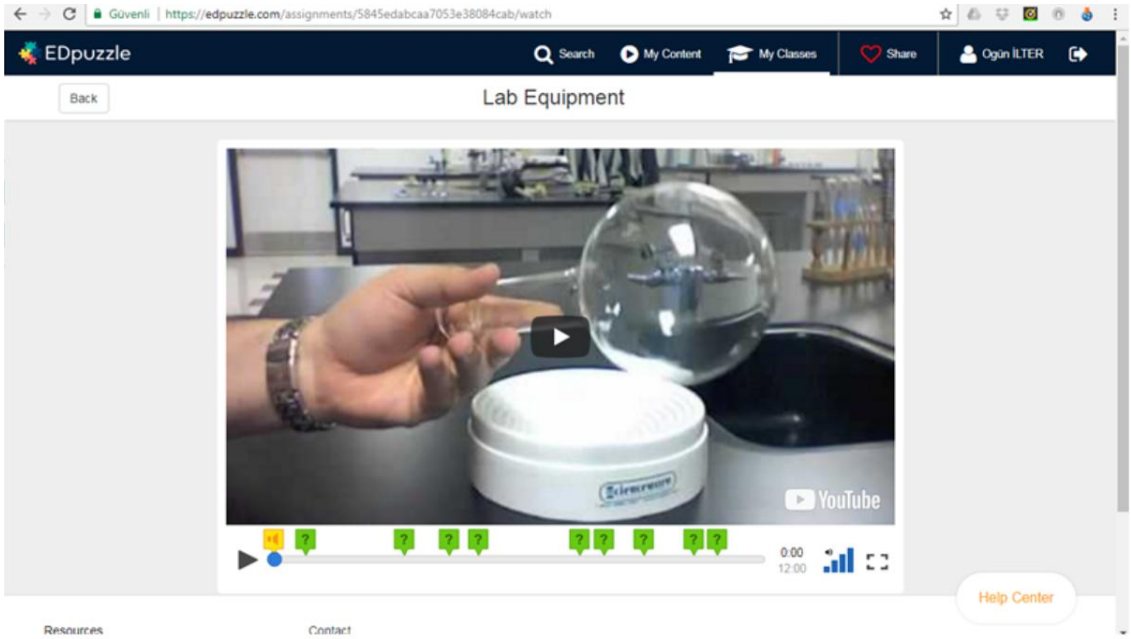

Figure 28. A sample scene from an Edpuzzle video of the flipped EAPP course.

Finally, Kahoot was used in group space learning either for presenting new content, practising them, or for assessing newly learned items of content and/or language (see Figure 29 below).

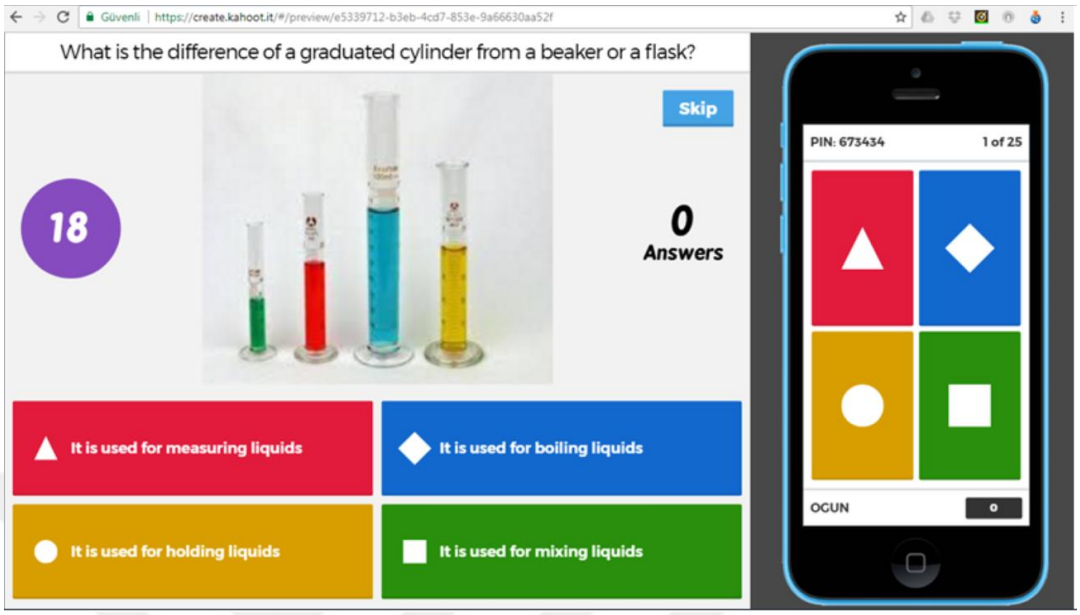

Figure 29. A sample scene from a Kahoot quiz of the flipped EAPP course.

Kahoot is a free game-based learning platform for teachers and learners. Relying on the related unit content, the researcher prepared Kahoot quizzes on language or pharmaceutical content, and for each quiz, a different code was supplied to learners, through which learners got access to these teacher-made quizzes on their smart devices/phones. To do the Kahoot quizzes, they saw the questions reflected on the projector screen while selecting the best alternative on their smartphones in a given set of time, generally 20 seconds.

Participants

The participants of the study were composed of 38 students and 7 faculty members at the faculty of pharmacy; 3 instructors of English at the school of foreign languages; and finally, the teacher-researcher, as the researcher conducts the action study in her own institution. The rationale behind choosing the participants is the criterion sampling that falls under the purposeful sampling strategies (Patton 2002, p. 238). Since the aim of the action research is to create a flipped EAPP syllabus for pharmacy students, the student participants were intentionally chosen to meet the criteria of learning English for pharmaceutical purposes; the faculty members were chosen from the faculty of pharmacy, and finally, the instructors of English were chosen among the ones who taught or have been teaching English at the faculty of pharmacy for occupational purposes. The notion behind choosing the criterion sampling is that the typical cases are thought to be “information-rich” to represent

the group or system by revealing the weaknesses that may turn into opportunities for program or system improvement.

The student participants were at their third year of study at the faculty of pharmacy, which was the first year for them to take occupational English courses. The class had 38 students; however, as expected, not all students attended every course throughout the term. Thus, the number of students differed, even with minor changes, every week, to be precise. Although the third-year students had already taken EGP courses at the elementary level in their first year and pre-intermediate level in their second year prior to the occupational English course, and they were expected to be proficient enough to take the occupational English course at the pre-intermediate level in their third year, the language background of the participants seemed to vary as the course progressed. In fact, due to the course selection system in the faculty of pharmacy, which does not function on a prerequisite system in English courses, students could take the occupational English course in their third year even if they could not pass pre-intermediate EGP course in the previous terms. Therefore, the EAPP course designed in the current study was aimed at the pre-intermediate level of English proficiency in order to find a balance between struggling and high achieving students. On the other hand, the age range of participants did not vary; almost all of them were at the same age; around twenty. The variables of gender or any other background are out of the scope of this study, as the study is not interested in building relationships between certain variables; instead, it is concerned with designing a syllabus relying on a needs analysis and stakeholders' feedback.

The 7 faculty members, who lecture at the faculty of pharmacy, were chosen to consult on their suggestions about pharmaceutical content in both needs analysis and evaluation processes of the flipped EAPP syllabus. Among these 7 faculty members, the first five of them were consulted in the needs analysis phase while the other 2 faculty members were conferred in the final evaluation of the syllabus after the implementation. The reason to choose the 3 instructors at the school of foreign languages was their experience in giving ESP courses at the faculty of pharmacy even for a one-term-long period. The instructors of English were asked about their opinions on the linguistic dimension of the EAPP syllabus.

Finally, the researcher involved in the study as the action research practitioner since she was the teacher who handled the research in her own institution to improve her teaching practice and bring a change to the existing syllabus of the occupational English course. The researcher took part as another participant of the action research in that sense, the roles of

which are explained in fine detail in the role of the researcher in the following paragraphs below.

Data Collection Tools

In this section, the details of the design of data collection tools and how these tools were managed during the study will be outlined with the justification of their selection to use in the study. As Patton (2002, p. 247) puts it, when designing research, triangulation is ideal and it strengthens a study by combining methods. In fact, Denzin (1978b, cited in Patton, 2002) identifies four types of triangulation:

i. data triangulation, use of a variety of data sources; qualitative or quantitative origin,
ii. investigator triangulation, use of different researchers or evaluators,
iii. theory triangulation, use of different perspectives to evaluate data,
iv. methodological triangulation, use of multiple methods to study a problem.

Patton (2002) points out a common misunderstanding about triangulation that different sources of data, theory or methods are meant to support the same result. However, the point here is to yield some different results from these different sources, as each is sensitive to multiple realities, whose inconsistencies illuminate the diamond-shape of reality about a single problem. Patton (2002) emphasizes that understanding such incompatibilities should be viewed as opportunities for a deeper understanding of the reality under investigation rather than issues of weaknesses of the credibility of research results. Similarly, in the current study, different types of data collection tools served as parts of a jigsaw puzzle, whose dimensions added to the understanding of the phenomenon in question, and what could be done best to find remedies for problematic situations.

In this dissertation, data triangulation is adapted to the research design. That is, multiple sources of data were used to achieve a deeper insight into the phenomenon as seen in Figure 30 below:

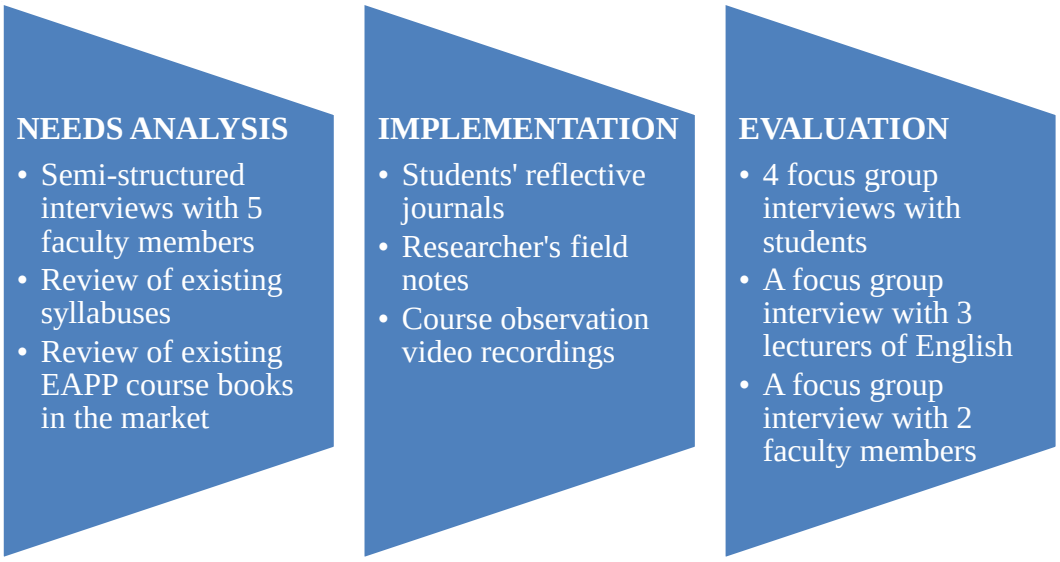

Figure 30. Data collection tools at the three phases of the current study.

As seen above, the data collection of the present study was realized at three phases; that is, the first phase was handled as the needs analysis; the second phase was realized as the formative assessment of the syllabus and flipped class implementation; and finally, the third phase was done at the end of the implementation to decide on the revised version of the firstly designed syllabus. The detailed explanation of the design and application of each data collection tool used at these three phases are explained below.

Data collection tools used in the needs analysis phase.

To begin with, following the main principle of backward design, which was put forward earlier as a framework for lesson planning by Wiggins and McTighe (1998, as cited in Bowen, 2017), to decide on the learning outcomes of the syllabus, the researcher asked herself the following questions, by the time the students complete the course;

1. Which skills will they have been able to perform in English?
2. What will they have known about the pharmaceutical content in English?

In order to find answers to these questions, the researcher conducted a needs analysis. Therefore, the researcher held semi-structured interviews with pharmacy faculty members and made a review of existing occupational English course syllabuses of other faculties of pharmacy in Turkey and course books related to English for pharmaceutical context available in Turkey to create a pool of learning outcomes for the syllabus design. Below are found the detailed explanations of the design and implementation of data collection tools used in this process with their justifications of selection in the study.

Semi-structured interviews with faculty members.

McMillan and Schumacher (2006, p. 350) define qualitative in-depth interviews as open-response questions to gather data on participants' sense-making about a specific phenomenon. Maykut and Morehouse (1994, p. 76) distinguish in-depth interviews from surface talks in that qualitative interviewing obtain a rich discussion of thoughts and feelings in a prolonged engagement with the interviewee, mostly more than once, in order to achieve an understanding participants' perceptions on the phenomenon in question at a deeper level. These features of qualitative interviewing enable researchers to explore how participants interpret and give meaning to their experiences, which further contributes to the knowledge about issues under study.

As Bogdan and Biklen (2007, p.104) explain, interviews vary on the continuum between structured ones with closed-ended questions and unstructured ones with no restricted questions. They argue that when the content of an interview is controlled too rigidly, the interviewee cannot express themselves personally, and that leads to loss of the qualitative function of the interview. Similarly, Yin (2011, p. 133) does not classify structured interviews as qualitative, rather he identifies interviews as structured and qualitative interviews, arguing that structured interviews act as a survey or a poll rather than as a qualitative inquiry, and these studies aim at accessing a representative sample of interviewees to make it perfectly match with their predetermined assumptions about possible participant replies. On the other hand, Bogdan and Biklen (2007, p.104) also suggest that different types of interviews may be applied at different phases of the study, for example, it may be beneficial to use unstructured interviews in order to explore the general understanding of participants about a phenomenon at the beginning of a study. However, if the aim of the study is to compare data across groups of participants or to concentrate on particular aspects of data, semi-structured interviews may be applied. Relying on this suggestion, as the purpose is to focus on particular aspects of participants' views about a flipped EAPP syllabus, semi-structured interviews were preferred for the current study.

When designing the questions of semi-structured interviews, another suggestion for the classification of interviewing by McMillan and Schumacher (2006, p. 351) was taken into consideration:

- informal conversation interview,
- interview guide approach,
- standardized open-ended interview.

They elaborate their classification by stating that in the informal conversational interview, the questions occur from the immediate context rather than a predetermined set of topics or phrases; in the interview guide technique, topics are outlined in advance, but relying on interviewees' responses, and the sequence of questions and their modifications via probe questions are decided by the researcher, which increase the comprehensiveness of replies; finally, in a standardized open-ended interview, each participant is asked predetermined open-ended questions in the same format with no alterations, which limits the naturalness and relevancy of responses. Depending on this suggestion on formatting the interview questions, the semi-structured interviews can also be treated as an interview guide approach. Accordingly, the researcher designed interview questions in advance according to the topics related to teaching English in pharmacy content and made use of probe questions to elaborate interviewees' responses whenever needed.

Taking into consideration the principles suggested above and aforementioned questions asked for needs analysis of syllabus design, the researcher designed a semi-structured interview protocol composed of three main questions (see Appendix 3), aiming at determining the English language needs of students of pharmacy:

- during their time at university,
- throughout their career as a pharmacist in any pharmaceutical sector, either at their own pharmacy stores; at hospitals; or at research and development departments of medical companies, etc.

Therefore, the faculty members were asked about:

- what their students are supposed to do in English in their professional careers,
- whether they ask their students to use any sources in English to support their courses,
- whether they took an occupational English course at any level of their educational life, and if they did, what the content of the course included.

Before reaching the actual participants of the study, the researcher piloted the interviews with two colleagues who are experienced in qualitative educational research. In addition, the researcher asked for advice from three colleagues as well to criticize the design of the interviews to increase the validity of the tool. Relying on the feedback taken from colleagues, the interview protocol was adjusted and redesigned.

The researcher held the semi-structured interviews with 5 faculty members at the faculty of pharmacy. The interviews took almost half an hour with each participant, and they were recorded via the voice recording function of a smartphone after taking permission from

the participants. The replies to the questions of the interviews created a pool of learning outcomes of an English language user profile at pharmaceutical settings. These interviews helped the researcher to build the activities and the content of each possible unit around tasks to be performed as the learning outcomes of the syllabus.

The review of existing syllabuses and course books for teaching English for pharmacy.

At this phase of the study, documents analysis was realized with reviews of existing syllabuses in other faculties of pharmacy in Turkey and existing ESP course books for students of pharmacy. Document analysis involves the analysis of written materials that include information about the phenomenon under study, by this means, researchers save money and time, sometimes even without a need to hold interviews or observations, and document analysis may also be used to achieve data triangulation to support other types of data sources (Yıldırım & Şimşek, 2013). However, within the scope of the current study, access to coursebooks for English for pharmacy was almost impossible. In Turkey's context, there was not such an occupational English coursebook specifically written for students of pharmacy. As for international context, the researcher found three examples; however, only one of them was available to reach while the other two course books could not be reached due to financial issues. The coursebook that the researcher could reach was that of Miriam Diaz-Gilbert, 'English for Pharmacy Writing and Oral Communication', by the Point Publishing. It was composed of terminological words, patient and pharmacist dialogues as listening and speaking activities related to 12 body systems. The organization of the book was inspiring; however, the level of English was higher than the levels of the researcher's present students' profile, and the context of the book was for ESL environment, which required adjustments to EFL setting. The coursebook could be used as a supporting document when necessary in designing activities, though.

To enrich the pool of learning outcomes created with the faculty members' replies to the semi-structured interviews, the researcher also reviewed the present syllabuses of occupational English courses held in faculties of pharmacy, which were active in education in Turkey in 2017, by downloading the occupational English course content packs shared online on universities' websites. The learning outcomes expressed in course content packs were examined and integrated with the findings gathered from semi-structured interviews. It was also found out that many faculties of pharmacy at different universities ignore occupational English content in their English courses. That is, the courses are either given as an EGP course, or they only include research article translation tasks in their syllabuses. However,

there are also a few though universities that give high importance to occupational English content. However, the results of the review indicated that the researcher's institution was the only faculty that provided an occupational English course throughout the five years of pharmacy education. This led to the need for a curriculum revision in terms of English instruction at the pharmacy faculty, which exceeds the scope of the present study, but needs to be studied for future implications.

Data collection tools used in the implementation phase.

As McNiff, Lomax and Whitehead (1996, p.71) suggest, in the centre of action research lies the action committed by the researchers' professional values; one that is informed by their considerations, and one that is intended to achieve the researcher's aims. Data gathered in parallel with the implementation of the action are meaningful only when the researchers themselves are able to make sense of them, taking into consideration the research aims, reflecting on their own practices and evaluating the overall process to generate a further action plan for the ideal answer to the need aroused. Therefore, the researcher conducted a monitoring process in parallel with the action being implemented. By doing so, it became possible for the researcher to take a formative assessment of her practice so that she could make necessary adjustments accordingly. To achieve this, the researcher recorded the 12 weekly three-class-hour courses via a video camera; asked the participants to keep reflective journals on their experiences of flipped class during the term and kept field notes whenever a need arose in the implementation of the flipped class syllabus. Below are the detailed explanations of how this monitoring process was realized during the term with the justifications of choosing the data collection tools.

Participants' reflective journals.

Merriam (2013, p. 141) states that the documents created by either the researcher or the participants for the sake of research purposes are very valuable sources of data as they carry the personal traces of individuals that provide insights into the phenomenon in question in participants' points of view. In the current study, the learners were asked to keep reflective journals at the end of units during the term, which helped the researcher to keep track of the outcomes of her actions both in individual and group space in the eyes of the students. At first, the students were asked to send their journals weekly as word documents via Edmodo; however, as the majority of the class neglected it for the very first weeks, the researcher decided to ask them to write their comments about the pharmaceutical content and flipped learning strategy (see Appendix 4) at the end of each unit. The students were asked to note

down their likes, dislikes and suggestions for the content, video lessons and group space activities of each week. As stated by the learners, it took 10 or 15 minutes for them to write their comments. Analysing these reports, the researcher ran mini action plans to improve the content and the flipped instruction model formatively throughout the implementation, which shaped the pharmaceutical content and instruction model as well. These mini action plans helped the researcher to find immediate solutions to the problematic issues whenever they raised during the term. These journals were also reanalysed to be used in the overall evaluation of the program at the end of the term. This methodology also supported the professional development of the researcher in finding immediate solutions to the problems appeared during the term, or in improving the content, activities and lecture videos for the better, taking into consideration the demands and needs of the students.

Course observation video recordings.

As Johnson (2015, p. 96) observes, video camera recordings help gather information about non-verbal behaviours of students and teachers' pedagogical techniques or performances. The rationale behind video recording of the implementation of the flipped class was that this could help the researcher realize whether or not she actually behaved in contradiction with her own values and beliefs about teaching (McNiff *et al*., 1996, p.48). This enabled reflective practice during and at the end of the implementation, which led to a constant improvement of weekly instruction both in individual or group space to generate an almost ideal English course syllabus of pharmacy content. By the way, in order to prevent video recording from creating an unrealistic learning environment, Johnson (2015, p. 96) suggests recording the class setting for many times so that learners get used to the presence of the camera during the course hours. Therefore, in the current study, via recording the class dynamics for twelve weeks, this effect is hoped to be overcome during the term as the recording time is of one-term-long (12 weeks). Additionally, through video recordings, the changes of verbal and non-verbal behaviours of the participants and the researcher during the implementation could be captured, which helped the researcher to take necessary actions accordingly. All in all, the video recording of a teacher's own actions helps them to monitor and evaluate their actions to make sense of the personal and professional challenges in the implementation process of their action research.

Patton (2002, p.276) suggests 6 dimensions of observation strategies along which fieldwork varies. These are, as shown in Figure 31 below, placed on a continuum illustrating the position of the observer relying on the criteria mentioned. It is the researchers' role to locate themselves in their roles in observation. To begin with, the first dimension is about the

role of the observer as a participant or a non-participant. In the current study, as the researcher was involved in the observation as the teacher implementing the syllabus under study; and at the same time, the evaluator criticising the dynamics of the class via video recordings of the course, the role of the observer is dominantly a participant role, but supported with an onlooker observer role. It is also because the current study was action research in which the researcher conducted a study in her own teaching environment to improve her teaching practice.

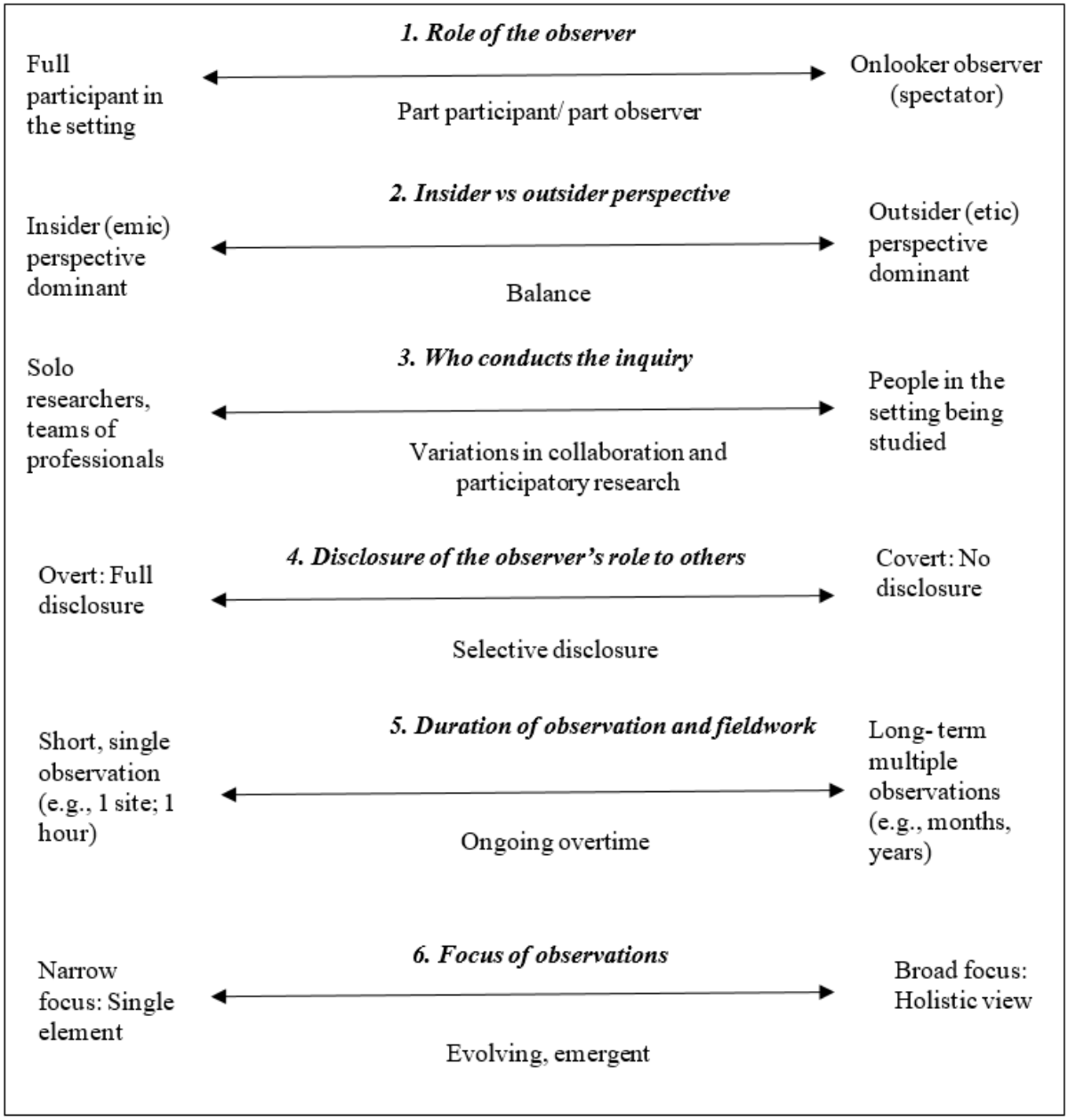

Figure 31. Dimensions showing fieldwork variations (Patton, 2002, p. 277).

Secondly, the observer's perspective is that of a balanced perspective; that is, even though the researcher was involved as a participant in the study as the teacher, the evaluation via video recordings of the course made by the researcher is etic, so that the researcher could reflect on the class dynamics as objectively as possible via thick descriptions of the class

atmosphere and/or making references to the verbal and/or non-verbal meaningful moments to the readers. Here as Patton (2002, p. 268) remarks, the challenge of the observer is to integrate participation and observation to better understand the atmosphere as "an insider while describing it to outsiders". So, the insider look was combined with an etic perspective in balance so that the data were treated to create meanings as much as possible.

Thirdly, as the present study is practical action research, the teacher collaborated with other stakeholders in the context in order to design a flipped EAPP syllabus rather than the researcher's individually observing the phenomenon as an absolute outsider and taking decisions on the syllabus design herself.

Fourthly, in terms of disclosing the observation to observees, the observation was overt in that the researcher realized explicit observations via a video camera placed at one corner in the class, and the students knew that the class environment was recorded via a video camera. As the camera recorded the whole term of 12 weeks, and the teacher kept telling the students the aim of the camera as acting as the third eye of the researcher, to keep a record of what was happening in class while implementing the syllabus, rather than assessing their performances in class, the students got used to the presence of the camera in the course of time, which is hoped to prevent ruining the realistic atmosphere of the learning environment.

Fifthly, as for the duration of the observation and fieldwork, in the current study, the observation took 12 weeks "to unveil the interwoven complexities and fundamental patterns" (Patton, 2002, p. 273) of the phenomenon under study, which takes a long time to discover. Especially, this duration is shorter in action research, when compared to anthropological studies that take many years; however, as Patton (2002, p. 274) remarks since the aim of action research is to make decisions, such issues cannot wait for years to solve a specific problem on site. Thus, the duration of observations depends mostly on time and resources available, relying on researchers' primary needs and aims.

Finally, the focus of observations involves either narrow, looking at only a small portion of the atmosphere of the setting, or broad scopes, focusing all aspects of the setting. In the present study, the focus of the observations was relatively narrow in the sense that the researcher focused on only the strengths and weaknesses of the syllabus in practice in the class setting rather than other variables that may affect the procedure. This focused scope helped the researcher to concentrate more on finding ways to improve the problematic dimensions of the class dynamics and evaluate such weaknesses and strengths of the adopted syllabus to reach a more efficient revised version for the study setting.

To put into practice all the abovementioned principles, during the actual 12-week implementation of the flipped EAPP syllabus, every three class hours (50 minutes per session) were video-recorded weekly, which created twelve 150 minute-class sessions, that made 1800 minute-video-record at the end of the term. At the beginning of each course, the researcher placed the video camera with a tripod to hold it in the corner of the classroom to have a better vision and sound of the students' and the researcher' actions during the course (see the position of the camera in class in Figure 25). The researcher did not only watch these videos during the term but also at the end of the term, in order to decide on which content elements and tasks were useful in teaching English for pharmaceutical contexts as well as how flipped learning instruction could be integrated with the designed syllabus. During the analysis of the observations, the researcher used NVivo 11 Pro, whose analysis screen enables to write down the observation notes on the verbal and nonverbal behaviours of the participants in relation to the chosen segments from the video recordings. By this means, the researcher could integrate her observation notes nearby with the related video segments, and thus, she could capture the moments that provide meaningful data to evaluate the syllabus in action, through which an outsider look was attained by an insider.

Field Notes.

As suggested by McNiff *et al.* (1996, p. 87), researchers' intentional diary keeping for the reflective practice of their action research helps them to create a time-line for events with their context; to make thick descriptions of the actions taken in the process; to serve as raw data to be analysed in making sense of the decisions made during the implementation; and to show the development of the action research, including personal reflection of successful and failed actions realized with some personal and professional learning emerged during the process. Accordingly, the researcher kept a journal during the term to write down the field notes to be used whenever an action needed to be taken. Similarly, the researcher made use of these personal notes during the data analysis process to generate meanings from the events as a reflective practice.

Data collection tools used in the evaluation phase.

When the implementation of the flipped EAPP syllabus finished, the researcher held focus group interviews with students, 3 English lecturers who taught English at the faculty of pharmacy, and finally with 2 faculty members on the final design of the syllabus, which helped the researcher have multiple perspectives to revise and improve the pharmaceutical and English language content and the elements of flipped instruction of the syllabus.

Focus group interviews with students.

Patton (2002, p. 386) differentiates focus group interviews from those conducted on an individual basis by emphasizing the aim of focus group interviewing, which is to reach valuable information in a situation where each participant expresses themselves while listening to others' points of view and comments on these views about a particular phenomenon under study. Here participants are not supposed to either agree or disagree with others in the group, but commenting on others' speeches is very welcomed and encouraged, which provides rich data for understanding issues in question. Bogdan and Biklen (2007, p. 109) suggest the number of focus groups be ideally seven to ten people in addition to a facilitator. They recommend preferring focus group interviews to individual interviews when the researcher thinks that informants may not talk so attentively about an issue in individual interviews; in such cases, in focus group interviews, participants feel more relaxed to express their opinions as talking in a group may stimulate talk for oneself. However, here the researcher has to act as a facilitator and be skilful to manage the talk in the group by keeping in mind what they want to obtain from that experience.

Keeping abovementioned principles in mind, the researcher held 4 focus group interviews with 9 to 10 students per group (n= 38) at the end of the term. These interviews included 4 questions (see Appendix 5) to find out students' likes, dislikes and suggestions on the pharmaceutical content and the flipped learning instruction; the focus group interviews took 1 or almost 2 hours; and they were recorded via a video camera after taking permission from the participants. The focus group interview protocol was designed by taking feedback from 3 colleagues who had experiences in qualitative educational research. In the focus group interviews, each student was given a right to comment on the syllabus and flipped instruction managed during the term, and they took turns to speak. The students were also given chances to comment on their classmates' speeches, which enriched the data gathered during the interviews. The data obtained from the focus group interviews helped the researcher adapt the pharmaceutical content, related activities and linguistic elements of the designed syllabus to learners' demands and needs.

Focus group interview with instructors of English.

Collaborating with critical friends, who are educated audience willing to judge the relevance of one's work to a particular professional context by considering the research aims, is of high importance in educational research (McNiff *et al.*, 1996, p. 84). Such collaboration helps the action research realize its aim to be participatory, forming critical communities of people to work collaboratively for further action researches.

In the current study, the researcher held a focus group interview with 3 instructors of English from her institution who had experiences in teaching EOP in pharmacy context. After preparing the focus group interview protocol, the researcher asked for three experts' feedback on the draft of the protocol; again depending on their opinions, the questions were adjusted. The interview took almost 2 hours, was recorded via a video camera by taking permission from the participants, and included three main questions (see Appendix 6). In the interview, the participants were asked to criticize the flipped EAPP syllabus designed by the researcher for pharmacy students. They judged the syllabus in terms of linguistic elements and contextual requirements of pharmacy context by taking turns, commenting on others' responses as well. The researcher made use of this data both to verify the validity of the syllabus designed in terms of linguistic elements and to use as supporting data to redesign the syllabus for the new action plan.

Focus group interview with faculty members.

The researcher asked the pharmacy faculty members for availability to criticize and comment on the flipped EAPP syllabus in terms of pharmaceutical content, and two faculty members accepted to contribute to the final version of the syllabus, who were different from those that attended the needs analysis phase of the study. The focus group interview protocol was prepared in parallel with the one realized with lecturers of English, with the nuance of replacing the dimension of linguistic elements with that of pharmacy-related elements (see Appendix 7). Here the faculty members were asked about their ideas on the implemented syllabus in terms of appropriateness to serve best for pharmaceutical purposes. Again, in order to increase the validity of the interview protocol, the researcher asked for two experts' opinion on the design of the protocol and piloted the interview with them to give the final version. Taking experts' advice, the protocol was adjusted accordingly. To realize this evaluation, the researcher held a focus group interview composed of two main questions based on the abovementioned issues and the interview took almost one and a half hour and were recorded via the voice recording function of a smartphone by taking the permission from the participants. With the guidance of the participants, the researcher made necessary modifications in the pharmaceutical content of the syllabus.

Data Collection Process

In this part, the data collection process (as shown in Table 4 below) will be explained in fine detail with the justification of the actions taken in each phase.

Table 4. *Data Collection Schedule of the Dissertation*

Research Questions	Related Tool	Data Collection Period	Phase
RQ1.What are the context-driven tasks to handle in English for pharmaceutical purposes	• Semi-structured interviews • Review of existing syllabuses • Review of existing ESP course books in the market	The fall term	**Needs Analysis**
RQ2. What are the views of the learners towards learning English for pharmaceutical purposes through the flipped EAPP syllabus?	• Students' reflective journals • Researcher's field notes • Course observation video recordings	The weeks between the 2nd-15th weeks of the spring term	**Implementation**
	Focus group interviews	The two weeks just after the end of spring term (16th & 17th weeks)	**Evaluation**
RQ3. What are the views of the lecturers of English towards the linguistic dimension of the flipped EAPP syllabus?	Focus group interview	One week just after the end of spring term (16th week)	**Evaluation**
RQ4.What are the views of the faculty members towards the pharmaceutical content of the flipped EAPP syllabus?	Focus group interview	Three weeks just after the end of the spring term (18th week)	

The data collection process was composed of three phases. In the first phase, the researcher conducted a needs analysis and finalized the first draft of the syllabus relying on this needs analysis in the fall semester of 2017-2018 academic year. Firstly, the researcher interviewed 5 faculty members at the faculty of pharmacy to determine the learning outcomes of the first draft of the syllabus. Secondly, the researcher reviewed the present syllabuses of occupational English courses held in 28 faculties of pharmacy that were active in education in 2017 in Turkey to enrich the pool of learning outcomes. Finally, the needs analysis was completed with a scan of existing coursebooks written for English for pharmacy students. Deriving from the faculty members' suggestions in the interviews, the first draft of the outline of the learning outcomes was integrated with samples of learning outcomes of the existing syllabuses in Turkey and with those of the course books for pharmaceutical English. To serve for the learning outcomes, the first syllabus was designed under 4 units in the flipped learning environment, and the individual and group space learning activities were designed accordingly.

In the second phase, the researcher implemented the flipped EAPP syllabus. This process of the study was held in the spring semester of 2017- 2018 academic year. The whole implementation took 12 weeks due to the exclusion of the 1st week for an introductory session of the study, the 9th week for mid-term exams, and the 12th week for a public holiday. At the beginning of each lesson, the researcher set up the camera at the corner of the class to keep a record of the in-class dynamics. At first, students felt a bit discomfort because of the presence

of the camera; however, in the course of time, they got used to it as the researcher kept reminding them of the reason for its presence as the third eye of the researcher to help remember what has happened in class while analysing the data. To support the data gathered from the video recordings of the class sessions, the researcher kept field notes as well whenever a need, a problematic issue or any new idea arouse throughout the term to use for the evaluation of the syllabus formatively. Depending on the diversity of the unit content, almost every Saturday or every second Saturday during the term, the researcher uploaded the lecture video(s) to the Edpuzzle and shared the link to the video(s) on Edmodo platform with the students. The students were asked to interact with the lecture videos before the class. When they came to class, related activities of that unit's task were done; actually, most of the in-class time was spent on realizing the task of that specific unit. Some pre-supposed timing of the syllabus schedule changed as the term went on partly because the students needed some language support more than expected and partly because the content and/or the task required more or less time than planned. In parallel with the implementation of the syllabus, the students were also asked to keep reflective journals to note down their suggestions for the activities in and out of class at the end of units each week. Here at this phase, the cyclical actions took place; that is, planning, acting, observing and reflecting stages were followed in designing lecture videos, tasks and related activities in and out of the class. That is, the researcher made necessary modifications to the syllabus design and its implementation when needed, relying on students' feedback and the researcher's field notes taken during the term.

In the third phase, the researcher conducted 4 focus group interviews with 38 students in 4 different groups of 9 to 10 students per each group to understand their experience in flipped EAPP course; and 1 focus group interview with 3 lecturers of English, and 1 focus group interview with 2 faculty members to ask for their suggestions on the syllabus in terms of language and pharmaceutical content. Additionally, the researcher watched the 12-week video recordings of the implementation supported by her field notes and students' journals kept during the term with the data gathered from the evaluations made by the students, the lecturers of English and the faculty members at the faculty of pharmacy at the end of the term. This triangulation of data enabled the researcher to see the multifaceted reality of her implementation of the flipped class and its content during the term and to suggest a better version of a flipped English class syllabus for students of pharmacy.

Data collection procedures and ethical considerations.

Gaining access.

To gain access to the research area, the researcher sought official approval from her institution. She submitted an application form to the ethical committee of the university to collect data. In the form, she expressed how she would pursue the officially required ethical considerations while collecting data to serve for the aim of the research. Once the researcher received an official approval that certificates the appropriateness of the study in terms of ethical issues to collect data at the faculty of pharmacy and the school of foreign languages of the university (see Appendix 1), she started the data collection process.

The role of the researcher.

In quantitative studies, the researcher's role is almost non-existent in that the data are collected with no regard to the participants and the person collecting the data. To remove biases and the subjectivity, the quantitative studies are supposed to yield similar results with other researchers, and therefore under the same conditions, they should be repeatable no matter who is collecting the data. However, in qualitative studies, the role of the researcher is quite different from the quantitative studies; that is, the researcher is considered as an instrument to collect data (Patton, 2002, p. 566). Therefore, the readers of qualitative research need to know about the human instrument in terms of any personal biases, assumptions, experiences, abilities to conduct research and the perspectives to handle research either as an insider or an outsider via thick descriptions of researcher setting and self-reflection (Yıldırım, 2010, p. 88).

In the current action research study, the researcher took two main responsibilities while conducting the research:

- The teacher-researcher who realized a practical/ first-person action research in her own teaching environment to improve her own teaching practice,
- The ESP practitioner who took on a variety of roles while designing a flipped EAPP syllabus.

To begin with, the teacher-researcher of the present study conducted a practical/first-person action research to improve her own teaching practice both in methodological and in contextual senses. That is, the researcher who is also the teacher of the action research understudy has taught English for general and specific purposes for 12 years at different schools and faculties in her institution, a medium-sized university. As for the faculty of pharmacy, the researcher taught English for general and specific purposes for three years at

the time of the implementation. In addition, the researcher had already established a relationship with the participants of the study as in the year before the occupational English course, she taught general English at the pre-intermediate level to these students.

Teaching ESP has been a matter of intensive endeavour for many years for the researcher in her institution since reaching out related materials appropriate to learners' language background is almost impossible in the market; thus, the researcher has to search for necessary content by looking for YouTube videos, podcasts; and asking faculty members for any printed materials for the occupational content, which are generally suggested by faculty staff as research articles that are high above learners' language background. Even if materials are found in the market, it requires time and effort to adapt materials via adding necessary language support to these materials, or as learners' contextual background may not be suitable for those materials, some content may be left out or simplified. Therefore, the researcher has always spent plenty of time and effort on designing the course materials suitable for her learners, which may also continue during the term. In relation to teaching English for pharmaceutical purposes, the researcher could only reach an ESP course book, English for Pharmacy Writing and Oral Communication, by Miriam Diaz- Gilbert, published by the Point Publishing. However, that book was very expensive to ask learners to buy as it was sold in U.S. Additionally, the level of English of that book was high above the researcher's students at the pharmacy faculty, whose proficiencies were at varying levels. Therefore, the researcher decided to design an ESP course syllabus to use in her occupational English course at the faculty of pharmacy via slightly relying on that book, but mostly depending on an intensive needs analysis. As a result, this action research was conducted to meet that need.

Additionally, it is worth mentioning that the researcher holds a communicative teaching philosophy toward language teaching in an eclectic manner. By communicative approach, it is meant to design activities around settings in which learners will be able to use English communicatively with their peers on given situations. By eclectic, it is meant to use any pragmatic dimension of EFL teaching methodologies in that sometimes some contextual skills may require audio-lingual/ behaviouristic methods while some situations may require active learning strategies. All in all, the researcher acknowledges teaching context-bound communication skills, especially in ESP teaching practice; therefore, the activities in the syllabus were designed accordingly.

Besides, the researcher believes that for the 21st-century generation, use of technological devices in class enables teachers to speak in the same language with these learners while teaching them; that is, as the attention span, and thus, learning habits have

changed in the 21st century, which is the age of technology, teachers should also adapt themselves to these innovative methodologies in technology-depended mediums as much as possible in order to enhance their learners' learning and retaining capacity.

Moreover, the researcher believes in investing in professional development via following the latest trends in instructional methodologies within teaching community networks either online or on-site. Finally, even if the researcher had taught ESP at the faculty of pharmacy for some years, and therefore may be said to have experience in teaching for that context, it was the first time for the researcher to design and teach a flipped class; thus, due to the lack of experience of flipped learning before, some inconveniences may have taken place in design and implementation of the flipped class dimension of the action plan. All these beliefs and (in)experiences towards teaching and learning may affect the current action research procedures. However, as the action research is about challenging oneself and creating change for a setting, these experiences have all added to the lessons learned in the action research process, which is also believed to be a part of professional development.

As for the ESP practitioner role of the researcher in the current study, which also overlaps with action researcher role, the researcher followed Dudley Evans and St. John's (1998, cited in Gatehouse, 2001) identification of five key roles for the ESP practitioner as a model while conducting the action research:

- Teacher: As a teacher, the ESP practitioner is supposed to create authentic learning opportunities via choosing the appropriate teaching methods to best meet the learners' needs. In order to do so, the researcher spent the fall semester to search for almost ideal EAPP content and flipped learning methods suitable for the contextual and linguistic needs of her students at the faculty of pharmacy.
- Course designer and materials provider: As a course designer and material provider the ESP practitioner has to create their own materials and/or adjust the authentic materials in the market, benefiting from a variety of educational resources and teaching materials. Similarly, the researcher conducted one-term-long search for the ideal course materials in the market and existing ESP course syllabuses in the pharmacy faculties at universities in Turkey, and she held interviews with the faculty members to learn about the pharmacy students' occupational foreign language needs as well as searching for online technological tools suitable for flipped learning.
- Collaborator: As a collaborator, the ESP practitioner should collaborate with other subject specialists to obtain the knowledge of the field-specific content. Thus, the researcher conducted interviews with the faculty members and other instructors of

English who taught English in pharmaceutical content before in order to get feedback and advice on her design of flipped EAPP syllabus and materials.

- Researcher: As a researcher, the ESP practitioner should be immersed in the learners' target needs, goals and interests, improve their knowledge of specific content being taught; and search for any appropriate authentic materials available. This was what the researcher was busy with before, during and after the action research process, which constituted the whole procedure of the current action research study.
- Evaluator: As an evaluator, the ESP practitioner has to evaluate the effectiveness of their teaching methods and learners' learning outcomes at the beginning, during and at the end of their courses. To serve for this purpose, the researcher conducted focus group interviews with learners, lecturers of English and faculty members at the end of the implementation of the first needs-analysis-driven syllabus.

Approaching the participants.

The study was conducted in the occupational English course at the faculty of pharmacy in the researcher's own institution in the spring term of 2017- 2018 academic year. Therefore, the participants of the study were the researcher's own students. In fact, they had already established a teacher-student relationship from the previous year, and it was the second time of the researcher to meet those students as an English teacher at that time. In the previous year, the course was a general English course at pre-intermediate level, and in the spring term, she would teach occupational English to that group for the first time. In the fall semester of the 2017-2018 academic year, that is, in the previous term of the same year, the students received a pre-intermediate level course, just based on dialogues for particular situations of a typical pharmacist's store in a traditional instruction model by another English teacher. That was the first time for those students to have a flipped instruction experience with an EAPP syllabus taught by the researcher.

In the very first week of the beginning of the term, the researcher explained to the students that she would teach the course as the implementation of her study for a doctoral dissertation. She explained to them that she aimed at designing a flipped EAPP syllabus and that their roles as participants would determine the outcome of the study via supplying their feedback throughout and at the end of the term. The students were asked for their consent to take part in the process as the participation was a volunteer basis. In case they would not like to attend the study, they were also given a chance to take the same course in the traditional class atmosphere at another class hour on another day to prevent the violation of their right to

get the instruction with the same content with the same learning outcomes and assessment criteria. However, the students all agreed to take part in the flipped class.

Before the implementation of the syllabus in the classroom, and holding the focus group interviews, the participants were informed about the function of the presence of the camera in class and/or interview room so that they would not feel anxious to be videotaped during sessions. The participants were reminded that the presence of the camera was for research purposes to keep a record of the dynamics in class and /or interview room, and not to lose data essential for research purposes rather than recording participants' performance during sessions or sharing their images with third parties other than the research purposes.

The researcher always highlighted the importance of the students' role as participants not only during the term when they were asked to keep reflective journals to express their opinions freely without writing their names on the papers but also during the focus group interviews handled at the end of term when they were asked to criticize the syllabus. In focus group interviews, the researcher always encouraged the participants to feel free to express their criticisms towards the syllabus.

Handling the focus group interviews in Turkish with the participants helped them feel relaxed to give their opinions when compared to English, in which they feel a bit more anxious and lesser proficient to express themselves.

Before holding semi-structured interviews and focus group interviews at the beginning and end of the research, the participants were asked for their consent to take part in the research as the study was a voluntary basis. Therefore, they were each given informed consent forms (see Appendix 2), explaining the purpose of the research; the data collection procedures to serve for the research purpose; the importance of the participants' role in the research; the participants' right to withdraw from the study whenever they want without facing any difficulty, enforcement or penalty; the protection of participants' real identities and their video and/or voice records without sharing with any third-party other than research purposes and by using pseudonyms in the research report. By signing the consent forms, the participants accepted to take part in the research and to give permission to be videotaped and/or their voice being recorded during data collection procedures. Additionally, a copy of the consent forms was given to each participant to keep for their personal rights in case of a need in the future.

Trustworthiness of the Study

The issue of research quality is of great concern for all researchers for sure as it reflects how well a research procedure is designed to answer research questions. In the research literature, different criteria are applied to evaluate the quality of quantitative and qualitative traditions. In quantitative research, the issues of validity and reliability are generally the most important tools for generalizability of the research findings that show the quality of research via numeric data related to the phenomenon under study; however, since the aim is not to generalize in qualitative studies, but focusing on information-rich settings, the qualitative methodologies approach these issues from a different perspective via highlighting the characteristics of the phenomenon under study. Therefore, in qualitative research, the issue of validity that refers to the verifiability of research results has greater importance rather than the issue of reliability that refers to the repeatability of research results in similar settings (Yıldırım, 2010, p. 81). Additionally, Merriam (2013, p. 201) states that qualitative researchers use different equivalents of the quantitative terms used for the quality of research due to different philosophical references of research paradigms. Therefore, there are different criteria for qualitative researchers to ensure the quality of their research studies, which will be treated below compared with the terms generally preferred in traditional research (Merriam, 2013, p. 201), as is seen from the Table 5 below.

Table 5. *The Trustworthiness vs Reliability & Validity Issues in Comparison*

CRITERIA	QUANTITATIVE RESEARCH	QUALITATIVE RESEARCH	METHODS USED IN THE STUDY
The exact representation of reality with research results	Internal validity	Credibility	• Data triangulation • Longitudinal participation • Constant observation • Peer/ expert review • Researcher's self-reflection • Deviant case analysis
Application of research results to other settings	External validity	Transferability	• Thick description
Achieving consistency within the study	Reliability	Dependability	• Data triangulation • Peer/ expert review • Researcher's self-reflection • Research journal • Reaching the saturation point • Using NVivo 11 Pro for data analysis
Being unbiased in research reports	Objectivity	Confirmability	• Researcher's self-reflection • Recording data via electronic devices • Using low-inference descriptors in the findings section

Precisely, qualitative researchers use the term 'trustworthiness' instead of 'issues of reliability and validity' to generally talk about how well research was conducted through a

series of treatment researchers apply in their research process (Yıldırım, 2010, p. 84). Therefore, the qualitative terms ‘credibility’, ‘transferability’, ‘dependability’ and ‘confirmability’- respectively corresponding to the terms ‘internal validity’, ‘external validity’, ‘reliability’, and ‘objectivity’ that are sought in quantitative research- are treated under the umbrella term trustworthiness in qualitative research.

Credibility.

To begin with, the term ‘credibility’ is used to refer to research results and research process being verified by other researchers via clear and consistent explanations of these processes to the readers (Yıldırım & Şimşek, 2013, p. 299). Otherwise, there may appear some suspicions about the conclusiveness of the research. Merriam (2013, p. 205) claims that credibility is the most powerful parameter of quality of qualitative researches in that the researchers who also function as a data instrument of qualitative studies stand much closer to the reality when compared to any other quantitative data collection instrument that intervenes between the reality and the phenomenon under study with the intent of digitizing research results. It is because in order to have a holistic sense of reality and to understand complex human actions and relations in a specific context, the reality is directly achieved through participants’ responses and stances in interviews and observations in their own settings in qualitative research. However, even though qualitative researchers acknowledge that there is no one absolute reality or truth in social sciences as a social reality is constantly under the change in the course of time, they need to practice a series of strategies to achieve full credibility of their research.

Merriam (2013, p. 205) suggests that the most frequent strategy to achieve credibility is data triangulation. Denzin (1978, cited in Merriam, 2013, p. 206) classifies triangulation that helps attain credibility as:

i. using multiple techniques while collecting data: e.g. supporting interview responses with observation notes and documents, etc.
ii. benefiting from a variety of data sources: e.g. cross-examining of data gathered at certain intervals, at different settings or realizing interviews more than once with the same participants, etc.
iii. participation of several researchers: e.g. different researchers are included in data analysis, or researchers conduct a study in cooperation, etc.
iv. relying on various theories while comparing, controlling and confirming research findings, which is less common in qualitative tradition: e.g. considering several theories or hypotheses during data analysis, etc.

Relying on the abovementioned issues about triangulation, in the current study, data triangulation was applied; that is, multiple data collection techniques were used, which are semi-structured interviews, document analysis, focus group interviews, participants' reflective journals, researcher's field notes and observation. This multiple look on the phenomenon helped the researcher describe the research processes and explain the research results from a variety of lenses to the readers, proofs of which were adduced with references to the raw data.

Similarly, Creswell (2013, p. 250) recommends longitudinal participation and constant observation in the research site, and hence learning the culture of the group of people under study in order to prevent misunderstandings that may be driven from participants' personal evaluations on the phenomenon under study either in interviews or in reflective journals. By learning the culture and what happens in the research setting in a long period of time, researchers gain a holistic understanding of the research atmosphere and complete missing parts and/or correct misleading parts of data with this powerful tool of 'being there for a long time'. The researcher of the current study spent 12 weeks in a flipped EAPP course environment as an insider, and her field notes and video recordings for observation purposes helped the researcher see the big picture of reality in class. The participants' responses in interviews and journals were supported by this means.

Additionally, Yıldırım and Şimşek (2013, p. 302) propose counselling an expert who is experienced in qualitative research methodology and/or in the research topic for the credibility of the research process from different dimensions as much as possible. This expert review has to have critical lenses towards research design, data collection and analysis tools and techniques, and finally writing these on research reports. The reviewers' feedback for the problematic issues in research helps the researcher see their studies critically from others' eyes, and is very beneficial to redesign the process and /or rewrite the report accordingly to serve best for the research purposes. Relying on this criteria, the researcher of the present study consulted two sometimes three different experts who are experienced in educational qualitative research while designing the data collection tools, and the researcher made necessary arrangements on these tools according to their feedback before the actual application in data collection. Similarly, during writing the dissertation, the researcher asked her colleagues for proofreading of sections of the thesis to check whether the meaning of texts is conveyed clearly for the readers. This feedback gathered from colleagues and experts helped the researcher approach her study critically and improved her methodology in data collection and analysis together with writing a more qualified qualitative research report.

Moreover, Creswell (2013, p. 251) strongly recommends researchers to express their researcher identity in their research reports, for example, by presenting their biases, research paradigms, assumptions and experiences in the related research field that may have any influence on the processes of research. This reflection will help readers differentiate researchers' biases from the data gathered. Therefore, the researcher in this study expressed her roles as a researcher in fine detail in the methodology section. This self-reflection helped the researcher improve her researcher identity at a more conscious level, and realized to isolate her presence in the research process as much as possible.

Finally, Merriam (2013, p. 209) suggests benefiting from negative/deviant case analysis, which involves searching for and discussing contradictory elements of patterns or explanations that are emerging from data analysis. Here the aim is to account for a majority of cases to prove researcher's objectivity in presenting research findings. Otherwise, readers may become suspicious about the reality presented in the research if only particular points of view are represented. Hence, the researcher of the current study discussed contradictory patterns emerged from data analysis with necessary explanations and/or reflections for the appearance of each case in the dissertation. This type of case analysis is hoped to reflect the researcher's objectivity as much as possible.

Transferability.

The issue of generalization, in other words is approached in a different perspective in qualitative research. It is because qualitative tradition does not suppose the quantitative idea that data gathered from a particular sample may be generalized to a larger population with similar features (Yıldırım & Şimşek, 2013, p. 302). Instead, in qualitative research, the data gathered from a particular setting with participants chosen purposefully according to research purposes depend on particular contexts under study by nature, as the aim is to examine the phenomenon in fine detail with no need to generalize to other contexts. Therefore, the term 'transferability' is used to talk about an analytic generalization in qualitative research rather than a statistical generalization in quantitative research (Güler *et al.*, 2013, p. 343). Here, Güler *et al.* (2013) draw attention to the analytic generalization being made by readers themselves by examining research results of a study and deciding whether and how they may use these research results in their own contexts, which is also called reader generalizability.

Yıldırım (2010, p. 86) suggests thick description as a strategy to achieve transferability in qualitative research. The detailed description of the research area, data collection and data analysis processes help readers picture the research processes in their minds and adapt research results to their own contexts more easily as well as generating their own impression

of research results, which decrease the subjectivity of the presentation of research findings. It depends on readers to decide on what aspects of research findings may apply to their own situations while the researchers' role is to provide a thick description, through which this decision is much easier to make. Therefore, the researcher of the current study made a detailed description of the context, the research purposes, the data collection and analysis processes, the action research cycles in the methodology section of the current dissertation to help readers apply the methods or results of the study to their own situation and to eliminate any biases towards the research procedures.

Dependability.

The quantitative notion behind the term 'reliability' refers to gaining the same findings in a study when the research processes are reapplied in the same setting (Merriam, 2013, p. 211), which shows the consistency of the research results to the readers of the research report. However, reliability is a controversial issue in social sciences as human behaviours are not stable and constantly under change; and therefore, expecting the same findings for the second time at a research site is supposed to be impossible. That is why qualitative research does not confirm reliability in that sense as the dynamic differences of phenomena derive from the nature of social reality (Yıldırım & Şimşek, 2013, p. 305). Therefore, As Merriam (2013) explains, qualitative researchers prefer to use the term 'dependability' instead of the term reliability to refer to what extent the findings are consistent with the data gathered in a study. That is to say, the cardinal issue in qualitative dependability depends on readers' recognizing the consistency and trustworthiness of the research findings relying on the data presented in fine detail from beginning to the end of the research process in the research report rather than the utopic notion of attaining the same findings again (p. 212).

In addition to the abovementioned methods, which are used for triangulation in order to verify interviewed data with observed data, for example, to reach supporting results, expert review for decreasing researcher biases, researcher's reflection for research transparency to describe all research processes in fine detail to the reader, to achieve credibility, etc., Merriam (2013, p. 213) also suggests keeping a research journal to achieve dependability in qualitative research. Here what is meant by a research journal is the researcher's taking personal notes during all the research processes from thinking about a research problem to data collection and analysis, including researcher's thoughts and decisions upon each research cycle. These notes may be used in data analysis and interpretation of findings to remind the researcher of the details of the research experience, and when needed, the researcher may make references to these notes in the research report. Thus, in the present study, the researcher kept a personal

research diary accompanying the field notes gathered at the research site, mentioning her decision making processes during the action research cycles. These notes helped to interpret and synthesize the findings of the triangulated data while writing the research report.

Moreover, using computer software in data analysis is also accepted to increase the dependability of data analysis as they empower this process by enabling researchers to search within datasets from a variety of points of view straight and fairly via the functions supplied on the software (Silverman, 2010, cited in Güler *et al.*, 2013, p. 144). Compared to data analysis made manually, the data analysis made via computer software eliminates the mistakes made by researchers during manual analysis or during transcribing audio and video files, especially when the data are composed of huge amounts of different media files (Güler *et al.*, 2013, p. 144). Thus, the researcher preferred to use NVivo 11 Pro qualitative data analysis software for data handling of written, audio and video files for qualitative analysis.

Furthermore, Güler *et al.* (2013, p. 345) recommend reaching the saturation point in data collection and analysis to achieve dependability. That is when no new or relevant information appears, it indicates that further data collection and/or analysis is unnecessary, and thus, it is enough to prove the consistency of findings gathered from the beginning to the end. By this means, the time spent at a research site will acquire dependability of research findings. Therefore, the 12-week-time spent for the implementation in research site at the current study was sufficient to reach an essential amount of data to support research results in that sense as the data emerging through the end of the implementation period started to repeat itself.

Confirmability.

Finally, the issue of ‘objectivity’ in quantitative research finds its qualitative cover in the term ‘confirmability’ to refer to the detachment of the researcher in presenting the research results (Güler *et al.*, 2013, p. 346). To achieve confirmability, the researcher is supposed to prove that personal biases are overcome as much as possible with related precautions. Therefore, Güler, *et al.* (2013) suggest a series of strategies to achieve confirmability in qualitative research:

a) Researcher’s self-reflection to achieve research transparency via giving information about researcher’s educational perspective; experiences in research methodology and the specific field under study; relationship with the participants; roles the researcher took in the study in the process of gaining access, approaching participants, data collection, and analysis, etc. that may affect these processes.

Accordingly, the researcher gave detailed information, as abovementioned, about the researcher in the action research process to achieve transparency.

b) To avoid researcher bias, taking record of the data appropriately, via using a voice recorder, video recorder, etc. during interviews and observations. Similarly, the researcher recorded her courses via a video camera to crosscheck data gathered from focus group interviews with students, field notes, researcher's notes and students' journals to verify what happened during the term.

c) When presenting findings, using low- inference descriptors; that is, researchers' quoting participants' responses as much as possible while giving their own interpretations of these references as less as possible in the findings section of a research report to help readers evaluate researchers' interpretation of the data relying on these responses, and to what extent researcher interpretations are done correctly by comparing them with their own interpretations. Accordingly, the researcher made references to participants' responses in focus group interviews, reflective journals and semi-structured interviews as much as possible in the findings section of the dissertation, supporting them the data gathered from field notes.

Finally, Creswell (2013, p. 257) takes a step forward and suggests treating the issues of research quality for each research design relying on their unique research purposes. In other words, Creswell emphasizes that, in addition to the universal standards of research quality, specific quality criteria should also be applied when dealing with trustworthiness, or in quantitative terms, validity and reliability issues in researches. For that reason, in the current study, the suggestion of Burns (1999, cited in Uztosun, 2013, p. 86) was followed for the overall quality of the action research study, dimensions of which are shown in Table 6 below:

Table 6. *Validity Criteria for Action Research(Burns, 1999, cited in Uztosun, 2013, p. 86)*

	Validity Type	The Description
1.	**Democratic Validity**	This criterion relates to the extent to which the research is truly collaborative and allows for the inclusion of multiple voices.
2.	**Outcome Validity**	This criterion relates to the notion of actions leading to outcomes that are 'successful' within the research context.
3.	**Process Validity**	This criterion raises a question about the 'dependability' and 'competency of the research': Is it possible to determine how adequate the process of conducting the research is?
4.	**Catalytic Validity**	This criterion relates to the extent to which the research allows participants to deepen their understanding of the social realities of the context and how they can make changes within it.
5.	**Dialogic Validity**	This criterion is in parallel with the process of peer review which is commonly used in academic research. Typically, the value or 'goodness' of the research is monitored by peer review for publication in academic journals.

Relying on the abovementioned criteria to achieve validity, accordingly quality, in action research, the current study has democratic validity in that multiple voices of the stakeholders, who are learners, faculty members and lecturers of English including the researcher herself in the context of teaching EAPP content in a flipped class at the faculty of pharmacy, are included in the study via semi-structured and focus group interviews. Secondly, it is hoped to have outcome validity in the study as all endeavours were made to generate a needs-based efficient flipped EAPP syllabus for pharmacy learners, and to some extent, as the study is a product-oriented one, with the aim to design a syllabus, this could be achieved at the end of the study. Thirdly, the current dissertation has process validity as the design, implementation and evaluation of the flipped EAPP syllabus took almost two academic terms, making use of methods of triangulation to achieve dependability in a long process. Fourthly, the present study has catalytic validity since all the stakeholders were involved in designing the EAPP syllabus for faculty of pharmacy via needs analysis in their context by being stimulating about how they can make changes within social realities of their contexts. Finally, the current action research has dialogic validity as during the processes of designing, implementing and evaluating the action research, the researcher consulted peers and experts who are qualified in educational qualitative research and ESP teaching. All in all, the value of qualified action research is evaluated by its main nature of "leading to a change by making difference to a problem with a solution" (Creswell, 2005, p. 565). This is hoped to be achieved by the researcher's challenging her teaching practice to improve the learning and teaching environment in her setting via a different methodology (flipped learning) in ESP teaching in a specific context (pharmacy); and accordingly, challenging learners with this flipped methodology and having a say in a syllabus design that they are exposed to in their educational lives.

Data Analysis

In this section, the data analysis procedure will be specified with the justification of the selection of data analysis method and software device to help realize the analysis. To begin with, it is worth noting the fundamental characteristics of qualitative data analysis offered by Creswell (2005, p. 232), which is the underlying data analysis approach of the current dissertation:

i. Qualitative analysis (QA) is inductive in form; that is, the analysis starts from the particular to the general. As Yin (2011, p. 178) puts it, QA starts from disassembling the data into codes and categories to assembling the data into themes and patterns to generate a larger picture of the phenomenon of interest.

Accordingly, inductive analysis was conducted in the current study as categories and themes emerge from the data instead of searching for predetermined sets within the data deductively (McMillan & Schumacher, 2006, p. 364), which helped the researcher discover the whole picture in its own reality instead of looking for fixed patterns prior to data collection.

ii. QA is realized concurrently; that is, while collecting data, analysis is also done simultaneously, and even report writing is done at the same time to return for missing or supporting information to the field to complete previously gathered data. This simultaneous feature of data collection and analysis is especially notable in action research, in which research procedure is cyclical by nature as in the current dissertation. Thus, as Burns (1999, cited in Uztosun, 2013, p. 81) remarks, the processes of data collection and analysis "inevitably overlap, interrelate and recur". Similarly, in the current dissertation, data collection and analysis proceeded simultaneously. That is to say, the data collection period during the implementation of the action plan was interrupted with cycles of data analysis as the process was evaluated formatively via a follow-up plan.

iii. QA is handled until the researchers reach the saturation point in data analysis, in which no new or relevant information appears in analysis, which indicates that further data analysis is unnecessary. Similarly, in the current study, the data analysis continued until the saturation point where no new categories and/or themes emerged in the analysis.

iv. QA is unique to each researcher even if there are some overall guidelines for the process. Additionally, it is interpretive research in which each researcher brings their own perspective to their interpretations that fit their situations best rather than a standardized formula that fits for all analysis process. As Kabakçı Yurdakul (2016, p. 3) puts it, it is also possible to gain different findings from the same data set due to the differences among researchers' perspectives, aims and research questions.

At the macro level, the data analysis process was realized as in the following, parallel to data collection phases:

i. The firstly collected data gathered from the semi-structured interviews with pharmacy faculty members served for the needs analysis of the flipped EAPP syllabus. After completing the semi-structured interviews with faculty members, the data were coded around meaningful units, and these codes were brought

together under meaningful categories to serve for answering the research questions. These data were used to generate the pool of learning outcomes of the syllabus under study. Additionally, the researcher combined these findings with the analysis of existing occupational English course syllabuses at faculties of pharmacy at different universities in Turkey as well as that of the aforementioned ESP coursebook for pharmacy students, and finally, the researcher categorized the learning outcomes under topics of a task-based syllabus to serve best for the EAPP course at the faculty of pharmacy.

ii. The needs-analysis-driven syllabus was used in the implementation of flipped class in one term. Since the researcher aimed at developing the syllabus considering her experience and the feedback from students during the implementation as well, the analysis of the data gathered during the term (course observation video recordings and students' reflective journals in addition to the researcher's field notes and research journal) were analysed in parallel with data collection during implementation. That is to say, during the implementation of the flipped EAPP syllabus, as the teacher was also busy with analysing the learners' journals and keeping field notes at the same time, whenever she determined a need and/or a problematic issue in the process, she made necessary research to solve that particular problem, such as finding a more user-friendly platform for sharing videos with students after reading their reflective journals of that specific week. Then, the researcher reached a conclusion upon analysing data on the related topic and put her solution into practice that week. Thus, the second phase for data collection, which also proceeded in parallel with data analysis, served for developing the syllabus formatively relying on learners' constant feedback and determination of the situations by the researcher as the teacher of the implementation.

iii. As for the final evaluation of the syllabus, the focus group interviews held at the end of the term (4 with learners, 1 with lecturers of English and another one with faculty members) were also analysed to answer the research questions concentrating on what could be included in and/or excluded from the pharmaceutical content of the flipped EAPP syllabus and what kind of improvements could be realized in the implementation of flipped learning strategy.

As for the micro-level analysis, the researcher followed Creswell's (2005, p. 231) model on the inductive process of data analysis in the present dissertation, as shown in Figure 32 below:

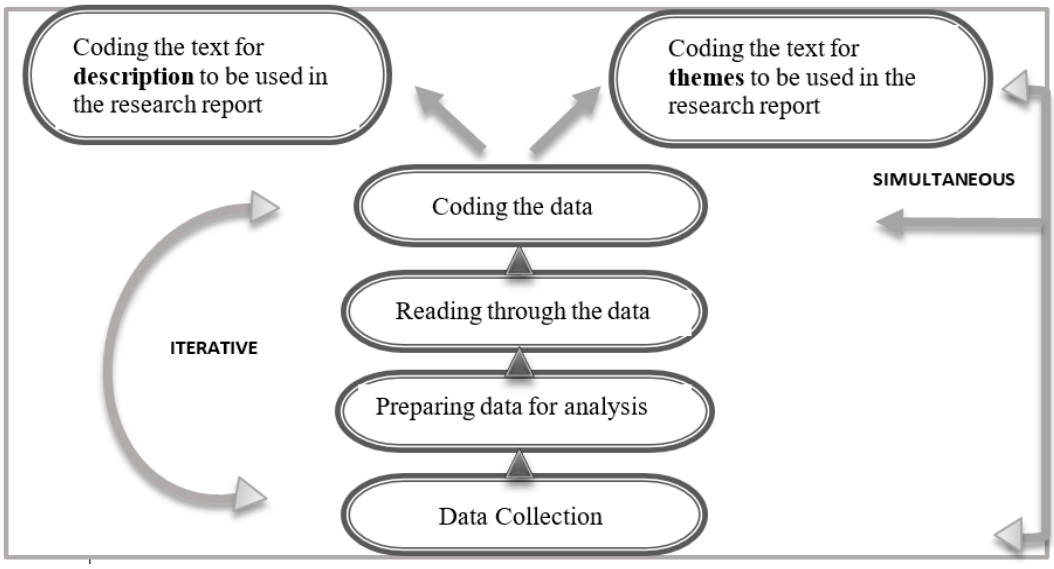

Figure 32. The qualitative process of data analysis (Creswell, 2005, p. 231).

Relying on the abovementioned process of qualitative data analysis suggested by Creswell (2005), the researcher conducted an inductive content analysis via NVivo 11 Pro qualitative data analysis software program, through which handling huge amounts of data composed of different media sources was easier when compared to manual data analysis through its filing system in folders, and functions of searching, coding, decoding, mapping, and modelling. Accordingly, the researcher conducted the data analysis as in the following steps suggested by Creswell (2005) in this dissertation:

Step 1: Preparing data for analysis. First, the researcher prepared data for analysis in folders in NVivo; that is, the existing syllabuses of ESP courses at faculties of pharmacy at universities in Turkey, field notes, notes on researcher's journal and learners' reflective journals were transferred into Word files and imported to NVivo; the audio files of semi-structured interviews and the video files of 12-week- courses and focus group interviews were also imported to NVivo program, so that all data sources were in NVivo, ready for analysis.

Step II: Reading through the data: Secondly, these data were read, listened and watched thoroughly over pages, audio and video files to determine meaningful units, relying on what participants suggested to find answers to the research questions.

Step III: Coding the data: Then, the researcher marked related pieces of participants' responses either as words, sentences or paragraphs by providing a code label for selected parts of the files, and continued this process of marking sections and coding the entire text/audio/video files, as shown in Figure 33 below. At this point, the researcher benefitted from the features of NVivo 11 Pro in coding audio and video files directly as raw media files rather than transcribing them first and studying on these transcriptions while coding. That is, the researcher selected the parts of audio and video files and attributed codes to them, which

helped eliminate possible mistakes that may occur while transcribing, and thus, strenghtened the dependability of data analysis.

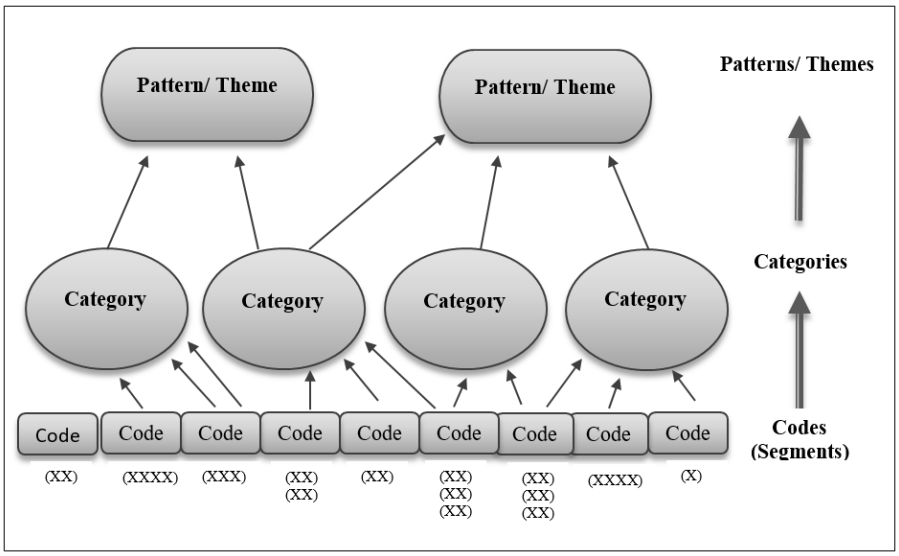

Figure 33. Building Patterns of Meaning (McMillan & Schumacher, p. 373).

Step IV: For the next step, the art of qualitative analysis worked; in other words, the researcher searched for similarities and differences among coded texts via a third reading. The overlapping codes were reorganized, when necessary, by merging similar ones into one as well as splitting codes into two or three codes, relying on their meanings conveyed about the research topic.

Step V: Finally, depending on these codes, the researcher generated categories and related themes that communicate broader senses of meaning about the research interest. Additionally, some data did not provide evidence for the themes emerged during analysis, and they were disregarded from the scope of findings. However, there appeared new categories as well during the analysis, which also enriched the existing categories with new dimensions in this process. As Creswell (2005, p. 239) suggests, the small number of themes were used for detailed information about the major themes that were most frequently discussed or had the most evidence to support them rather than giving general information about many themes. The detailed information in these small numbered themes was the description of people, and events in a setting when talking about findings in the study. Here, the researcher continued generating themes until she reached the saturation point when no new themes emerged from the analysis.

Step VI: The researcher also benefitted from Miles and Huberman's Flow Model in qualitative data analysis (1994, p. 10), which is composed of the steps of data reduction, data display, and conclusion drawing and verification, similar to Creswell's (2005). Here, with parallel strategies in each step to Creswell's (2005) suggestion, Miles and Huberman (1994)

propose displaying data in matrices, graphs, charts and networks to ease conclusion drawing as qualitative extended texts become a burden for readers to follow and build relationships among them. Therefore, for the next step, the researcher displayed the findings using figures to help readers have a broader impression of the overall findings in manageable chunks, which also helped the researcher establish relationships among the themes by going further than just sorting out categories and themes in findings section. As Miles and Huberman (1994, p. 11) state, designing displays is part of the analysis because it requires the researcher to see whether "to draw justified conclusions or move on to the next step of analysis the display suggests may be useful". Then, as the third step of Flow Model of Miles and Huberman, the researcher worked on drawing conclusions with verification of data from field notes, interviews, observations, etc. Here, researchers look for patterns, cause and effect relations, explanations, etc. within the findings since the beginning of data collection; and inductively generate conclusions as analysis proceeds. Accordingly, the researcher built relations among the themes by using references to the raw data in participants' quotations and researcher's field notes to help readers check their understanding of the findings presented.

As a final note on data analysis, Kabakçı Yurdakul (2016, p. 16) remarks that the idea of reaching a coding accuracy among more than one coder contradicts with the principle that there is no ultimate truth in data analysis and that there are different types of data analysis depending on each researcher. Therefore, Kabakçı Yurdakul defines coding accuracy in qualitative data analysis as controlling whether the process of generating codes and themes is completed and as examining the table of codes and themes in terms of their appropriateness to the data set by an expert qualified in the specific research field and qualitative data analysis. It is the researcher's responsibility to give information on how this process was realized and what was done to reach the saturation point in data analysis in fine detail to achieve the credibility of the data analysis. Therefore, in the current study, the researcher asked for review from an expert who is experienced in qualitative analysis to critically examine the table of codes, categories and themes in relation to their properness to the data set presented. Additionally, Yıldırım and Şimşek (2013, p. 281) suggest applying the emerged code and theme table to a randomly selected portion of a data set in deductive way so that the researcher could check whether the codes are functional for the data set. Thus, the researcher crosschecked the table of codes and themes of the current study by applying a deductive analysis to a part of raw data set and made necessary modifications on the code and themes labels, which increased the credibility and the consistency of the analysis. These processes also helped the researcher build the inter-relationship among the categories and themes generated.

Limitations

There are some inevitable limitations of the current action research, which do not necessarily reduce the contribution of the current study to design a flipped EAPP syllabus for pharmacy students but need to be considered in future research and implications.

Firstly, the present action research depends solely on qualitative data sources, which may be criticised in terms of quantitative concerns of validity and reliability. However, being practical action research in nature, the current study concentrates on improving the quality of educational practice in a specific setting with a narrow context of teaching English for pharmaceutical purposes, relying on naturally occurring events in local grounds via rich and holistic data that were collected over a sustained period of time.

Secondly, a longer period of study is surely needed "to unveil the interwoven complexities and fundamental patterns" (Patton, 2002, p. 273) of the phenomenon under study, which takes a long time to discover in qualitative research designs. However, this time duration is shorter in action research as Patton (2002, p. 274) remarks that action research aims to make on-site decisions as the action takes place, such issues cannot wait for years to solve a specific problem in research site to be useful. Thus, "the duration of observations depends mostly on time and resources available", relying on researchers' primary needs and aims.

Thirdly, the study is only limited to the context of faculty of pharmacy, and therefore, the suggestions on the syllabus are only limited to using English for pharmaceutical purposes. Additionally, the current syllabus was designed to be taught for one academic year, so the scope does not cover a whole year of study; thus, for future research, the overall English curriculum of the faculty of pharmacy has to be considered in the broader lens of language regulations of the faculty. However, the suggestions on designing an EAPP syllabus and teaching in the flipped learning approach may be transferred to contexts where English is taught for specific purposes at tertiary level.

Finally, the researcher acknowledges designing and implementing a course on flipped learning is a new experience for her; thus, the processes of design and implementation of the course for individual and group space in flipped learning approach may have some inconveniences due to the inexperience of the researcher in certain cases, such as making more professional videos on licenced software devices on video recording, etc., which may have also affected the processes. However, the researcher regards all the process as a gain in her professional development as she observed that her teaching practice in a flipped learning environment has improved when compared to the very beginning of the study, such as

designing more communicative in-class activities and making course videos efficient for learners using different media tools, etc, which the current action research meant to achieve.

In the following chapter, the data gathered before, during and after the implementation of the flipped EAPP syllabus will be interpreted with references to the formative and evaluative feedback of the participants and with the discussion of the related research in the field in relation to the research questions of the study. Finally, the revised version of the flipped EAPP syllabus will be presented, relying on the evaluation made by the participants and suggestions from the empirical research.

CHAPTER FOUR

Findings and Discussion

In this chapter, the data gathered before, during and after the implementation of the flipped EAPP syllabus were presented and interpreted in association with the research questions of the current study, and they were discussed with references to the empirical evidence in the related literature. The first research question, '*What are the context-driven tasks to handle in English for pharmaceutical purposes?'* led to a needs analysis to discover the learners' needs to use English for pharmaceutical purposes as the first phase of data collection. Thus, the researcher conducted a needs analysis through semi-structured interviews with faculty members at the faculty of pharmacy; had a review of existing occupational English course syllabuses at pharmacy faculties in Turkey and analysed the existing ESP course books for pharmaceutical purposes on the ESP market. The data gathered were used to generate a pool of learning outcomes for the flipped EAPP syllabus for undergraduate students of the faculty of pharmacy. In the first section of the findings and discussion chapter, these data will be presented with references to the participants' responses and the related documents; and finally, the syllabus generated relying on these learning outcomes will be exhibited.

To find answers to the second, third and fourth research questions, which are '*What are the views of the learners towards learning English for pharmaceutical purposes through the flipped EAPP syllabus*?'; '*What are the views of the lecturers of English towards the linguistic dimension of the flipped EAPP syllabus?'*; '*What are the views of the faculty members towards the pharmaceutical content of the flipped EAPP syllabus?',* learners, lecturers of English, and faculty members were consulted respectively on their suggestions towards the implemented flipped EAPP syllabus. Thus, the data gathered during and at the end of the implementation of the flipped EAPP syllabus were interpreted to gain an understanding of what could be included in and/or excluded from the pharmaceutical content of the occupational English course and what kind of improvements could be realized in the implementation of the flipped learning model. Accordingly, the second phase of the study, in which the implementation of the syllabus took place, included three datasets composed of the learners' journals, the researcher's field notes and video recordings of the course during the term while the third phase of the study, in which the overall evaluation was made, involved three different datasets consisted of focus group interviews with 38 learners, 2 faculty

members and 3 instructors of English. Accordingly, in the second section of the findings and discussion chapter, these data in the second and the third phases of the study will be presented around the four units of the flipped EAPP syllabus. Integrated with different sources of data, the analysed data will be introduced and discussed with references to the related literature and the formative and evaluative feedback of the learners, the lecturers of English, and the faculty members during and at the end of the term. Finally, in the third section of the findings and discussion chapter, the revised version of the flipped EAPP syllabus will be suggested, relying on the evaluation made by the participants and suggestions from the existing empirical research.

It is worth mentioning that in order to make this dissertation reader-friendly and to ensure the confidentiality of the participants' identities throughout this chapter, while making references to the participants' comments, a specific reference scheme was used to address to learners, who were interviewed in groups of ten in separate four focus group interviews, e.g. Learner X1, Learner E2, etc., while pseudonyms and numbers were used to mention lecturers of English and faculty members as well as learners, e.g. 'Faculty Member 1', 'Lecturer 3', 'Kerem' etc. In Table 7 below is found the specific reference scheme used to refer to learners while excerpting their comments in the findings:

Table 7. *The Reference Scheme of Learners in the Findings*

Learners	E	S	P	H	A	R	M	Y	C	X
Focus group interview	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3
	4	4	4	4	4	4	4	4	4	4

To illustrate, if a learner was involved in the first focus group interview, they were referred to as in the following possibilities, Learner E1, Learner M1, Learner X1, etc. while if they were involved in the third focus group interview, they were referred to as Learner E3, Learner M3, Learner X3, etc.

The Presentation of the Findings Obtained from the Needs Analysis

In order to design the flipped EAPP syllabus, a needs analysis was conducted to generate the learning outcomes of the syllabus in terms of pharmaceutical content and related language needs. For this purpose, the following research question and the related sub-questions were aimed to be answered:

RQ1. What are the context-driven tasks to handle in English for pharmaceutical purposes?

1.1. In which pharmaceutical contexts is English needed to be used?

1.2. Which language skills are needed in these pharmaceutical contexts?

Below are the findings gathered from the reviews of existing occupational English syllabuses in Turkey and the coursebooks on the ESP market, and finally, the semi-structured interviews with faculty members. Besides, the findings obtained in the needs-analysis phase of the present flipped EAPP syllabus could not be discussed with the results of previous research because each ESP context is already unique in its own setting, and thus, the pool of learning outcomes emerged in needs-analysis phases of course design studies pertain to the suggestions of the particular group of participants in each study context. Therefore, for the first phase of the study, the findings will be presented with references to the participants' comments in addition to the researcher's interpretations of these findings.

The presentation of the findings on the review of existing syllabuses and the coursebooks on the market.

As a result of the review of the occupational English course syllabuses in Turkey, the researcher reached 35 faculties of pharmacy, 29 of which were actively engaged in education in 2017 ("YÖK Lisans Atlası", n.d.). Among these 29 faculties, only 7 faculties, including the researcher's institution, published course contents online in their undergraduate course information packages (i.e. the curriculum of the whole program) and involved occupational English courses in their curriculums at the same time. As for the other faculties, some faculties did not publish any course information packages online at all (n=6); some other faculties did not have even an occupational English course in their curriculums (n=10); some faculties included occupational English courses in their curriculums but did not publish the course contents online (n=6). Therefore, the researcher considered the course contents of only the six faculties, excluding her own institution as it is under study, in order to support the learning outcomes of the flipped EAPP syllabus. In addition to the semi-structured interviews held with faculty members, data gathered from these syllabuses did not only support the initial syllabus design, but they also supplied missing dimensions to the content. The researcher added content to the syllabus, taking the subjects mentioned in the syllabuses into consideration.

Having reviewed the curriculums of the faculties of pharmacy, it was found out that due to their views on English language proficiency of a target student profile, the proportion of general and occupational English courses in curriculums at the six faculties vary. The

different durations of time in program curriculums among the six faculties of pharmacy are depicted in Table 8 below:

Table 8. *The Duration of ESP and EGP Courses in Different Program Curriculums*

University	**Status**	**General English Course Year/ Term**	**Occupational English Course Year/ Term**
A	State	2nd year/ two terms	5th year/ 1 term
B	Private	-	The first 2 years, 5th year/ 5 terms
C	State	1st & 2nd years/ 4 terms	2nd year/ 2 terms
D	Private	1st & 2nd years/ 4 terms	3rd year/ 2 terms
E	State	1st year / 2 terms	5th year/ 1 term (elective)
F	State	1st year / 2 terms (elective)	4th year/ 1 term (elective)

Relying on the data found in the table above, it is seen that none of the curriculums includes English either for general or specific purposes in each year of the study, which shows differences among present language learner profiles in different faculties or the importance the faculties give to English in their target graduated student profile. Exceptionally, in the case of the researcher's institution, the curriculum includes English courses for general purposes in the first two years; for occupational purposes in the third and the fourth years, and finally for test-taking purposes in the fifth year of study. As the researcher's institution provides English instruction in each year of study, it seems that the institution puts more emphasis on English in their target graduated student profile, and/or their learners need more instruction to support their proficiencies in English, and thus, the faculty is in more expectations from their students to be proficient English users in their professional contexts. However, the researcher feels the necessity of cooperation among faculty members and lecturers of English in order to reconsider the content of the occupational English courses in the third and the fourth years of study in the program curriculum. Since the syllabuses in practice were not designed by any collaborative work with those who are directly concerned with the issue, the current situation creates problems while delivering courses: Either content-specific sources are scarce for lecturers of English to reach and modify, or the contents of the courses lack the linguistic elements required for mastering the language skills in occupational English contexts. As the current concern of the present study is to design a semester-long occupational English course, the issue needs to be considered for further studies. However, it is also expected to reach an understanding of such collaboration via the attempt of this action research.

In addition to the duration of occupational English courses, the researcher also analysed the content of the existing occupational English course syllabuses at different

faculties of pharmacy in terms of contexts and language skills, which are summarized in Table 9 below:

Table 9. *The Context-Driven Tasks in Different Occupational English Course Syllabuses*

Context	Pharmaceutical Content	Tasks in English
Medical use	• Organs and body systems • Diseases, diagnosis and treatments	• Informing patients in written and spoken forms
Pharmaceutical company	• Business communication	• Writing a cover letter and a CV • Writing and responding to business emails • Introducing and comparing the features of medicine with others in an oral presentation
Pharmacological laboratory	• Laboratory equipment • Laboratory safety • Pharmaceutical chemistry experiments • ESCOP monographs • Pharmacognosy and pharmaceutic Botanics • Toxicology • Pharmacology	• Telling how to handle an experiment, using laboratory terminology • Writing experiment reports • Recognizing the forms, doses, active pharmaceutical ingredients in medicine and the related mechanisms in experiment reports • Recognizing botanical preparations and parts and their effects and uses in experiment reports
Academic use	• Research articles • Proceedings papers • Academic and/or professional seminars and presentations	• Recognizing pharmaceutical terminology in research articles • Translating research articles and proceedings • Writing research articles and proceedings • Giving seminars and presentations on pharmaceutical topics • Communicating with colleagues in professional contexts
Pharmacy store	• Patient information leaflet • Patient-pharmacist communication	• Understanding the patient information leaflets of the prescribed and OTC medicine • Telling patients how to take medicine: in what doses; how often, how to store, etc. • Performing patient- pharmacist dialogues to inform about health problems and treatments

As it is seen from the table above, the learning outcomes range from using English while exchanging information with colleagues at pharmaceutical companies, at research and development departments of state and private institutions and at professional and/or academic conferences to communicating efficiently with patients at pharmacy stores and with other health professionals at clinical departments at hospitals as well. The contexts emerged as a result of the review helped the researcher organize the topics of the units in the initial syllabus

design by forming a prior framework for the syllabus organisation. Additionally, data gained from reviews were used to crosscheck and enrich data gathered from interviews held with faculty members in the syllabus design process.

Finally, as mentioned earlier in the previous methodology chapter, only one coursebook was economically and logistically available to reach in ESP coursebook market for pharmacy students in the researcher's context, which was 'English for Pharmacy Writing and Oral Communication', by the Point publishing written by Miriam Diaz- Gilbert. The organization of the book was inspiring; however, the target vocabulary intensity was a bit higher than the researcher's objectives and the covering of the topics was relatively monotonous for class use. Besides, the coursebook was composed of medical vocabulary comprehension tasks related to 12 body systems, relevant patient-pharmacist dialogues through listening and pronunciation activities and pharmaceutical writing tasks, in which pharmaceutical documentation was not valid in Turkey's context, but in the American context, as the book was initially designed for ESL speakers in American pharmaceutical contexts. The researcher made use of the organization of the book and content as a supporting document when necessary in designing activities in the final draft of the syllabus, though.

The presentation of the findings on semi-structured interviews with faculty members.

The semi-structured interviews held with the faculty members at the faculty of pharmacy in the researcher's institution were the primary source of data for the needs analysis of the flipped EAPP syllabus. The faculty members were asked three main questions about their experiences in any ESP courses; their demands from the students to use English in their courses for academic purposes; and finally, their foresight towards the advantages of being graduated from their faculty with a good command of English in occupational contexts. The responses of the 5 faculty members to the three questions mentioned above were analysed and reported here with references to their responses.

To begin with, the faculty members were asked about their experiences on an ESP course at undergraduate and/or graduate level. Out of 5 faculty members, only one had a semester-long ESP course at the graduate level, the content of which relied on legal protocols and general terminology of the field:

> "Yes, I took an occupational English course for one semester. I learned the terminology of a professional protocol in my field." [Faculty Member 01]

As for the other faculty members, two of them stated they took EGP courses under the course title of 'occupational English' in their undergraduate programs:

> "I took a two-semester-long occupational English course […], but we studied general English." [Faculty Member 02]

> "The courses were named occupational English courses but the content was general English. The reading passages were adapted to pharmaceutical topics. In fact, the texts were mostly about medicine." [Faculty Member 03]

For the rest two faculty members, they told that they did not take any ESP courses during their undergraduate and/or graduate education at all. This question was asked to learn about whether any good practices of an ESP course existed and whether this experience (if any) could provide any insights into how an ESP course could be best designed to meet pharmacy students' needs. The data collected from this question only provided that there is still a misunderstanding and/or indifference towards the necessity of ESP courses in educational contexts of pharmaceutical practice.

Additionally, the faculty members were also asked whether they had any expectations and/or demands from their students in English at their courses at faculty of pharmacy, which served to gather data for the syllabus to include the required skills in English at academic settings as well. Two of the faculty members stated they do not ask for any assignments to be done in English. As for the rest three faculty members, they all explained that they make references to pharmaceutical sources in English and ask their students to have a grasp of international terminology and literacy of their academic field as much as possible in their courses. The Faculty Member 04 exemplified this as:

> "There is some fixed universal terminology used in global literature. I do not translate them into Turkish, such as resonance, etc., in my courses. In the future, if the students choose to study for a master degree or doctorate, they will need these terminologies. Students should learn these terminologies automatically through hearing at the courses and reading in their coursebooks. […] when I went abroad, or when I read a scientific article, I benefitted from using these words in English in our laboratories. […] Even if I did not have an advanced level of English proficiency, I understood the terminology at a conference when a professor talked about their methodology while performing an experiment. Therefore, I try to make my students become familiar with these terminologies in English at the undergraduate level."

The other two faculty members echo their colleague as in the following:

> "I ask my students to reach pharmaceutical sources in English; therefore, they have to be able to translate these texts into Turkish." [Faculty Member 05]

> "I suggest them sources, generally research articles in English, to prepare their assignments for my courses. I ask them to make presentations relying on these articles." [Faculty Member 01]

In addition to understanding research articles in pharmaceutical literature via translation with good command of international pharmaceutical terminology, students are also expected to understand the professional pharmaceutical videos related to their academic field

as the Faculty Member 01 suggested:

> "I use videos on […] scientific developments in class, which are generally in English, students need to have an adequate level of English at least to understand the content better."

In summary, relying on the data gathered from the second question in the needs analysis with faculty members, three skills emerged to add to the pool of learning outcomes, which are translating research articles into Turkish; understanding visual media in pharmaceutical context and having a good command of the common terminology used in pharmaceutical laboratories in English as shown in Figure 34 below:

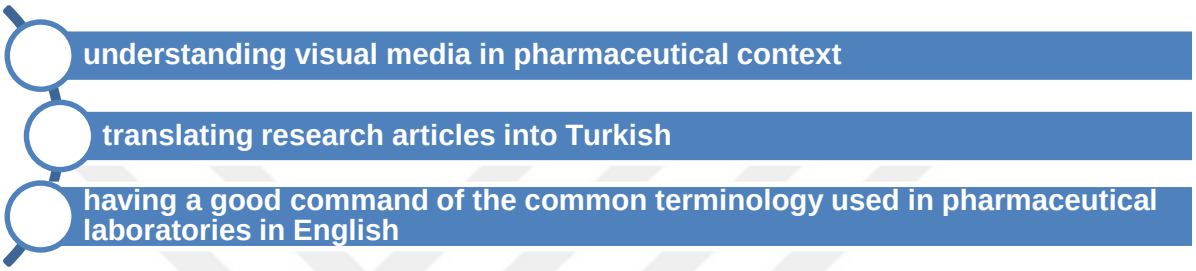

Figure 34. The categories emerged related to EAP.

Finally, the faculty members were asked about their opinions on which English language skills the prospective pharmacists may need to acquire in occupational contexts. Their responses to the question were analysed and six categories of responses emerged, which served for the purpose of generating learning outcomes for the syllabus, as shown in Figure 35 below.

Figure 35. The categories emerged related to English for pharmaceutical purposes.

To begin with, four of the faculty members emphasized the benefit of having a good command of English as a pharmacist working at a pharmacy store. Only the Faculty Member 05 stated, "I do not think that pharmacists in Turkey need any English proficiency at all when they work at a pharmacy store."; however, he also added, "But they need to understand a patient information leaflet in English when they come across a medicine with a foreign brand." Supporting this possibility, Faculty Member 02 talked about his experience with

foreign customers:

> "In Turkey, we call a certain medicine with a different brand name. One day, some foreign people came with a pillbox, which was called with a different name in Turkey, to the pharmacy store [when he worked as a pharmacist], I understood which medicine it was by looking at the cover of the box. But customers asked me to tell you how to take the medicine." [, which shows even for a slight chance in everyday routine in all around Turkey, but more possibly in touristic places, a pharmacist needs English in their professional lives at their pharmacy stores].

On the other hand, the other 4 faculty members mentioned that a pharmacist needs English to communicate with their foreign patients at their stores, especially if located in a touristic spot, as the Faculty Member 01 mentioned:

> "Turkey's economy partly depends on tourism. In touristic spots, you need to communicate with foreigners in your pharmacy store, which makes your store more preferred than others in such places in that sense."

The Faculty Member 02 who worked as a pharmacist before stated that:

> "Only once I needed to use English […]. Two foreign teachers of English that were working at a private language school came to my pharmacy store and I helped them. But this need is greater in more touristic places like Antalya. […] A pharmacist should be able to tell their customers how to use the medicine, etc. […] If a pharmacist is responsible for introducing a medicine, they have to talk about the ingredients of that medicine. In your course, students at the pharmacy faculty may compare in English among different medicines which have similar ingredients to heal the same health problem.".

Similarly, Faculty Member 04 agreed with his colleagues, stating:

> "Pharmacists working at a touristic spot need to know about some certain terminology on how to take medicine. These pharmacists should be able to communicate with foreign patients in their pharmacy stores."

He further elaborated other possible occasions that may require the use of English at a pharmacy store:

> "Similarly, a pharmacist should also understand patient information leaflet of medicine in English. Additionally, while exchanging information with the pharmacy stores online, they also need English. A pharmacist who wants to research certain medicine also needs English as the scientific works are published in English.

Furthermore, Faculty Member 03 suggested:

> "We have a course in our curriculum on patient-pharmacist communication in which students are assigned to create a case study, including a specific patient profile that has certain illnesses or complaints. Students are asked to treat the case by giving some certain medicine and dealing with the patients, starting from welcoming the patient to telling about their illnesses and how to take necessary medicine. This is done at a course called "rational medicine use" in an undergraduate program of the faculty of pharmacy. Here students have to think about other possible situations about their patient; for example, think

about a pregnant woman who has psychological problems and high blood pressure; therefore, the pharmacist should think about chemical interactions of medicines.[…] They may formalize a specific prescription for her, and deal with her starting from welcoming to telling her how to use the medicine […]the pharmacist should tell her a series of things to do and not do while using the medicine […]Sometimes patients may come with some symptoms rather than visiting a doctor and bringing a prescription. So, you, as a pharmacist, need to be in contact with customers in such cases. The English teacher may not be critical about the pharmaceutical dimension, but rather focus on whether the students could express themselves in English. […] students may act out this process in pairs; one of the students may be a pharmacist while another may be a patient. […] Such case studies are very beneficial for practical uses. This supports both the communication skills and English language skills of pharmacy students at the same time."

Faculty Member 02 here echoes his colleague on the same issue:

"There is a patient information competition among the faculties of pharmacy in Turkey, in which pharmacy students compete with each other on giving the best consultation to their patients. It is like a play in the theatre. […] You act like the pharmacist and you have a patient who is a professional actor/actress, indeed. You help the patients asking questions on their health problem and relying on their prescription, you help the patients by talking about how to take the medicine, etc. Students may act out similar cases in class."

To sum up, for the first category of participants' responses, the following learning outcomes occurred as shown in Figure 36 below:

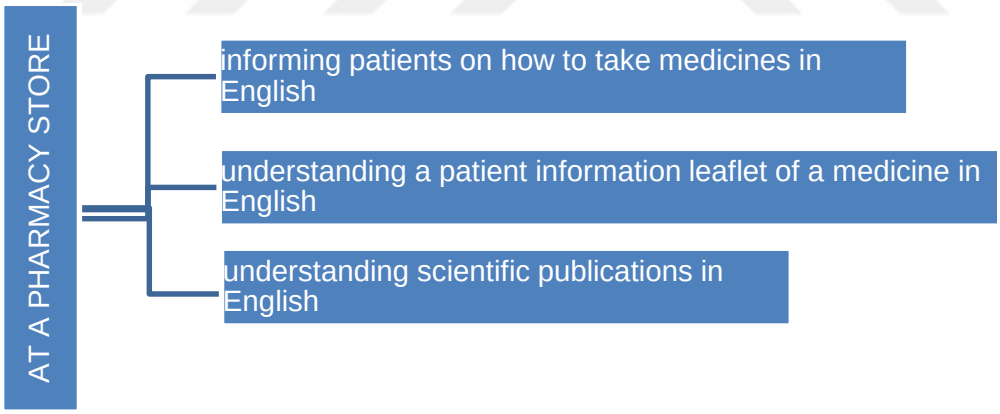

Figure 36. The learning outcomes emerged from "at a pharmacy store" category.

Secondly, the faculty members expressed that a good command of English enables pharmacists to have a position at pharmaceutical companies, and they talked about the possible situations that require the use of English at a pharmaceutical company, as in the following response given by the Faculty Member 02 below:

"There are some foreign pharmaceutical companies that have factories in Turkey. A pharmacist who is good in English should be able to get into contact with foreign directors abroad. The topic may be about selling medicine or obtaining a licence for a specific medicine. […] People at companies of foreign origin may make presentations in English to Turkish employees, so these

pharmacists should understand English. All in all, these companies employ individuals via interviews in English. These people should be competent in communicating in English either by email, skype or face-to-face basis to keep in contact with company authorities."

As his area of specialization is pharmaceutical chemistry, Faculty Member 04 suggested designing typical scenarios to role play as if the students were at a laboratory at a pharmaceutical company:

> [As a pharmacist] "you should be able to express yourself in English by asking and answering questions in personal interactions at a pharmaceutical company. You may turn these scenarios into dialogues to role-play in class. For example, students may explain how to handle an experiment. You have to know the terminology here."

Faculty Member 05 added a professional career dimension to the issue:

> "Pharmacists may attend employment interviews in English with employers at pharmaceutical companies; therefore, they broaden their professional network by this means. […] Pharmacists at pharmaceutical companies should be able to exchange e-mails and phone calls with other companies abroad as well as understanding pharmaceutical literature at research and development departments of the unit of production of these companies."

Faculty Member 03 agreed with her colleague in industrial pharmacy dimension:

> "In business writing, there is some specific terminology used in pharmaceutical companies. Even though business writing has a universal format, each department within such companies also has its own unique terminology important for their work, such as production line, etc. Even when I was doing my internship as an undergraduate student at a pharmaceutical company of foreign origin, I learned lots of new terminologies related to specific procedures of industrial pharmacy. These procedures may be told in English to the pharmacists at pharmaceutical companies of foreign origin."

In sum, for the second category of participants' responses, the following learning outcomes occurred as shown in Figure 37 below:

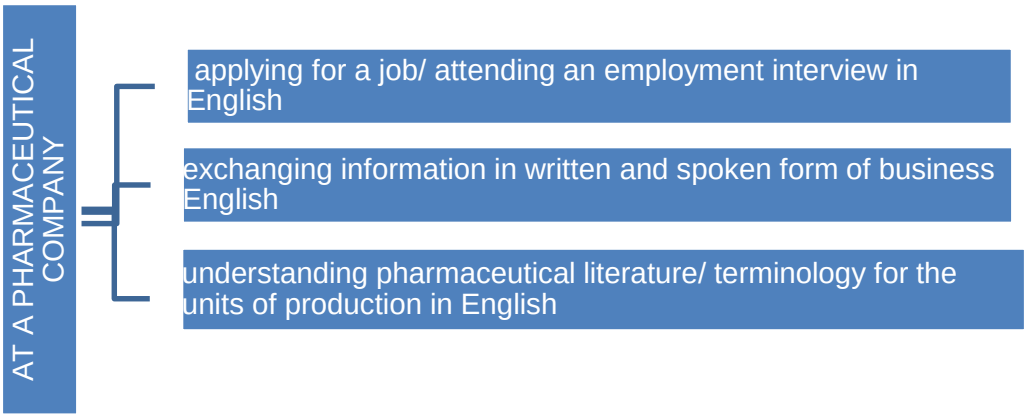

Figure 37. The learning outcomes emerged from "at a pharmaceutical company" category.

Thirdly, the faculty members highlighted the need to use English efficiently in

international cooperation either between pharmaceutical companies in Turkey and abroad or among governmental departments of Turkish Ministry of Health and other stakeholders and/or partners of foreign origin. This need was explained by Faculty Member 01 as follows:

> "At governmental departments, if you have a good command of English, and an adequate score on standardized English language proficiency tests, you get the chance to be employed in projects held abroad. […] A sound English proficiency enables you to take part in such projects and organisations. […] A pharmacist who is good at English may understand international protocols between the Ministry of Health and foreign pharmaceutical companies, which will make it easier for pharmacists to find positions in the departments of the Ministry of Health as well. Additionally, such pharmacists may also mentor Turkish pharmaceutical companies to establish networks with their counterparts abroad."

Similarly, Faculty Member 05 pointed out the advantage of being proficient in English for pharmaceutical purposes by stating:

> "A pharmacist who is proficient in English is able to attend exhibitions abroad related to the pharmaceutical sector and learn about medicine and find partners for networking in the future."

The possible situations that may require the use of English in such international cooperation may be as in the following response given by the Faculty Member 01:

> "To work in such projects, in order to communicate with foreign partners […] first of all, you need to use [every day] English […] Secondly, you need to engage in dialogues on a face-to-face basis to talk about your projects, and also to establish relationships with your partners on an individual level. Thirdly, to sign contracts, you need to know specific vocabulary related to your expertise in English as well as professional skills. […] To use the biological richness of our country, we need to learn methodologies in pharmaceutical industry from other countries to use at research and development departments either in pharmaceutical companies or in the departments of the Ministry of Health […]. To establish networks abroad, we need English to contact these stakeholders."

In conclusion, for the third category of participants' responses, the following learning outcomes occurred as shown in Figure 38 below:

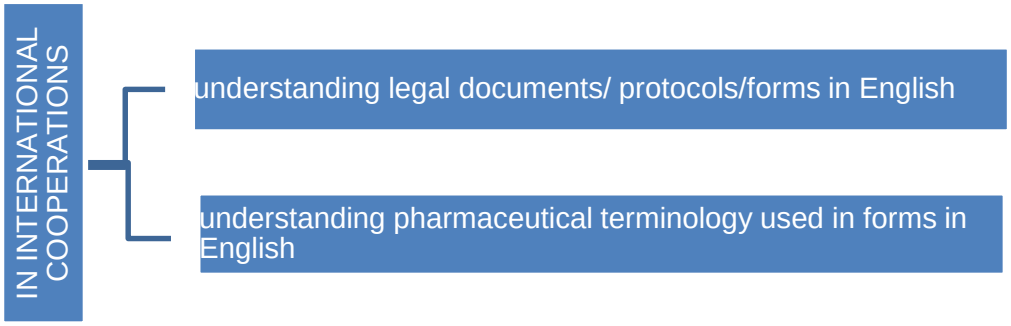

Figure 38. The learning outcomes emerged from "in international cooperation" category.

Fourthly, Faculty Member 01 pointed out the possibility of using English while

working as a pharmacist at international hospitals (either in Turkey or abroad) where pharmacists may work with foreign medical staff and/or give consultation to foreign patients:

> "In clinical services, the pharmacists may encounter foreign patients as well as foreign health professionals as clinical doctors. The clinical pharmacists may have to collaborate with foreign professionals in certain cases; thus, proficiency in English is vital in such cases."

Additionally, Faculty Member 03 also notes that pharmacists working at international hospitals may need English in the following cases:

> "A pharmacist at an international hospital may be in dialogue with foreign doctors. A pharmacist deals with medicine by sorting them out relying on their functions. They store medicine into different closets. By sorting out the medicine, they write notes including the expiration dates, etc. As the medicines are used and finished in the storage, the automation on the pharmacist's computer informs the pharmacist. You check the overall medicine store and supply the department accordingly. These tasks may be done in written English at such hospitals […] Doctors may also ask pharmacists to make up medicine for specific patients, for example in a different formula other than pills."

The learning outcomes emerged from the fourth category, "at an international hospital", are shown in Figure 39 below:

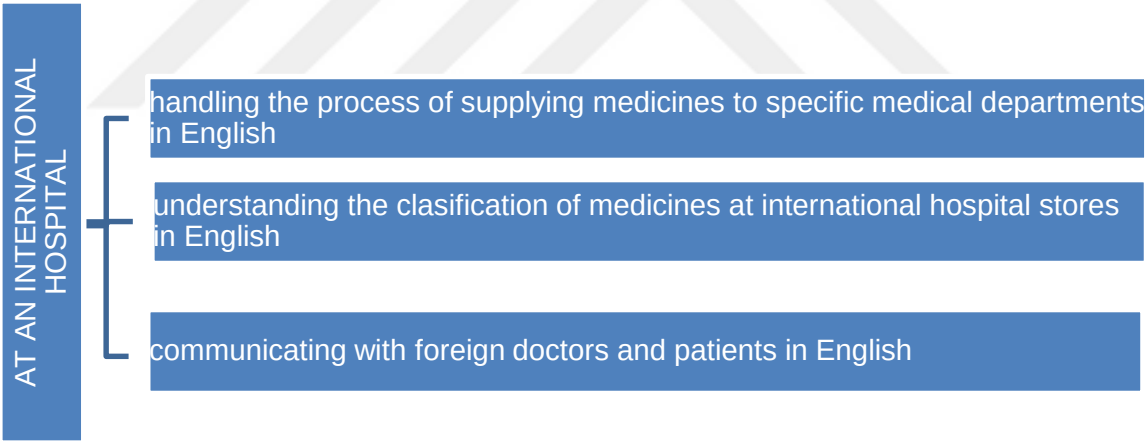

Figure 39. The Learning outcomes emerged from "at an international hospital" category.

Finally, Faculty Member 04 also emphasized the importance of having a good command of laboratory equipment and the processes of handling experiments in English in case they may work in laboratories abroad/ or with foreign partners in laboratories in Turkish pharmaceutical companies:

> "When I went abroad [to study at laboratories], or when I read a scientific article, I benefitted from using these words [laboratory equipment] in English in our laboratories [in Turkey]. […] Even if I did not have an advanced level of English proficiency, I understood the terminology […] when a professor talked about their methodology while performing an experiment."

He further suggested:

> "Students may handle an experiment at a laboratory by looking at the experimental section of a scientific article in English, and they may tell about the procedures during the experiment. Firstly, they may talk about the formula, and then just like giving a recipe, they may handle the experiments while talking about what they are actually doing. The students may also make use of YouTube videos to perform dialogues […] at a research and development department."

Faculty Member 05 added:

> "Students should know the features of substances used in experiments in English."

Finally, below are the learning outcomes that emerged from the fifth category, "in a pharmaceutical laboratory", as shown in Figure 40:

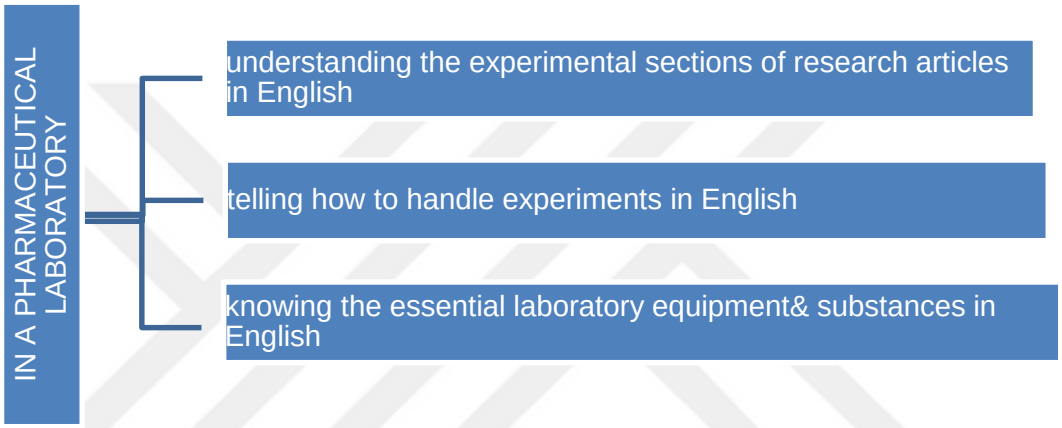

Figure 40. The learning outcomes emerged from "in a pharmaceutical laboratory" category.

Relying on the learning outcomes emerged from the five categories of responses given by the five faculty members at the faculty of pharmacy, and the review of ESP course syllabuses of different program curriculums in Turkish faculties of pharmacy, an EAPP syllabus was designed based on the flipped learning approach.

The needs analysis-driven EAPP syllabus based on the flipped learning approach.

As mentioned above, depending on the needs analysis conducted via a review of existing ESP syllabuses in different program curriculums and the existing coursebooks on the market, and finally, the semi-structured interviews held with members of faculty of pharmacy, an EAPP syllabus was designed within the framework of the flipped learning approach, relying on the flexible nature of action research study. As Richards (2001, p. 65) remarks, in order to decide to what extent the information gathered from needs analysis may be used, it should be born in mind that even if all the information is useful, the needs should be prioritized as it is unreasonable to include all the needs in a language program, which is most probably restricted to a limited time frame; thus, only a portion of them should be used. Similarly, Graves (2000, p. 76) highlights that as the class time is limited to achieve all the

goals of the course, the choice is necessary. That is, even if it is possible to generate as many goals as possible, teachers and course designers have to consider the constraints of the course, i.e., the learner profile, level of proficiency, time amount and the available materials, etc.; thus, they should select among these goals to determine a reasonable set of goals that may be realistically attained with the particular group of learners and the dynamics of the learning environment within the time limit of the course. Accordingly, in the present study, not all the learning outcomes emerged from the needs analysis could be used due to the English proficiency levels of the participants of the study and time limit of a one-term syllabus. However, the researcher chose specific learning outcomes from different sectors of the pharmacy profession as much as possible for the first draft (see Appendix 8). Apart from that, the researcher hopes to contribute to the pharmaceutical content knowledge of ESP practitioners who handle ESP courses for pharmaceutical purposes with the pool of learning outcomes emerged from the needs analysis conducted in the present study. Furthermore, the feedback gathered from the learners and the reflections made by the researcher herself on her teaching practice during the implementation of the syllabus; and the feedback gathered from lecturers of English, learners who took the course and the members of the faculty of pharmacy at the end of the implementation affected the overall design of the syllabus, in terms of pharmaceutical content, language and the practice of flipped learning. From this point, the EAPP syllabus content was merged with the flipped learning principles and the first needs analysis-driven flipped EAPP syllabus was generated under four units, which were named and placed in the syllabus as in the following order: ‘Anatomy’, ‘Rational Medicine Use’, ‘Chemistry Laboratory’, and ‘Job Application’, in which language topics were developed around the learning outcomes, in other words, the tasks (see Table 10).

This first version of the syllabus was designed to take 12 weeks, every three weeks of which was assigned to each unit. However, as expected, depending on the learners’ language needs; their demands towards the content and/or the way the flipped learning applied in and out of the class; and the emergence of some new information on flipped learning practice and/or pharmaceutical content during and at the end of the term, the first draft of the syllabus changed via micro action plans to deal with such issues in the course of the time. The flexible nature of the action plan provided great conveniences to revise the syllabus understudy during and at the end of the implementation process. It is because as Richards (2001, p. 127) states, the learning outcomes of a course cannot be considered as fixed since as the instruction progresses, some learning outcomes may require revision to better meet the need while some may be abandoned due to being impractical, or some more may be added to fulfil emerging needs. In this regard, the contents of the first version of the flipped EAPP syllabus, the

adopted version of it and the revised version for the post-implementation were outlined below in Table 10.

Table 10. *The Three Versions of the Flipped EAPP Syllabus*

Weeks	The 1st Draft	The 2nd (adopted) Version	The 3rd (revised) Version*
1st week	Anatomy (3 weeks)	Anatomy (4 weeks)	Common Patient Complaints (6 weeks)
2nd week			
3rd week			
4th week	Rational Medicine Use (3 weeks)		
5th week		Rational Medicine Use (5 weeks)	Rational Medicine Use (3 weeks)
6th week			
7th week	Chemistry Laboratory (3 weeks)		
8th week			Pharmaceutical Technology Laboratory (2 weeks)
9th week			
10th week	Job Application (3 weeks)	Chemistry Laboratory (2 weeks)	Job Application (2 weeks)
11th week			
12th week		Job Application (1 week)	

*Considering there will not be any interruption during the academic calendar (e.g. any national holiday, etc.) and excluding the first introductory week and mid-term examination week from the duration of a term, the revised syllabus is regarded to cover 13 weeks.

As seen from Table 10 above, the only difference between the first and the adopted versions of the syllabus was the duration of the units due to the necessities emerged by the language learning needs of the learners while the content and duration of units changed in the revised version. In the following paragraphs, the findings will be introduced and discussed, relying on the adopted version of the syllabus, and in the last section of this chapter, the revised version will be presented.

The Presentation and the Discussion of the Findings Obtained from the Evaluation of the Flipped EAPP Syllabus Implementation

At this phase, as mentioned before, the implementation of the syllabus took 12 weeks because of three weeks off due to the first week for the introductory session of the study; the 9th week for the mid-term examination; and the 12th week for an official holiday, when there was not an instruction that week due to holiday. As for the duration of time for the post-implementation focus group interviews, the timing of the interviews differed due to the availability of the participants. After the implementation, the focus group interviews with each of the four groups of the learners conducted at the very end of the term on different days before the final examinations. Besides, the focus group interviews of the lecturers of English and faculty members were conducted a few weeks after the end of the term. The data gathered at this stage composed of course observation video recordings; learners' reflective journals; the researcher's field notes; and focus group interviews with learners, lecturers of English and faculty members, each of which revealed the strong and weak points of the implementation, and this enabled the researcher to reflect on her practices in terms of the design of EAPP

syllabus and flipped learning strategy. The data gathered were essential to improve the next action during the implementation and to suggest the revised version of the flipped EAPP syllabus. For this purpose, the following research questions and the related sub-questions were aimed to be answered during the collection and analysis of the data:

RQ2. What are the views of learners towards learning English for pharmaceutical purposes through the flipped EAPP syllabus?

2.1. What are the strengths of the flipped EAPP syllabus in learning English for pharmaceutical purposes?

2.2. What are the weaknesses of the flipped EAPP syllabus in learning English for pharmaceutical purposes? How can these weaknesses be overcome?

RQ3. What are the views of lecturers of English towards the linguistic dimension of the flipped EAPP syllabus?

3.1. What are the strengths of the linguistic dimension of the flipped EAPP syllabus?

3.2. What are the weaknesses of the linguistic dimension of the flipped EAPP syllabus? How can these weaknesses be overcome?

RQ4. What are the views of faculty members towards the pharmaceutical content of the flipped EAPP syllabus?

4.1. What are the strengths of the pharmaceutical content of the flipped EAPP syllabus?

4.2. What are the weaknesses of the pharmaceutical content of the flipped EAPP syllabus? How can these weaknesses be overcome?

Relying on the formative feedback, which was gathered from learners' reflective journals at the end of the course units, the researcher's field notes and observation notes gained while watching the video recordings of the course, the researcher reflected on her practices and ran micro action plans to improve the EAPP content and the flipped learning implementation of the syllabus formatively throughout the term when necessary. These micro action plans helped the researcher realize immediate solutions to the problematic issues whenever they emerged during the term. As for the summative feedback obtained at the end of the implementation, they were used to compensate the weaknesses of the syllabus and the flipped learning methodology, and to provide a more efficient flipped EAPP syllabus for students of pharmacy. These various data sets support one another and are used to crosscheck what happened in individual and group space within the meaningful unity of reality, which in

turn contributed to the design of the pharmaceutical English content and the implementation of the flipped learning-based EAPP syllabus the researcher generated previously. In the following section, the different sources of data will be presented in a merged format under the four units of the syllabus in addition to the discussion of the empirical evidence in the related literature. These findings will be handled first with the evaluation of the pharmaceutical and language content, and then, the application of flipped learning strategy to implement the content.

The presentation and the discussion of the findings obtained from the evaluation of the pharmaceutical content.

The researcher made use of the first week of the term as the introductory session to give information about her study for a doctoral dissertation that would take place in the occupational English course at that term. She explained to the learners that she aimed at designing a flipped occupational English syllabus with pharmaceutical content and that their roles as participants would be, in addition to attending in- and out-of-class activities, supplying their feedback via keeping reflective journals for each unit of the course during the term and attending the focus-group interviews to be held at the end of the term. As mentioned earlier, the students were asked for their consent to take part in the process as the participation was on a volunteer basis. In case they would not like to attend the study, they were also given a chance to take the same course in the traditional class atmosphere at another class hour on another day to prevent the violation of their right to get the instruction with the same content, the same learning outcomes and assessment criteria. However, the students all agreed to take part in the flipped class. Upon taking consent of the learners, the researcher showed a video demonstration to give the idea of how flipped learning would take place during the whole term; asked them to enrol to the online course via the LMS supplied by the distance education centre of the university to watch lecture videos and post questions to the researcher whenever needed before the class sessions (see Figure 41 for a scene from one of the online courses created for the flipped class); and introduced their roles as learners during the term as interacting with the videos and doing related activities before the class and attending the group space sessions to do related tasks of the unit. That introductory week ended by reminding learners to watch course videos before coming to class for the next week.

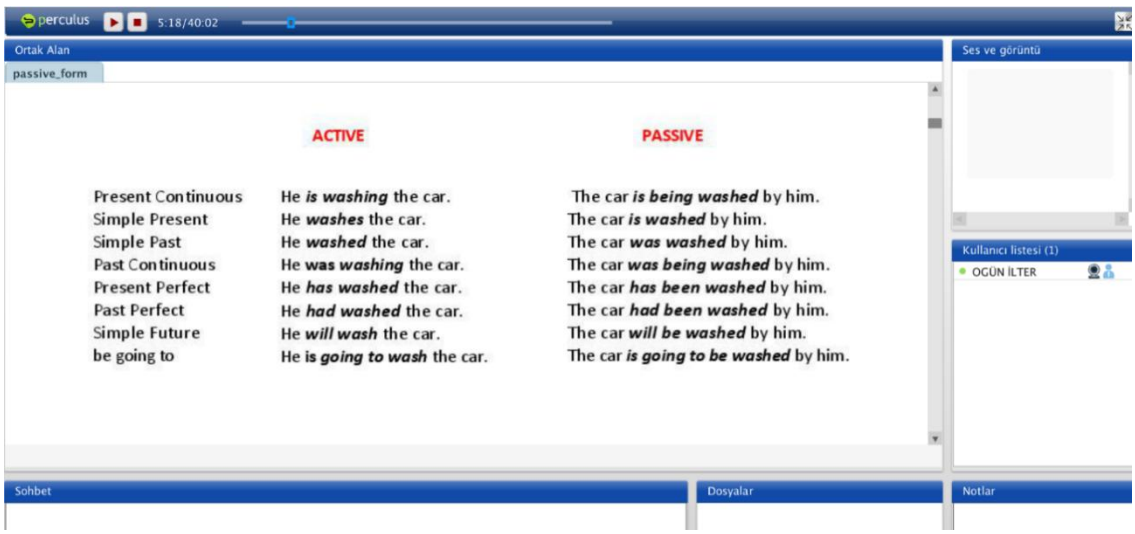

Figure 41. A scene from one of the lecture videos on the university LMS platform.

The data gathered for the following weeks will be presented under the units of the syllabus with references to the researcher's field notes and reflections through video recordings in addition to the participants' responses reflected on journals and in the focus group interviews held at the end of the term. Depending on the data obtained, content and the implementation of the flipped EAPP syllabus went under constant change via micro action plans that were aimed to solve problems and/or supply necessary language support whenever a need arose during the term. Similarly, the post-implementation data helped the researcher to provide a better version of the flipped EAPP syllabus in terms of language skills, pharmaceutical content and flipped learning methodology.

The evaluation of the first unit, 'Anatomy'.

In Table 11 below is found the pharmaceutical and language content of the first unit, 'Anatomy' in addition to its application in four weeks in the flipped learning environment. Following the table, the findings on the unit content will be presented and discussed with references to the participants' comments and the previous research in addition to the researcher's interpretations of these findings.

Table 11. *The Adopted Version of the First Unit, 'Anatomy'*

1st unit: Anatomy
The Related Learning Outcome **LO1: Learners will be able to give information on the most common diseases related to 12 body systems in written form in English.** 1.1. Learners will be able to explain the functions of the organs in the 12 body systems briefly in English. 1.2. Learners will be able to identify the English equivalents of the words related to • features of the most common diseases found in 12 body systems, • symptoms of them, • treatments for them, • protection from them. 1.3. Learners will able to write a patient information pamphlet in English.

Table 11. (*continued*)

Pharmaceutical content • The 12 body systems in brief • The related most common diseases • How to write a patient information pamphlet on common diseases
Language • Passive forms of the verbs • Relative clauses
Task • Writing a pamphlet on one of the most common diseases related to one specific body system
Individual space Learners watched videos on LMS which were about: • The passive form of the verbs • Relative clauses • The 12 body systems in a brief explanation • How to write a pamphlet
Group space **1st week** Most of the learners came to class having watched the grammar videos on the passive forms of the verbs and the relative clauses. In pairs, first, the learners shared with their peers what they learned from the videos on the use of the passive form of the verbs relying on the notes they took while listening to the video courses. The researcher just walked around the room and followed the flow of content delivery and only interfered when necessary to avoid mislearning. Then, the whole class had a Kahoot quiz on the passive form, which helped them to check their understanding of the subject. Later on, again in pairs, the learners engaged in doing paper and pencil exercises related to the use of the passive form of the verbs. The answer key was also given to them so that when they had problems to understand how to make passive forms of the verbs they could ask the researcher for clarification. However, due to varying proficiencies of English in the class, some learners asked the researcher for quick revisions of frequently used tenses to check their understanding; therefore, rather than whole-class instruction, the teacher gave mini-lectures when demanded to particular groups of students. For the rest of the class hours, the researcher walked around the classroom and made explanations on forming sentences in the passive voice when necessary either on an individual level or on a group and even sometimes a whole class level. A similar process continued for the use of relative clauses as well. The three-hourly course continued learners' practising passive and relative clause sentences in pharmaceutical contexts given. **2nd week** That week, the 38 students were separated into groups of 3, two groups were composed of 4 learners, which made 12 groups in total. Each group was distributed short texts about one different body system. On the sheet were the description of the body system and related most common diseases. Each group studied a body system, they asked questions to one another on the text within their group and took notes. Although the initial aim was to teach the learners the basic mechanism of body systems and organs, later on, due to the low proficiency of learners and time limit, the researcher decided on asking groups of learners to study one body system. Through this kind of reading, the learners practised all four skills as they first read the texts, then talked and listened to their friends while translating and discussing the content of the texts, and finally wrote their notes on what they understood from their texts. There appeared some problems due to language proficiency level and the researcher spent some time for language support.

Table 11. (*continued*)

3rd week That week, the learners were asked to watch the short video on how to write a pamphlet in terms of both form and content before coming to class. In the first class session, before starting writing their pamphlets, the learners were given samples of pamphlets on some common diseases and asked to examine the samples to see the flow of ideas. In the second class session, the learners were moved to the computer laboratory to write their pamphlets during class time. In the computer laboratory, the learners engaged in writing a pamphlet on one of the most common diseases of a body system individually, relying on the texts of body systems, and the samples of pamphlets. The researcher walked around the room to help each learner whenever they asked for. The learners needed language support and the researcher made some necessary explanations on the board to help their understanding of the grammar topics and/or writing skills. **4th week** In the fourth week, the learners continued writing their pamphlets in class. Similarly, the researcher walked around the room to help learners working at their computers. When they finished writing their pamphlets, they were also asked to exchange their end product with their peers and upon taking feedback from their peers, they revised their pamphlets. At the end of the course, the researcher asked the learners to write their feedback on the effectiveness of the pharmaceutical content and the flipped learning methodology of the unit 'Anatomy' via reflective journals on LMS system, on which a template was provided to them.

As mentioned earlier, in order to evaluate the effectiveness of the pharmaceutical content and the flipped learning strategy in the implementation of the units, the researcher asked the participants for their insights on the strengths, weaknesses and their suggestions for the weaknesses of the implementation of the flipped EAPP syllabus. The data gathered for this purpose will be presented below respectively. To begin with, the evaluation of the pharmaceutical content, some learners stated they benefitted from the topic 'Anatomy':

> "It is good for me to learn new words related to specific diseases."[Learner E1]
>
> "I liked the topic itself. I understood the texts you gave us on anatomy." [Learner X2]
>
> "I learned a lot about AIDS thanks to this task. I learned new words while translating, such as disease, gender, etc." [Learner Y2]
>
> "This was also necessary for us. We learned new words, such as side effects, etc. I learned a lot about my topic." [Learner C2]
>
> "It was beneficial for us to read texts in our field." [Anonymous learner's journal]

When asked about their opinions on the task of the unit 'Anatomy', some learners stated that they liked the task of preparing a pamphlet:

> "I liked preparing a pamphlet. When we deal with it, we learnt about a disease, side effects, and do's and don'ts that we should also know about. Patients do not only ask for medicine, but they also need some advice; therefore, this task was beneficial." [Learner M2]

"I enjoyed it. I translated a body system text and prepared a pamphlet. I learned new words, such as symptoms, etc. We frequently see a pamphlet, so I learned what to understand from them." [Learner R2]

"I really like that I have a final product in English, like preparing a pamphlet on a particular disease we searched, this is pleasing." [Learner E3]

On the other hand, the majority of the learners did not like the unit 'Anatomy' asserting that the content should have been handled in a pharmacological context:

"Anatomy is a theoretical issue. It is all about our educational life. When we graduated from university, this will not be beneficial for us." [Learner S2]

"We are mostly interested in treatments rather than a theoretical knowledge of body systems." [Learner M4]

"We should study pharmacology instead. […] In pharmacology, the active ingredients of medicine, the typical diseases are mentioned." [Learner Y4]

"Rather than pure chemistry or biology, we study mostly the interrelation of them with diseases in the perspective of treatment. […]The topic should be like this: We study a specific disease: the subtopics may be the treatments of those diseases, and the detailed information on medicine to be used in treatments." [Learner C4]

Some learners were not satisfied with reading texts:

"We are familiar with anatomy. I learned about my own topic, I didn't learn anything about the other body systems. This may be a weakness, but I learned about my topic." [Learner S3]

"We should have translated the texts on Anatomy together in class sessions. It could be better if we could translate the texts with the help of the teacher." [Anonymous learner journals]

"The texts on body systems were very intensive. We just had one system. We had the grasp of just our topic to some extent. We didn't know much about the other systems. I didn't have a look in fact." [Learner P2]

"The texts on body systems were too long to study for the exam. When I checked the texts, I couldn't decide what to study- the words, the structures, the terminology- 12 systems. This topic should be handled by the teacher's assistance. We could have had a look at the texts with you." [Learner P3]

"A vast amount of unknown scientific terminology was tiring and boring to read and understand." [Anonymous learner's journal]

The same issue was observed by the researcher herself as well:

"After they have studied the passive voice and the relative clauses last week, the students were asked to translate texts on the body systems in groups this week. They were also asked to study the texts, asking comprehension questions to their classmates in groups. However, not every group could study each body system-which was the weak point of that week's topic."

[The researcher's field notes, February 21st, 2018]

Similarly, several learners did not like the task of preparing a pamphlet:

"The topic was good, but the task was useless. It is enough for us to learn body

parts, systems, etc." [Learner S1]

"Preparing a pamphlet is very difficult for me to finish in class time." [Learner P1]

"I think preparing a pamphlet was about computer skills […] I had difficulty a lot. I got nervous while designing the pamphlet." [Learner A2]

"I didn't like preparing a pamphlet, the task was also monotonous, and we sat on computers, translated the texts and designed a pamphlet with pictures and texts." [Learner X4]

Learners also stated that they feel no need to study anatomy in English as they need Latin versions instead:

"We study anatomy in Latin. It was complicated to learn the Latin terminology in English as well." [Learner H2]

"The Latin terminological words in anatomy sound and look like English. Even if I didn't study especially for them, I can understand texts on anatomy." [Learner A3]

Learners also suggested alternative topics for anatomy:

"Adjuvant treatment alternatives will be more rational when we want to give information. They will be also easier and call our attention. We may use them in the future." [Learner H1]

"Rather than a pamphlet, we can make presentations with basic sentences in English about the search we have made for a specific disease. We can study new words together. It will be more beneficial. […] For example, the endocrine system may be explained and there may be a translation on it. Then, patient and pharmacist dialogues may be handled using this topic." [Learner R3]

"It could be better if you could tell the body parts and related diseases in class." [Learner M3]

"It would be enough to learn the English equivalents of organs and body systems by studying on human body model." [Anonymous learner journal]

"We may study texts in English on what kind of diseases occur in certain body systems, what happens in the human body when an illness progresses and what kind of treatments can be applied." [Anonymous learner journal]

The faculty members who attended the focus group interviews at the end of the implementation of the syllabus expressed positive opinions towards the unit 'Anatomy':

"The students should know the names of the organs in body systems. When you have a prescription in English, you will see some specific terminology, such as oedema, etc. You [as a pharmacist] should know the typical diseases as well. […] A pharmacist should know the English equivalents of diseases and the related symptoms, such as coughing or expectorating, etc. [Faculty Member 06]

"I found the content under this topic very useful. They should tell the patients what to do and who to consult when they experience a side effect. Companies started to publish patient information leaflets in everyday language these days, they should understand and tell the patients accordingly." [Faculty Member 07]

However, Faculty Member 07 also stated that the content of the unit requires a revision:

> "I think the content and the name of the topic do not match, as the anatomy topic refers to a broader medical meaning while the content is more about pharmacology."

Similarly, Faculty Member 06 suggested a more pharmacological approach should be adopted in the 'Anatomy' unit:

> "In medical science, the content should be broader. But in the pharmacy program, the anatomy course is a one-term course in the curriculum and is handled within a narrow content. Only at a pharmacy store, a pharmacist is in contact with patients to talk about their medical problems. The content of such dialogues is in plain English rather than a professional one. We do not know much about diseases like doctors know in the medical literature. […] Pharmacology means knowledge of medicine. That is, we perform pharmacy by supplying medicine for specific diseases with this knowledge, all the things related to symptoms, adverse effects, etc. […] You may arrange the topic; for instance, as studying the cardiovascular system, related common diseases, the medicine supplied to treat these diseases and adverse effects in English. Learners may be interested in more if they see what they study [at their departmental courses] is given in English."[Faculty Member 06]

On the other hand, English Lecturer 01 suggested designing a separate EAPP syllabus composed of units on 12 body systems:

> "The content of the 12 body systems is very intensive, and there is lots of unknown vocabulary for the students. I think the topic of anatomy takes almost a year to cover by dealing with the unknown vocabulary and language points. […] The anatomy topic is too intensive to cover in class time. So, in my class, I started with basic vocabulary like body parts and common illnesses in specific body systems, and then I combined these with dialogues between a pharmacist and a patient. I use some parts of a commercially available medical English coursebook to handle anatomy issue. Additionally, it takes a lot of time for students to perform these dialogues.[…] This syllabus should be spread to two terms when you include anatomy […] six systems for each term, and then you may place the other topics among them because it may be very boring otherwise."

Relying on the feedback gathered from the learners during the implementation of the 'Anatomy' unit and her observation during class, the researcher decided to change the way she covers the anatomical content of the unit:

> "The body systems under the topic, 'Anatomy' should be studied separately; that is, three of 12 body systems should be studied each week- one body system at one class hour and the anatomy topic should be completed in 4 weeks. In individual space, students should be prepared for the body systems, the target words should be taught before the class, and the group space should be used to practice these words and to analyse text via comprehension questions. After each anatomy week, which is distributed through the term, one specific task should be designed. That is, at the end of one week, a speaking

task may be realized or writing a report or presenting on a body system should be designed so that learners do not get bored with the same kind of activity and could practice productive skills using content knowledge. Additionally, the texts for the anatomy topic should be simplified. Post-reading activities integrated with other skills should be designed.

[The researcher's field notes, March the 7th, 2018]

However, considering the suggestions made by the faculty members, lecturers of English, and the learners at the end of the implementation, the researcher now believes that rather than studying basic anatomical texts on the 12 body systems, the vocabulary of the most common medical conditions related to 12 body systems and complaints that a pharmacist generally encounters should be taught in sample patient-pharmacist dialogue transcripts in addition to studying listening comprehension and speaking practices. To organize such content, Miriam Diaz- Gilbert's 'English for Pharmacy Writing and Oral Communication', by the Point publishing may be a good alternative to consult after making certain modifications, such as adjusting the tasks and the intensity of the vocabulary to the target level of certain groups of learners. By doing so, rather than a broad medical approach, a relatively narrow pharmacological approach will be adopted, which should be the main objective of the specific unit content under study. Taking this into consideration, the researcher decided to change the scope, and thus, name of the unit from 'Anatomy' to 'Common Patient Complaints' as well as changing its duration, from 4 weeks to 6 weeks. It is because the researcher suggests studying common medical conditions and patient complaints related to two body systems each week, which makes up 6 weeks to cover the content relevant to 12 body systems (see Table 10). It is worth mentioning here that since the topic, 'Anatomy' was not handled in any of the empirical research on designing an ESP course for pharmaceutical purposes in the related literature, the findings on this unit could not be discussed with any previous research in the field. The adaptation of learning outcomes, individual and group space activities will be demonstrated in the third section of the chapter (see Table 16), where the final version of the unit will be presented.

The evaluation of the second unit 'Rational Medicine Use'.

In Table 12 below is found the pharmaceutical and language content of the second unit, 'Rational Medicine Use' in addition to its application in five weeks in the flipped learning environment. Following the table, the findings on the unit content will be presented and discussed with references to the participants' comments and the previous research in addition to the researcher's interpretations of these findings.

Table 12. *The Adopted Version of the Second Unit, 'Rational Medicine Use'*

2nd Unit: Rational Medicine Use
The Related Learning Outcome **LO2: Learners will be able to inform patients on how to take medicine in English.** 2.1. Learners will be able to understand the sections of a patient information leaflet in English. 2.1.1. Learners will be able to identify the English equivalents of terminology and phrases related to the sections of a patient information leaflet. 2.1.2. Learners will be able to identify the forms of medicine in English. 2.2. Learners will be able to give consultation to patients in dialogues around the most common medical conditions and patient complaints related to 12 body systems. 2.2.1. Learners will be able to participate in dialogues in English with patients who come to the pharmacy store with a prescription. 2.2.2. Learners will be able to participate in dialogues in English with patients who come to the pharmacy store with typical symptoms of a health problem to buy an OTC medicine.

Pharmaceutical content
• Forms of medicines
• Some common side effects of medicines and/or symptoms of common illnesses
• Talking about illnesses and giving advice on treatment
• Reading a patient information leaflet of a medicine
• Pharmaceutical consultation skills
  o How to take medicines
  o Pharmacist-patient dialogues

Language
• Specific Modals used in
  o Offering (can, could, may)
  o Requesting (would like to, can, could)
  o Suggesting (can, will)
  o Advising (had better, should)
  o Permission (can, could)
  o Possibility (may, can, should, will)
• Imperative forms of the verbs
• Present Simple Tense
• Present Continuous Tense
• Present Perfect Tense

Task • Writing a consultation (a dialogue between a pharmacist and a patient) for a learner-created case • Performing pharmacist-patient dialogues on OTC and prescribed medicines
Individual space Learners watched videos on LMS which were about: • Forms of medicines • Some common side effects of medicines which may also be symptoms of common illnesses • How to take medicines • Modals used in pharmaceutical consultation • Imperatives and present tenses

Table 12. (*continued*)

Group space

1st week

This week, students watched videos on forms of medicines, some common side effects of medicines and typical utterances to give instructions on how to take medicines before coming to class. At the beginning of the lesson, to check learners' understanding of the pharmaceutical content of the unit, Kahoot quizzes were handled in class on the topics of the videos. The learners were asked to classify different forms of medicines, to match common side effects with common illnesses and to talk about certain illnesses, and to give advice on treatments through some pen and paper activities and speaking exercises in pairs, so that they could apply what they had learned into practice.

2nd week

This week students were given a sample of a patient information leaflet and were asked to analyse the parts of it in pairs. The parts of the leaflet were set as an example for them on how to give consultation to patients. The learners translated the leaflet in pairs and a Kahoot quiz was applied afterwards to check their understanding. Then they asked their peers some specific comprehension questions on the leaflet as well. It took time for the learners to completely translate the text; thus, that week, only the comprehension activities could be handled in class. For those who finished early, some speaking exercises were handled; for instance, depending on the leaflet, they tried to give consultation to their peers as if they had been patients.

3rd week

This week learners watched videos on typical utterances used and steps to follow in pharmaceutical consultation. Additionally, they watched videos on grammar topics of the unit. At the beginning of the class, Kahoot quizzes were applied in order to check their understanding of uses of present tenses and certain modals to talk about diseases and give consultation on how to take medicines. Then, the learners were given sample texts of patient- pharmacist dialogues with blanks on them about taking OTC and prescribed medicines. They were asked to fill in the blanks on sheets as they listened to dialogues. Afterwards, the researcher asked them to create a case of a patient with some certain diseases. Following the steps of pharmaceutical consultation, such as welcoming the patient, asking for prescription and/or symptoms, etc., the learners were asked to write pharmacist-patient dialogues. In order to do so, the researcher gave the learners a template to follow, beginning from welcoming the patient to seeing off the patient. Then, the learners had to suggest three specific medicines addressing the symptoms by mentioning how to use that medicine, etc. to their made-up case. That week, it took time for them to make up a case with certain diseases and apply the steps of pharmaceutical consultation.

4th week

This week, the learners engaged in writing their consultation dialogues. They kept asking questions to the researcher on how to form sentences and which words to choose so that they could write meaningful dialogues. Some students needed more teacher support on issues of grammar; therefore, mini-lectures either at individual or group level were conducted in face-to-face sessions. The learners enjoyed using their pharmaceutical knowledge to suggest medication to their made-up cases as they had to be careful to suggest certain medicines together. The learners were also encouraged to study in pairs to give feedback to each other during writing. By these means, the learners used their knowledge of rational medicine use into practice. At the end of the course, the learners were asked to submit their dialogues on Edmodo. That week, the researcher decided to switch from the university LMS system to Edmodo, which was more user-friendly as it looks like a kind of social media platform when compared to the previous one. The researcher's feedback on learners' assignments was given online through the tools of Edmodo.

5th week

This week, the learners were given a series of cases of patients with two or more health problems and suggested medication. Then, the learners were asked to give consultation to these made-up cases in pairs by acting out the roles of the patient and the pharmacist. By switching roles and then responding to immediate scenarios in class time, the learners practised patient- pharmacist dialogues by using the knowledge of rational medicine use and related utterances in English.

As an after classwork, the learners were also asked to record two 5-minute-long videos in which they roleplay giving consultation for an OTC and prescribed medicine for two different cases they made up with their peer. The learners were encouraged not to read from the paper while roleplaying, but to memorize their utterances in dialogues in their videos so that they could internalize the steps of pharmaceutical consultation and act appropriately in any spontaneous case in their future pharmacy practice.

In the focus group interviews, the majority of the learners stated that they enjoyed the unit, 'Rational Medicine Use'. Some specifically stated that studying patient information leaflets was beneficial for them:

> "I liked the unit 'Rational Medicine Use' most. We learned about how to talk about taking medicines. I liked reading patient information leaflets in English. I found a patient information leaflet on the internet; I read both Turkish and English versions. [I could understand the English version, so] I felt good about it." [Learner P2]
>
> "I can now form sentences while communicating with a patient in English, so I liked the task. I learned about some specific medicines when we dealt with rational medicine use consultation. I felt like a real pharmacist." [Learner M1]
>
> "It was the most useful task for us. I searched for some medicine a lot while writing consultation for rational medicine use. It was good for me." [Learner R4]
>
> "I really liked the translation of patient information leaflet of 'Aspirin', I studied hard for translation during the two-class hours. The words on patient-pharmacist dialogues were also very beneficial. I will feel familiar with these words in the future." [Learner H4]
>
> "The patient information leaflets of some specific medicine or manuals of some biomedical products are mainly in English. For that reason, I found the course content very beneficial." [Learner S2]

Using patient information leaflets to teach ESP for pharmaceutical purposes was also recommended by Grabowski (2013), who compared patient information leaflets and summaries of product characteristics in the lenses of corpus-driven research. In his study, he suggests using the findings of his study in ESP syllabus design and translators' training for future implications. Similarly, Woźniak and Acebes de la Arada (2018) used patient information leaflets in an English for pharmaceutical purposes course as well. In their study, relying on particular patient information leaflets, learners explained how to use specific medicines by adjusting the written information from the patient information leaflets to the audio format using an everyday language to communicate with patients in their audio recordings. As a result of the study, the researchers emphasized the need for 'a language-focused ESP course' to strengthen meaningful learning. It was found out that learners could acquire English when engaged in performing disciplinary tasks in English better when they use language in disciplinary communication.

Similarly, some students in the current study stated that they enjoyed studying pharmacist-patient dialogues in English:

> "What we did in this task would appear in our future career most. I studied a lot, but I also enjoyed writing about rational medicine use a lot. Then, I also liked patient-pharmacist dialogues. Some utterances we learned were very beneficial and useful. I really liked the documents you gave us. I used those

documents you gave us to do the tasks. When I will be asked a specific question [as a pharmacist by a patient in the future], I now have a lot of alternatives to communicate with patients." [Learner Y2]

"While I was doing my pharmacy internship, lots of foreign patients came to the pharmacy. Now, I have learned how to interact with them, for the next internship, I will speak more efficiently with patients." [Learner A2]

"For me, my knowledge of terminology increased, this was the best thing for me in this course. For example, […] the structures on how to interact with foreign patients in English were professional learning outcomes for me." [Learner M2]

"We have a chance to do an internship abroad this year via the Erasmus program, what we did in class will be very beneficial to me. We will use the terminology and especially the patient-pharmacist dialogues we learned in this course in that internship." [Learner M3]

"It is our profession- what a pharmacist does is informing patients. I liked the dialogue task as we had a speaking task that was different from others. It was beneficial." [Anonymous learner journal]

"I will use the dialogues between a patient and a pharmacist that will be a part of my job. I can use them in everyday life." [Learner Y4]

"I liked the dialogues most. We learned how to form sentences. I liked to perform a made-up patient-pharmacist communication; I liked dreaming about it". [Anonymous learner journal]

The researcher also observed the learners' positive reaction to the topic, 'rational medicine use':

"I told the students about what they were going to study in the following weeks. They got motivated as they liked the new topic which was about rational medicine use, including creating dialogues between a patient and a pharmacist. […] I observed that the students liked this topic much better than anatomy." [The researcher's field notes, March the 7th, 2018]

The unit, 'rational medicine use' was also found beneficial by Faculty Member 06:

"When it is the case for the health sector, things become very crucial. Think that a pharmacist gives a foreign customer some eye drops that should not be given to that patient just because they do not understand the symptoms. The result is very risky. They [the prospective pharmacists] should also know the forms of medicine; […] the typical terms, such as adverse effects, etc.; and how to use the medicine." I think, for pharmacists, understanding the complaints of patients and telling them how to take medicine in English are sufficient to learn in such ESP courses." [Faculty Member 06]

On the other hand, few learners did not like the content of this unit:

"We won't have any foreign patient if we don't work in touristic places. [about the task of patient-pharmacist dialogues] I couldn't find anyone to record videos of dialogues as well."[Learner S1]

Pharmacist-patient dialogues have been dominantly used in English for pharmaceutical purposes courses in the related literature. To begin with, in their team-

teaching ESP course, Graham and Beardsley (1986) aimed at improving students' efficiency of oral communication in their professional settings by practising specific speech functions for pharmacists, which were first illustrated either by ready-made videos by companies or by a live demonstration by the instructors. Secondly, Diaz-Gilbert (2009) covered pharmacist-patient dialogues in each unit that deals with patient complaints related to one body system or one particular organ in her book, 'English for Pharmacy Writing and Oral Communication'. In these pharmacist-patient dialogues, the learners are exposed to the steps of patient counselling as well as everyday English used by patients such as idioms to describe their complaints. Thirdly, Kokkinn and Stupans (2011) observed 15 classes of "simulated pharmacist-patient interactions" between students and tutors/actors, pretending the interactions at a pharmacy store. Fourthly, Berardo (2017) also designed a course for increasing ESL students' comprehensibility in spoken English through a special set of ESL communication skills by practising some aspects of pronunciation, which was probably the main cause for miscommunication. Again in Australia, Hussin (2013) used reflection strategy in stimulated recall interviews with 20 third- year Malaysian ESL pharmacy students on their pharmacist-patient simulations in order to gather insights for the problematic aspects of their patient counselling, the results of which led to pedagogical change in ESP course design. Similarly, Kobayashi, Yazawa, Saguchi and Tanaka (2018) prepared an English program and manual booklets composed of common phrases in pharmacy counselling settings. In the South African multilingual setting, Van de Poel, Van Dyk, Gasiorek and Blockmans (2015) covered 10 different communicative functions embedded in particular pharmacist-patient dialogues in clinical practice in their blended course, 'Communication for Professionals- Pharmacists', where learners are exposed to typical utterances in a clinical setting and are supposed to produce those utterances as well as receiving hints and tips for effective communication. Finally, Woźniak and Acebes de la Arada (2018) included pharmacist-patient dialogues in one part of their course under the unit, "English for Pharmaceutical Care", where they asked learners to make use of the counselling steps in patient information leaflets in order to make up dialogues between a pharmacist and a patient. As can be seen from the examples above, pharmacy counselling is the backbone of the pharmaceutical communication, where pharmacists are able to deliver their pharmaceutical knowledge in practical terms to their interlocutors, patients, who have the highest priority in their profession.

In the current study, the learners were also asked to record the patient-pharmacist dialogues. Some learners enjoyed it:

> "While video recording I searched for how to pronounce some specific words, so it contributed to my pronunciation. It [the task of video recording] was

beneficial to help us learn how we can form sentences and pronounce while speaking" [Learner X3]

"I really enjoyed recording my video. First I didn't want to do it, but later on, I really enjoyed and learned from it. I think both of us [with her partner] remember the utterances we said in dialogues." [Anonymous learner journal]

"It was fun to record a video with my friend. The utterances of the dialogues are still in my mind. […] I think I can understand what their [patients'] problem is. I can remember them [the utterances in the sample dialogues]. […] I can understand a patient information leaflet of a certain medicine, I can translate them. [Learner P1]

"I liked patient-pharmacist dialogues most. I could form basic sentences myself. It was fun for me to record a video. I did not want to do it first, but I liked it while recording. It was not difficult for me to write the dialogues." [Learner Y1]

"It was the most related topic [about their profession]. I think the task was efficient. I liked video recording more because I could perform something in English." [Anonymous learner journal]

"This model was better for me. Because when we recorded a video, we could speak English even a minute. [Learner E1]

Similarly, Woźniak and Acebes de la Arada (2018) also asked their students to record a video in pairs on a patient-pharmacist dialogue, referring to OTC medicines. Learners created their dialogues around common problems and their treatment, and they were provided with a checklist of the most important parts of the dialogue, such as asking questions, giving advice, and interaction.

However, some learners in the present study did not like to record videos, partly because they felt uncomfortable with recording themselves and partly because they found it complicated to record due to low computer skills:

"[Rational medicine use] is mostly related to our professional life. I liked patient-pharmacist dialogues, but I didn't like recording videos. Rational medicine use was good, but writing texts for dialogues was difficult for me."[Learner C1]

"I didn't like video recording. It was unnecessary for us to memorise and perform the dialogue we wrote. It took time. It demanded us, but did not add much to our knowledge." [Learner M2]

"Video recording was very hard for me. I don't know any recording technique; when I said something wrong, I laughed, but I couldn't delete it. Two-minute videos took almost 5 hours. It took a lot of time as I had a lot of difficulties, I didn't like it at all." [Learner C3]

"Video recording was very tedious for me. I had difficulties with the internet connection and we had problems with our pronunciation." [Anonymous learner journal]

Upon taking feedback from the learners on the efficiency of video recording on their learning, the researcher observed that:

> "Some learners felt uncomfortable with recording themselves, they wanted to record their voices instead. Such possibilities should be considered and alternatives should be suggested for such learner profiles while designing tasks." [The researcher's field notes, April the 4th, 2018]

> "Rather than asking them to record their dialogues, they could have been asked to perform their dialogues in the teacher's office in a specific time for assessment. In these sessions, a student may choose a situation, and the teacher being the patient, the student may roleplay as the pharmacist." [The researcher's field notes, April, the 4th, 2018]

Additionally, learners suggested the following tasks for the unit 'rational medicine use':

> "We may practice giving instructions on how to use certain types of medical products, such as inhalers, blood glucose meters or blood pressure monitors in English in the classroom." [Anonymous learner journal]

> "We can role-play how to explain the use of inhibitor, for example, in English in class. We can bring the gadgets to the class. The teacher may help us how to explain their uses in English slowly, and it becomes possible for us to use English while applying." [Learner X3]

> "I would like to know the English equivalents of biomedical materials as they are imported products, such as plasters, stents, varsity socks, cardiac pacemakers, things that are sold in medical stores. They don't usually have Turkish explanations in booklets. I will need them in the future. So, I would like to know their meanings so that I could tell how to use them to a patient." [Learner E3]

> "I would like to know what we should say to a patient in case of emergency in English, we should be able to interact with someone who needs first aid in English." [Learner Y4]

> "We may study the dialogues between a pharmacist and a commissioner from a pharmaceutical company or typical dialogues in the sector of pharmaceutical industry" [Anonymous learner journal]

> "We may learn the basic vocabulary related to cosmetic products and practice giving instructions on how to use them to the customers." [Anonymous learner journal]

Before starting to perform dialogues, learners were exposed to samples of patient-pharmacist dialogues with blanks in texts. After they were taught the practical utterances in a sample dialogue, they were given the steps of pharmacist consultation, which were in parallel with the instructions in a patient information leaflet. For the following sessions, they were asked to write a patient-pharmacist dialogue for a made-up case. Only then, they were demanded to give spontaneous patient counselling for different possible cases in a pharmacy store. This process helped them to get prepared from a controlled to free practice. As the levels of learners were varied, translation also worked well for them, which was observed by the researcher herself:

> "Translating texts helped the students to learn new utterances. Similarly, the researcher asked the students to think about what they could say in some different situations depending on the text they were translating. That also made them ready for dialogues. Translating can help more than ever thought of in ESP classes, sometimes EFL learners need to hear their first language in such occupational English courses as long as it doesn't dominate the class." [The researcher's field notes, March the 28th, 2018]

Making modifications in the duration and the scope of the first unit required a change in the scope and application of the second unit 'rational medicine use' as well. In the previous version of the first unit, the 12 body systems were the main focus of attention, and even if common diseases were also included, they were not handled thoroughly, and thus, in the scope of the 'rational medicine use' unit, common illnesses were handled. However, in the revised version, as common medical conditions and patient complaints related to two body systems will be studied each week, that part of the 'rational medicine use' unit will be excluded, which will lead to the reduction of the time duration of this unit from 5 weeks to 3 weeks. Although learners will be exposed to the samples of patient-pharmacist dialogues throughout the first 6 weeks of the syllabus, it will be in the second unit that the learners will be purposefully instructed the specific steps of pharmaceutical consultation as well as the practical utterances to use in each step. In other words, the first unit will set the ground for the second unit in terms of teaching the medical words for common medical conditions and complaints of patients, so that in the second unit, learners will be able to use their medical vocabulary knowledge in giving consultation and/or comprehending a patient information leaflet. The revised version of the unit will be provided in the third section of the chapter (see Table 17), where the final version of the unit will be presented.

The evaluation of the third unit 'Chemistry Laboratory'.

In Table 13 below is found the pharmaceutical and language content of the third unit, 'Chemistry Laboratory' in addition to its application in two weeks in the flipped learning environment. Following the table, the findings on the unit content will be presented and discussed with references to the participants' comments and the previous research in addition to the researcher's interpretations of these findings.

Table 13. *The Adopted Version of the Third Unit, 'Chemistry Laboratory'*

3rd Unit: Chemistry Laboratory
The Related Learning Outcome **LO3. Learners will be able to report on an experimental procedure in English.** 3.1. Learners will be able to use the English equivalents of typical laboratory equipment. 3.2. Learners will be able to talk about the steps of an experimental procedure in English. 3.3. Learners will be able to write the experimental section of a laboratory report in English.

Pharmaceutical Content
• Laboratory equipment
  • Glassware
  • Plasticware
  • Balances
  • Porcelain Tools
  • Burners
  • Clamps
  • Holders
• Experimental sections of laboratory reports

Language • Past tense • Passive forms of the verbs in the present and past tenses in brief • Some process transition words
Task • Talking about the steps of an experimental procedure • Writing the experimental section of a laboratory report **Individual space** Learners watched videos on LMS which were about: • English equivalents of laboratory equipment • The passive voice of the verbs in present and past tenses • Some process transition words **Group space** **<u>1st week</u>** Learners watched the videos on laboratory equipment and transition words before coming to class. The first class started with a Kahoot quiz on laboratory equipment to check learners' understanding of the new vocabulary. Then, some pen and paper exercises such as classifying the equipment according to their types, such as glassware, etc., and functions, such as holders, heaters, etc. in the lab were done. After the learners practised the laboratory vocabulary, a sample of a chemistry recipe was distributed to them and the learners were asked to analyse the text by translating and asking and answering comprehension questions on the text. Later, the researcher asked the learners to translate some of their chemistry recipes from their chemistry laboratory files into English. Then, learners verbally gave basic chemistry recipes to one another in pairs, using the lab equipment and process transition words they learned. **<u>2nd week</u>** This week learners watched the video on the passive voice before coming to the class. At the beginning of the course, they had a Kahoot quiz on the use of the passive voice in the present and past tenses to check their understanding of the content. Later, they had pen and paper exercises on forming sentences in the passive voice. Afterwards, the experimental section of a research article in the field of chemistry was distributed to the learners and they were asked to analyse the text by translating and asking and answering comprehension questions on the text. Finally, the learners were asked to translate only the experimental section of an original chemistry research article.

Some learners in the study enjoyed the chemistry lab unit, emphasizing the amount of new vocabulary and practical utterances they learned:

"We are all engaged with lab equipment every day and when we learn the

English equivalents of them in class, it definitely attracts our attention. When I saw the lab equipment in the occupational English course just after the biomedical course, whose course notes were in English, I got really motivated to learn these new words." [Learner E4]

"In the pharmacopoeia [a universal handbook for manufacturing medicines], we saw many words you taught us this year." [Learner R1]

"What we did here was also important. We learned about the lab equipment first, then we learned related verbs, such as add, mix, etc." [Learner P3]

"The terminology used in research articles and pharmacopoeia were included in the topic, so it was beneficial in that sense. We learned the necessary words in this task." [Learner S4]

"We did translations in the class, there was a text about a lab experiment, I think that was taken from the pharmacopoeia, and we saw our level of English. We felt that we knew something [The researcher used a lab text from Boston College University, chemistry department website, and the learners knew this]. We noted down some words on the board, it was beneficial." [Learner E2]

"Labs are the exact places where we should study, it will be useful to know lab equipment, for example, when we go abroad." [Learner P2]

"Sometimes experiments are given in English in other courses. This topic was useful in that sense too". [Learner R4]

"We did a translation of a chemistry recipe, and we should do more of such exercises. The text we translated was related to analytic chemistry. I think that was very beneficial for my profession." [Learner C4]

"I really benefitted from the 'laboratory' unit because it was all about my department and I learned the basic structure of experimental sections of research articles."[Anonymous learner journal]

Using genuine chemistry recipes borrowed from the website of Boston College University Chemistry department, and informing learners that the texts were not adapted to their level-as the experimental texts are mainly in plain English with the uses of present tenses and imperative-, the researcher observed that learners got engaged in the task as they felt motivated to accomplish something real in English:

"The students got motivated when they learned they had worksheets not modified for EFL learners, but genuine chemistry recipes. Some students definitely felt so motivated that they can use their existing knowledge in English, without any educational adaptations, in real life." [The researcher's field notes, April the 11th, 2018]

On the other hand, some learners did not favour the chemistry lab unit:

"I don't think it will be beneficial to me. Unless I study further to become an academician at university, I won't need to have a look at an experiment in English. I will be interested in interactions between medicines and the human body." [Learner A4]

"When I graduate, I will be a pharmacist, and I won't need lab any more. To be realistic, I won't work in the lab, so I won't need English here. However, even if I didn't think I will need English in the lab, I liked the task a lot because of

the fun we had in Kahoot quizzes." [Learner H4]

In addition, the participants suggested the following tasks and/or topics for the unit 'chemistry laboratory':

> "The content of the lab was restricted, we had different labs."
> [Anonymous learner journal]
>
> "We could go to our different labs and learn the equipment we actually have there." [Learner A4]
>
> "We may study the chemistry texts on the side effects of a medicine, the biochemical features of that medicine, and the contradictions, etc., which are more important for us." [Learner H1]
>
> "You can add manufacturing medicines to this unit; we may study the topics of 'pharmaceutical technology', such as generating capsules, tablets, etc."[Learner P3]
>
> "We may study more of manufacturing medicines rather than studying chemistry experiments. We may study the texts in Martindale [complete medicine reference] and the pharmacopoeia."
> [Anonymous learner journal]

Similarly, Faculty Member 06 suggested that the content of the 'chemistry laboratory' unit needs to be modified in terms of terminology of different laboratory tasks, which leads to further consideration of the scope of the unit:

> "In fact, we have different labs, and the types of equipment are all different in each lab. For example, when I am engaged in the animal lab, there is a difference between the terms 'rat' and 'mice'. It is because we study animals. As another example, for toxicology lab, for example, they should know about toxic matters. But generally, there is also some common equipment, such as flasks, etc. This topic is useful for those who want to work in the medical industry, otherwise, a pharmacist will not need this.[…] We [faculty members] may give you a prescription of a magistral medicine, and the students may prepare this in the lab, translating the English version." [Faculty Member 06]

Similar to the present unit, Woźniak and Acebes de la Arada (2018) also added chemistry laboratory topics to their ESP syllabus for pharmaceutical purposes. Their ESP course was composed of two main parts: the first part included chemistry topics synchronized with practical classes in laboratory and the second part covered topics in pharmaceutical care.

For the first "English for Chemistry" part of the course, learners were expected to complete tasks related to chemistry and chemical experiments under the units, called 'Lab Safety, Chemistry, and Experiments. This was the case because their ESP course was held in a content and language integrated learning (CLIL) program, where ESP courses aim at supporting the disciplinary language learning needs for learners to perform the activities in their departmental courses. However, the participants of the current study stated that they demanded a laboratory unit, but rather from a pharmacological aspect. Having taken the

comments of the participants on the unit ‘chemistry laboratory’, the researcher acknowledged that the scope of the unit was focused on chemistry laboratory in broad terms rather than holding a pharmacological approach, which should have been the case. The lab equipment and terminology in the unit are essentially valid for all laboratories in pharmacy expertise; however, there are also some specific ones in each laboratory practice. The main concern in the EAPP syllabus design cannot be to translate the content of all departmental curriculum in pharmacy program into English to make up an ESP course, but rather it is reasonable to purposefully choose the areas where English is mostly used and needed by the specific group of learners to meet their immediate or future English language needs in their education and professional career. Therefore, the researcher decided to focus on the equipment and terminology in pharmaceutical technology branch in the EAPP syllabus for the revised version as mostly suggested by the participants of the research. Accordingly, the name of the unit was decided to be ‘Pharmaceutical Technology Laboratory’ as well as changing its scope in parallel with its name. Additionally, the tasks in the unit were considered to remain the same, but in the revised version, more specific tasks, such as translating texts on manufacturing pharmaceutical products, and writing a similar one, and giving verbal directions on manufacturing medicines, etc. will be added. As for the duration, two weeks will be enough to study on the tasks as is the case with the adopted version. The details about the revised version of the unit will be introduced in the third section of the chapter (see Table 18), where the final version of the unit will be presented.

The evaluation of the fourth unit ‘Job Application’.

In Table 14 below is found the pharmaceutical and language content of the fourth unit, ‘Job application’ in addition to its application in a week in the flipped learning environment. Following the table, the findings on the unit content will be presented and discussed with references to the participants’ comments and the previous research in addition to the researcher’s interpretations of these findings.

Table 14. *The Adopted Version of the Fourth Unit, ‘Job Application’*

4th Unit: Job Application
The Related Learning Outcome **LO4: Learners will be able to apply for a job in English.** 4.1. Learners will be able to write a CV with a cover letter in English.
Pharmaceutical content • How to write a cover letter • How to write a CV (using the template of Europass)
Language • Useful phrases for writing a CV and a cover letter (The templates of Europass)
Task • Writing a CV with a cover letter using the Europass template

Table 14. (*continued*)

Individual space
Learners watched a video on the common phrases used in the cover letter and CV writing.
Group space
It took only one week to study this unit due to the limited time of the term as the previous units took more time than expected. The learners were moved to the computer lab for this unit, and they were introduced to the Europass website on preparing a cover letter and a CV on the lecture video. The learners analysed the samples on the site in pairs. By this means, they had the chance to practice what they watched in the video before coming to class. In group space, they made up a professional CV for an imaginary position at a pharmaceutical company. Similarly, they wrote cover letters as well. The Europass is a very smart platform as it suggests commonly used appropriate phrases and templates for CV writing in 30 languages, which is approved by the standards of the European Council. Therefore, the learners followed the instructions on the Europass platform to produce their imaginary CVs and cover letters. During the class hours, the researcher walked around the class to help learners form sentences and express themselves better. At the end of the course, almost all the learners had their CVs and cover letters ready in PDFs. They were asked to send their documents to Edmodo in order to receive feedback from the researcher on their writing. What flipped learning made it possible is that the researcher as the teacher was ready there during the actual process of writing and could give individual instant feedback to her students.

Some learners in the current study stated that they benefitted from the unit content:

> "There is an online platform for international pharmacy students. Everyone has their own CVs in English on that platform. When I did this task, I thought I could use this outside the class on that platform. So, this was the most beneficial task for me. I am planning to create my own real CV in the near future." [Learner H3]
>
> "It will be very useful for the future. We didn't know how to write a CV even in Turkish, we learned how to do it in English." [Learner A1]
>
> "I have always wondered how to attend to a job application. While preparing our CVs, I saw the real issues that would be mentioned about myself in a job application. We saw a CV framework on Europass." [Learner M3]
>
> "It is very important to us. In the future, we may apply for a job abroad." [Learner C2]
>
> "We had a framework to form our CV; we learned specific words and the details we should mention in a CV." [Learner X1]
>
> "I really enjoyed writing an imaginary CV, and everyone participated in the task. I had more chances to do research and I learned lots of new things. [Anonymous learner journal]

Similarly, the faculty members also approved the need for learning how to apply for a position in a pharmaceutical company and/or in future possible partnerships abroad using English:

> "If I were a student, I would definitely like to know about CV and cover letter writing. […] In our country, we do not produce medical products; therefore, those who want to be in the pharmaceutical industry should know English as they will be sent abroad for professional training in their fields in the sector. We have to learn the issues from foreign companies, so we have to know English for professional purposes. […] applying for a position in such companies is a part of the process." [Faculty Member 07]

> "When students graduate, they will understand the importance [of the task of applying for a job in this unit]. As some students will not immediately open a pharmacy store due to some legal legislations, they will tend to work in the medical industry sector, so they will need to write a CV to apply for positions in medicine companies. They will be asked about it. […][To fully meet the requirements needed for job application in the pharmaceutical industrial sector] You [as the ESP practitioner] should know about business and sales administration etc., in the sector." [Faculty Member 06]

On the other hand, some learners did not favour the unit 'job application':

> "I won't go abroad, so I won't apply for a job using English. It is useless to me." [Learner E1]
>
> "It didn't appeal to me much as I don't think I will need it, but I loved to make up a fake CV as I like dreaming for my career." [Learner M2]
>
> "I had difficulty to write a CV as I still have problems in forming sentences." [Anonymous learner journal]

One of the participants also suggested:

> "In addition to job application, we may study how to speak in an interview of a job application." [Learner S1]

As a result, the feedback taken from the participants revealed that the scope of the unit was mostly favoured by the participants and the learners generally suggested adding activities for verbally attending job application interviews. In the adopted version of the syllabus, due to time constraints, such adaptations could not be realized; however, in the revised version of the syllabus, the researcher suggests adding tasks for attending job application as well, which requires adding one more week to the duration of the unit content, making course duration as 2 weeks for this unit to complete. If more than one term were aimed for syllabus design, then, the scope of the unit could also be broadened to include typical tasks in pharmaceutical companies, such as exchanging information with partner companies and/or other colleagues in their companies via emailing, talking on the phone, or making presentations, etc., as well as the other typical tasks in the business world. It is worth mentioning here that since the topic, 'Job Application' was not handled in any of the empirical research on designing an ESP course for pharmaceutical purposes in the related literature, the findings on this unit could not be discussed with any previous research in the field. As is the case with the previously mentioned units, the revised version of the unit will be introduced in the third section of the chapter (see Table 19), where the final version of the unit will be presented.

The evaluation of the overall content of the flipped EAPP syllabus.

In addition to the evaluation of each unit, the participants were also asked about their opinions on the overall pharmaceutical content of the syllabus. To begin with, the learners stated they benefitted from the task-based nature of the flipped EAPP syllabus:

> "The tasks were good, they were tiring and demanding, but the topics were good."[Learner A3]
>
> "I had learned nothing in English so far in my educational life. I have anxiety about English. I think I overcame this fear this term. As I frequently practised forming sentences, I think I covered a distance. The tasks were very useful to me." [Learner E4]
>
> "Because of the tasks, we spent time practising English outside the class in addition to the in-class sessions. Last year, for example, we learned a few things and stopped studying English outside the class. This time we spent time studying English." [Learner C1]
>
> "Doing tasks in the class contributed to my knowledge. Teachers used to instruct English only using the coursebook, and I didn't listen to them at all. This time it was different for me." [Learner C4]
>
> "Rather than theoretical course documents, it is more enjoyable to perform tasks." [Learner M3]

Additionally, the learners loved to create an end product while engaging in tasks:

> "I found it very meaningful to produce something related to my profession, I felt I got qualified to do tasks in my profession." [Anonymous learner journal]
>
> "I feel confident and comfortable for performing the occupational tasks in the future" [Learner H2]
>
> "As the course content is not very intensive, this helped me understand and learn the content in English much more than before." [Anonymous learner journal]
>
> "The patient information leaflets of some specific medicines or manuals of some biomedical products are mainly in English. For that reason, I found the course content very beneficial."[Learner E3]
>
> "I learned as much occupational terminology in English as possible. [Anonymous learner journals]

Moreover, the researcher observed that learners got engaged in doing tasks more when they were given templates or guidelines of an end product for performing occupational tasks in English:

> "I observed that when the students are given a template, a guide for analysing a text or producing an end product, they feel more relaxed, motivated and ready to complete the tasks." [The researcher's field notes, May the 16th, 2018]

This may be because of the core features of ESP courses, which are goal-oriented, needs-based, and related in content to particular disciplines and occupations, as mentioned by Alousque (2016, p. 193). Here meeting learners' needs is of primary importance, which is basically to have teacher guidance to communicate effectively in specific fields and professional contexts. When learners are engaged in an end product that they may utilize in their disciplines, as a matter of course, they tend to participate in such activities more. Similarly, the active learning environment of flipped learning also makes it possible for

performing such task-based activities in-class sessions. The active learners, who attend in higher-level critical thinking, task-based and interactive problem-solving activities and skill development by accessing peers and teachers' support at the same time, get engaged in deep learning of subject matter (Karagöl& Esen, 2019; Roehl *et al.* 2013; Wang, 2017).

In addition to the responses on each unit and related task, the faculty members also commented on the overall scope of the flipped EAPP syllabus:

> "The students should know the difference between a research article and a case report. […] For example, a person may be poisoned by mercury and he has a specific case, such as he may be at the age of forty with particular symptoms; therefore, he is to be treated in a particular way. A case report is an expert's report. We can find examples of a case report on the medical academic databases, such as PubMed, Scopus, Science Direct, Google Academics, etc. They should know the differences among case reports, research articles, reviews, to see the examples of professional authentic papers in English related to pharmacy." [Faculty Member 07]

> "Students may study case reports by translating the English versions into Turkish. […] They may translate these papers, or write a case report in English depending on an imaginary case. They may translate from English to Turkish or from Turkish to English. The students may learn how to search on the internet for specific sources to make a literature review." [Faculty Member 06]

> "I think topics may be redesigned as in pharmaceutical sectors: academic, industrial, pharmacy store, etc. If you arrange the units under the names of courses in pharmacy program [such as pharmacognosy, pharmacology, etc.], you cannot handle it, the content would be so broad, or it means you translate and transform the entire faculty curriculum into an ESP course, which is impossible and unnecessary." [Faculty Member 06]

Similarly, a few learners suggested alternative topics to cover in the flipped EAPP syllabus apart from their suggestions for each existing unit:

> "For the first time, English became important to me as my instructor of pharmaceutical technology told us to study some course materials in English. The instructor doesn't consider whether you understand the texts or not. Maybe you as our English teacher may help us to translate materials in other courses, such as pharmacopoeia, etc. When we feel it is a need for our undergraduate degree, we will definitely study English more." [Learner Y1]

> "We may translate scientific articles". [Anonymous learner journal]

On the other hand, lecturers of English suggested a change in the sequence of the topics:

> "The sequence of the units should change. The unit 'job application' should be in the first place and the unit 'anatomy' should be in the last. It is because CV and cover letter writing is a kind of guided writing as Europass Template was used. However, the anatomy reading passages are complicated and difficult to understand especially for the beginning of the term, these passages may be demotivating for the low- achievers." [Lecturer 02]

> "The weight of English courses in the pharmacy program curriculum should be questioned. Whether or not to teach occupational English for the last 3 years of the pharmacy program should be thought twice. Maybe it is better to teach occupational English only for the last year or for the last 2 years. We have serious problems with general English proficiency. We do not have enough materials to cover in these 3 years as well. […] I think CV writing and business English should be in the last term of a pharmacy program as they are mostly related to the professional world after graduation. I think we should question what to include in all these 4 years of occupational English." [Lecturer 01]

As mentioned earlier, the researcher decided to change the sequence and the scope of the units, this decision was also supported by the lecturers of English with their suggestions given above. On the other hand, as Lecturer 01 stated above, the consideration of the weight of occupational English courses in the pharmacy program curriculum has to be handled not only by the faculty members but also by the lecturers of English who lecture English courses there. The idea 'the more the merrier' does not seem to be efficient, rather it increases the unnecessary workload on learners and lecturers of English, who, as a matter of course, lack useful sources to teach ESP, when it comes to meeting realistic needs of a particular group of learners. In the case of the present study, the researcher attempted to suggest an alternative to the content and methodology of the occupational English courses in the pharmacy faculty; however, the issue has to be addressed by the contributions of all the stakeholders in the long-run. Otherwise, in terms of content delivery in English, lecturers generally lack necessary departmental knowledge, which decreases the efficiency of teaching and practising occupational tasks in English. On the other hand, faculty members are not adequately knowledgeable about teaching English while delivering pharmaceutical content, but rather they transform ESP courses into a translation course, where only grammar teaching and translation are the dominant techniques to practice English. Therefore, faculty members and lecturers of English are supposed to collaborate on generating learning outcomes to use English for pharmaceutical purposes, considering the weight of English courses in their program curriculum in the long-term.

Such collaboration has been recommended by the ESP literature as well. For instance, Kokkinn and Stupans (2011) suggested collaboration across disciplines in which pharmacy expertise and language expertise worked together in order to search for the specific language needs in patient-pharmacy counselling context; and they even recommended extracurricular activities for ESP courses to exactly address the language needs of students of pharmacy. Similarly, Woźniak and Acebes de la Arada (2018) report on the implementation of an ESP course for pharmaceutical purposes taught in the content and language integrated learning (CLIL) degree program in Spain, in which the medium of instruction is English. This brings a

necessity for the collaboration between content lecturers and ESP lecturers to be in agreement with syllabuses of the courses as well.

The presentation and the discussion of the findings obtained from the evaluation of the language content.

As the syllabus was based on purposeful tasks the learners need to perform in English via using specific language skills, the syllabus was designed around a series of tasks to be accomplished within the community of practice rather than the conventional way of language teaching, such as structural or notional-functional approaches. The researcher focused on mastering learners' specific language skills in the pharmaceutical context; thus, the language to be taught came out of the task, in other words, the linguistic aspects were of secondary place in the design of the syllabus. Below are the views of the learners and the lecturers on the linguistic aspect of the EAPP syllabus with references to the related literature as well.

Activities to promote listening skills.

Flipped learning provides a language class with intensive input via its creating space for receptive skills, which are listening and reading. Making use of this alternative space for input outside the class contributes to learners' comprehension of the input in the target language a great deal. In the current study, the syllabus included a relatively small amount of listening input, which was in the second unit on patient-pharmacist dialogues. In individual space, learners were asked to watch a video on patient-pharmacist dialogues, and they were supposed to answer the related questions while watching the videos. Additionally, a couple of teacher-made videos on the possible utterances needed in these dialogues and samples of patient-pharmacist dialogues were also supplied to learners to support their understandings of the dialogue videos. However, it is worth mentioning that the limited amount of listening input in the syllabus was due to the dominance of the related learning outcomes focusing on writing and comprehension of written texts in the pharmaceutical context. Below are learners and lecturers' suggestions on the input provided to learners in ESP class:

> "I remember the content of the video, which was interrupted with comprehension questions during the stream. This could be used to support listening and learning pronunciation." [Learner H3]
>
> "Why cannot we understand a native speaker? Understanding what is said should be given more importance. […] I think we should study listening comprehension skills. When a foreign patient comes to my pharmacy, I may not understand their pronunciation because of their accent." [Learner C2]
>
> "I would like to study more on listening skills in the course." [Anonymous learner journal]
>
> "You may use videos and listening texts to decrease the intensiveness of the

reading texts, you had better add listening activities to the tasks." [Lecturer 2]

"You may help us to pronounce the most frequently used everyday words and pharmaceutical words in a video so that we can study the pronunciation in this way. I have difficulty in pronunciation." [Anonymous learner journal]

As for improving listening skill in ESP syllabus, Dudley- Evans and St. John (1998) approach this skill in two different perspectives: listening to monologues and listening as part of a discussion. Firstly, listening to monologue skill is resembled reading skill to a great extent in that understanding a seminar or a business presentation has the same processing for reading a research article: first trying to figure out the language, and second changing overall knowledge about a topic as a result of the comprehension of the language. Dudley- Evans and St. John (1998, p.104) suggest that extracting meaning from listening texts should be the key skill to focus in either EAP or EOP contexts because learners need to understand what they listen to, which is delivered at a normal speed, and grasp the gist of the information for their own specific purposes, giving teaching of the micro-skills secondary place for narrower focuses on the information. Additionally, Goh (2013, p. 62) emphasizes that varied listening skills may be required depending on the demands of learners' EAP or EOP listening contexts. For instance, in an EAP setting, in addition to the comprehension of the gist of the lectures, learners may also need to take notes, and integrate these notes with reference materials, so that they can fully understand the content of the speech. On the other hand, in an EOP setting, a business meeting, for example, learners may need to listen critically, think and answer to immediate questions that may arise suddenly during presentations. Therefore, ESP listening differs from EGP listening in that specific communicative demands may require a particular use of language and skills in the workplace and/or academic context-related competency.

Regarding teaching listening as part of a discussion, in other words, *spoken interactions*, in which participants have both listener and speaker roles in EAP and EOP settings, Dudley- Evans and St. John (1998) advise including activities to teach active listening, through which the listener communicates to the speaker that they have been understood, by either back-channelling devices, such as 'tell me more, really, uh uh' and questions, or non-verbal expressions, such as gestures, mimics, and expressions. Here the focus is not to teach turn-takings but to encourage speakers. Moreover, in spoken interactions, questioning is a really vital skill, which may be about learning information, asking for clarification; and it may even be used as a strategy. Deciding on which question type to include in course content depends on the nature of spoken interactions that take place in ESP settings; for instance, in a business meeting, all sort of questions may be needed while in a technical talk, only limited response questions may be useful. In either one-to-one or in multi-

person spoken interactions, Dudley- Evans and St. John (1998, p. 111) suggest using task-based activities around group work dynamics, which take place around typical scenarios practising suitable language use and skills. A key point here is that, rather than placing listeners as outsiders with activities, such as filling in the blanks, answering comprehension questions, etc., as is the case with listening activities in several course books, making listeners as insiders through allowing them to ask questions on the listening exercise will definitely improve their authentic listening skills in real-life spoken interactions.

Relying on the suggestions in the literature, the researcher acknowledges that more listening practice, especially on pronunciation, should be added to the syllabus in order to increase learners' listening comprehension during pharmacist-patient interactions. For instance, for the purpose of supporting the role plays, Graham and Beardsley (1986) suggested listening comprehension exercises on pharmacy counselling, pronunciation work, discussions about role-playing and the linguistic and extralinguistic elements in role-plays. Similarly, Berardo (2017) suggested practising some aspects of pronunciation as well as listening comprehension of cross-cultural communication and perceptions in order to prevent miscommunication during counselling. Moreover, the second half of Diaz-Gilbert's book (2009) is composed exercises on aural, oral and pronunciation skills, including additional direct advice to speakers of varied nationalities, such as Russian, Spanish, etc., considering the possible pronunciation difficulties they may have in English in addition to exercises of listening and spelling, pharmacist-patient dialogues and idiomatic expressions. Alternatively, Van de Poel, Van Dyk, Gasiorek and Blockmans (2015) used the online platform to help learners to practise the sounds, word meaning, and language structures of the target language, which is supported by the training materials on the online platform. This may also be applicable in flipped learning individual space, where learners can reach sources to learn the pronunciation of sounds and some specific words, and in group space, activities may be handled to practice pronunciation.

Activities to promote speaking skills.

Although in the first draft of the syllabus, the speaking activities were planned to be not only in the second unit but in the third unit (i.e. to talk about the steps of an experimental procedure) as well, the application of the syllabus, especially in the second unit, took more time than expected; therefore, in the current syllabus, the speaking activities were only practised around the tasks in the second unit, rational medicine use, in which patient-pharmacist dialogues were dominantly studied. In the speaking activities of the second unit, learners were asked to write sample dialogues between a patient and a pharmacist and practise

them in class with their friends. To assess learners' works on dialogue generating, the learners were asked to record their dialogues in a short video format to be submitted to the researcher. Below are the participants' opinions and suggestions on the speaking activity:

> "The dialogue videos between a pharmacist and a patient you showed in the class were efficient. We got ready for participating in similar dialogues." [Learner R1]
>
> "For me, I cannot speak English with anyone else. I feel incompetent when speaking. […] However, after we practised the dialogue between a pharmacist and a patient, I remember almost all the utterances because the task was on speaking." [Learner M4]
>
> "I think the pharmacist-patient dialogues will be beneficial for me when I have a foreign patient. When the students get passive they stop learning. The students should be active as in your instructional model." [Learner P2]
>
> "I think this kind of writing [learners were first asked to write sample dialogues and then perform them] may help them get prepared for dialogue performance. This may be useful especially for lower-level students." [Lecturer 3]

Some learners asked for studying pronunciation, which was not treated specifically in the syllabus:

> "I think the matter of pronunciation was disregarded. I think this should be added to the course, so the course will be more efficient."[Learner C3]
>
> "You may help us to pronounce the words we could not pronounce right." [Learner X3]

In addition to the study of the dialogues in unit two, the participants were asked about what kind of speaking activities they would suggest for the syllabus, and below are their responses:

> "Students may be given some situations to help them to be ready for immediate situations and dialogues. Rather than asking them to record their dialogues, they could have been asked to perform their dialogues in the teacher's office in a specific time given for assessment. In these sessions, the student may choose a situation and the teacher being the patient, the student may roleplay as the pharmacist." [Lecturer 2]
>
> "Change the task of the lab into a speaking activity instead of lab report writing. Make students tell what they do in a lab." [Lecturer 1]
>
> "We may prepare presentations on some specific topics in our pharmacy program." [Learner X1]
>
> "We had better speak at any pharmaceutical area; the dialogues should be at other professional contexts as well" [Anonymous learner journal]

On the issue of practising the speaking skill in ESP courses, Basturkmen (2006, p. 47) remarks that in ESP syllabuses, 'speech acts', which are also termed as 'functions', take a large portion as ESP learners are supposed to use particular functions of language that speakers of target community prefer in certain situations. Therefore, ESP course designers

identify a set of speech acts which occur frequently in specific environments by examining the interactions among individuals within target contexts. Here the focus is on the communicative purposes behind these utterances, such as apologizing, making a request, booking a room, ordering, etc. Moreover, Basturkmen (2006) explains Austin's (1962) claim on the three elements existing simultaneously in every utterance: locutionary (the exact words spoken); illocutionary (the purpose behind the utterance); and perlocutionary (the influence of the words on the listener). She gives the example of someone saying, 'I'm busy' (locutionary) meaning, 'you're disturbing me' (illocutionary), and the listener's apologising for disturbance and disappearing (perlocutionary). Relying on this, target contexts could also be examined in terms of cultural issues so that non-native speakers of English will not have difficulties in communicating because of lack of information on cultural messages behind speech acts, which may happen due to differences among cultures that may lead to misunderstandings about target language (p. 48)

As expected, in the related literature, the speaking activities are dominantly designed around patient counselling, as this is the fundamental issue in pharmaceutical English courses. As mentioned earlier, in their team-teaching course, Graham and Beardsley (1986) taught speech functions to their students, either through illustrating in ready-made videos by companies or via live demonstrations by the instructors. Next, the related expressions in the role-plays were studied by eliciting additional expressions from the students, and the role plays were practised by the students and analysed by the whole class. Similar to the current study, Woźniak and Acebes de la Arada (2018) asked learners first to individually produce an audio recording for a consultation to a patient suffering from a specific health problem, relying on particular patient information leaflets and using an everyday language to communicate with patients in their audio recordings. Second, students were asked to record a video in pairs on a patient-pharmacist dialogue, referring to OTC medicines, mostly around common problems. They were provided with a checklist of the most important parts of the dialogue, such as asking questions, giving advice, and interaction to organise their dialogue flow. Moreover, in Hussin's study (2013), the student participants in the study practised being pharmacist while pharmacy staff members at university acted the part of patients in the simulations of patient-pharmacy interactions. In the study, the pharmacy students were asked to reflect on their videoed performances of patient counselling simulations in stimulated recall interviews while the pharmacy staff members commented on their students' performances as well. In addition to designing a course for improving a special set of communication skills, such as greeting a patient, engaging in small talk on learning the patient's reason for the visit; explaining the treatment, etc., Berardo (2017), focused on practising some aspects of

pronunciation (prosody and segments) as well. In Japan, Kobayashi, Yazawa, Saguchi and Tanaka (2018) also prepared manual booklets composed of common phrases in pharmacy settings. Depending on the learning objectives, the researchers conducted a trial, where the performances of six final year students in the school of pharmacy were assessed by two Thai incoming students, who acted like patients in simulated cases, as well as being self-assessed in terms of the pharmacy students' effectiveness. Having participants of foreign origin in patient counselling simulations may be useful to see the efficiency of the ESP instruction. Alternatively, in their study, Kokkinn and Stupans (2011) suggested using explicit discourse markers during their interactions with patients; building collaborative relationships with patients via politeness strategies and effective turn-taking in conversations with patients, and dealing with sensitive topics during information-exchange in addition to the commonly used speech acts in pharmaceutical counselling, such as gathering the necessary information on patients' health problems; giving advice to patients on how to deal with their health problem and how to take medicine, etc. In addition to the speaking activities related to pharmacy counselling, pharmacy students may also practise speaking in a series of pharmaceutical contexts, such as talking about the steps of manufacturing medicines, talking to a colleague on the features of specific medicines or medicinal herbs, and participating in a job interview, etc. Additional speaking activities may be added depending on the requirements of departmental courses, such as making a presentation, etc., as well as on prospective sectorial demands. Equally important, especially for students in EFL countries, pronunciation work is also an issue to be handled in EAPP courses.

Activities to promote structural knowledge.

As mentioned previously, the researcher designed the units according to the targeted learning outcomes, which made the syllabus a kind of a task-based one rather than a structural or a notional- functional one. In each unit, the tasks were the main focus to be mastered, with related structural and vocabulary knowledge in mind. That is to say, in the flipped EAPP syllabus, the researcher did not follow a grammatical stance, but aimed for achieving tasks relying on related structural and vocabulary knowledge to reach the learning outcomes. Learners were satisfied with latent learning when they try to form sentences related to each task. Below are the learners and the lecturers' views on the structural activities held in the syllabus. To begin with, some learners stated that they benefitted from the task-based nature of flipped EAPP syllabus in group space:

> "We didn't study grammar directly this term; rather, we studied it indirectly through the tasks. I am glad that we were not dependent on only learning English grammar." [Learner R3]

> "It is good that grammar was given a secondary place." [Anonymous learner journal]
>
> "I enjoy forming sentences when writing about my profession, and I learn the structures of English in a paragraph." [Anonymous learner journal]
>
> "We learned how to form sentences while studying them in class with the support of the teacher whenever we asked for." [Anonymous learner journal]

Additionally, some learners also stated that explicit grammar instruction in individual space was beneficial:

> "I see that I did not know passives; I learned this while translation." [Learner A2]
>
> "The second video lecture on passives was very clear and I learned it immediately with this video." [Learner A1]

In the implementation of the syllabus, the differences among learners' proficiency levels often necessitated a review of previously learned structures, which caused some delay in the timing of the sequence of units. The researcher observed a need to support the flipped EAPP syllabus with more grammar videos especially for lower-level learners:

> "I would like you to record more videos on grammatical structures of sentences." [Anonymous learner journal]
>
> "I have difficulty to form sentences as I do not have a sound English background. We need grammar instruction." [Learner A4]
>
> "I indeed learn terminology, but I do have difficulty with tenses, and I cannot form sentences accurately while doing the tasks." [Learner R2]
>
> "In my group were many students who had very basic sentence-level problems, which showed me that learners needed basic English grammar revision before starting any ESP course. At the very beginning of the term, a comprehensive revision of language points, at a pre-intermediate level in this case, may be done, as learners need such language support." [The researcher's field notes, March the 14th, 2018]

Additionally, the teacher-created videos in English challenged some learners who have lower-level of listening comprehension proficiency:

> "I do not understand anything in the video you shared with us. Even if I tried, I did not understand. My proficiency in English is low, so that means nothing to me as I don't understand the video; I cannot do anything in practice in class." [Learner X1]
>
> "I do not understand the videos in English as my English is not enough to understand them." [Anonymous learner journal]
>
> "It may be better if videos have subtitles either in English or in Turkish, but English subtitles are more reasonable. You see what you hear. It will be better." [Learner E4]
>
> "In the videos on lab equipment, even if the pieces of equipment were shown in a lab and named in the video, the learners were still in need of Turkish

equivalents. They frequently sought for Turkish support in videos." [The researcher's field notes, April, the 11th, 2018]

Similarly, the differences among the proficiencies of learners were also reflected on task performances in group space activities, which was inevitable:

> "As students' level of proficiency is not the same, in-class activities, some students could finish their tasks on time, but some could not." [Learner E2]
>
> "We are not equally proficient in English to do the same tasks in class." [Anonymous learner journal]

Likewise, at the beginning of the term, there appeared a need for language support for lower-level learners. The syllabus required to be modified with additional grammatical support to enable learners to be capable of doing tasks in class. A suggestion was made by a colleague in the focus group interview as well:

> "Students need revision for even general English courses. As for occupational English, it varies from person to person. While some need basic grammar rules revision, some may be bored of this. In addition, they should be ready for the content knowledge beyond English to understand the pharmaceutical texts in English." [Lecturer 3]

Likewise, another colleague suggested that such a grammatical revision has always been required in ESP courses she has given for a couple of years:

> "The students are supposed to have at least pre-intermediate level of proficiency in English before taking ESP courses; however, this is not the case as in my courses in the faculty of pharmacy. It always takes time to recover basic grammar rules before starting texts related to the pharmacy in my ESP courses […] The student's readiness level for occupational English course is generally too low. So, rather than just dealing with the content and the related vocabulary, we always have to cover basic English language subjects in such courses. […] To make students get prepared for the occupational English course, you may offer suggestions for English classes in the previous year, such as process writing or use of passives in reporting a process, etc. for example for the units, such as 'anatomy' and 'laboratory'." [Lecturer 2]

Therefore, relying on the feedback gathered from learners during the term, some additional linguistic support was supplied to learners in class time, which led to changes in the lengths of units within the syllabus. This situation was decided to be reflected on the linguistic design of the revised syllabus; that is to say, the researcher decided to design additional videos on general language points or using language skills in synchronizing with content videos and related specific language skill or point to be used while doing the tasks so that learners who need additional support on specific language knowledge and skills may consult these videos to catch up with their peers.

On the issue of grammar teaching, Dudley- Evans and St. John (1998, p. 74) emphasize that the specific context affects which grammar subjects are needed in a syllabus,

and particular contexts may require certain uses of grammar, e.g. use of past passive voice in method sections of a research article. Rather than ignoring grammar subjects at all, such an approach to grammar teaching will also help improve skill use in ESP; that is, comprehension in reading or listening may be influenced due to grammatical weaknesses of learners; thus, learners should be supported with grammar teaching to certain extents depending on their proficiency. Similarly, Basturkmen (2006, p. 35) also highlights that particular grammatical structures are more frequently used in ESP texts, e.g. use of passive voice and a set of technical vocabulary in scientific texts. Teaching grammar to support ESP learners' structural knowledge has been suggested by the related English for pharmaceutical purposes literature as well (Berardo, 2017; Graham & Beardsley; 1986; Van de Poel, Van Dyk, Gasiorek & Blockmans, 2015). In addition to knowledge of grammar, teaching how to form sentences, especially in written form, has also been practised in ESP courses for pharmaceutical purposes. For instance, in the last chapter of the book by Diaz- Gilbert (2009), one part is dedicated to pharmacy documentation skills, including pharmacy documentation vocabulary, medical and pharmaceutical abbreviations, and pharmacy documentation forms. Additionally, Mayo, Antón and Vasco (1995) also suggested teaching genre skills for learners to write efficient textual products appropriate for the conventions of their discourse communities. Similarly, Hyland (2013, p. 103) remarks that genre studies in ESP supply instructors and course designer with the text-based descriptions of specific genres to be transferred to syllabus and material designs. All in all, ESP teachers are supposed to balance between teaching the conventions of writing in target contexts and designing tasks in which learners write individually, or in pairs or groups in class settings.

Activities to promote vocabulary knowledge.

Teaching terminology has been a very crucial issue for ESP literature, as vocabulary knowledge is the unique feature of any particular ESP course. Below are the participants' comments on the teaching of vocabulary in the flipped EAPP syllabus. Learners were satisfied with learning the terminological vocabulary of their specific domain while dealing with the tasks in class:

> "For terminological words, videos on Edpuzzle were beneficial." [Anonymous learner journal]
>
> "Quizzes on Kahoot reinforced our knowledge of vocabulary." [Anonymous learner journals]
>
> "This model seems more appealing than the traditional one. It is about our profession in terms of either translations or terminological vocabulary. Rather than everyday words, it is more reasonable to learn lab equipment. We studied grammar subjects in our previous English courses; in this class, learning

vocabulary is more reasonable and enjoyable." [Learner H4]

"The things we have learned were related to our profession, it was good in that sense. I learned new terminological words and sentence structures." [Learner S3]

Additionally, some learners stated that translation practice while reading specific texts or writing the pamphlet or CV helped improve their vocabulary knowledge:

"Your encouragement for us to use dictionaries during translation helped me learn more vocabulary and motivated me to get involved in the tasks more." [Anonymous learner journal]

"This course helped me improve my translation skills. Now I can understand the terms and interpret texts more easily." [Learner C3]

Similarly, the participants offered some suggestions on teaching vocabulary:

"You could have given us a supplementary document including the key vocabulary we would use for the tasks. I wasted a lot of time to find the exact meanings of some words in the anatomy texts." [Learner P1]

"I needed more practice [time] to learn new words."[Anonymous learner journals]

"I think the reading passages in the unit "Anatomy" are difficult for them. The passages should be shorter." [Lecturer 2]

Additionally, it would be reasonable for ESP instructors to double-check the meaning of some specific terminological words before teaching them to their learners, as experienced by the researcher herself during her teaching practice:

"For teaching terminology, the teacher should check the vocabulary with an expert or a faculty member on their actual meaning so that when the content is delivered, there will not be any misinstruction [As is the case with the confusion the researcher had while teaching the difference between 'Magistral' and 'Generic' medicine, which was later corrected by the researcher herself after taking feedback from some learners and a faculty member.]. [The researcher's field notes, March the 28th, 2018]

About the issue of dealing with technical vocabulary, Dudley- Evans and St. John (1998, p. 81) suggest using cognates that are familiar to learners (i.e. terms which have equivalents in both target and native languages of learners, such as *carbon monoxide*); translating new terms into learners' first language (henceforth, L1) after a short explanation; using technical dictionaries; cooperating with a subject specialist; and creating a glossary of new terms with their explanations. Additionally, Basturkmen (2006, p. 63) emphasizes that even if language use in a particular domain does not vary much from general English, some specific lexical items and phrases dominate ESP texts. Thus, she points that in order to determine these frequently occurring words and structures, use of concordancing software can make it possible for ESP course designers and teachers to scan content-specific texts and define which words and structures often appear and co-exist in such texts. By studying the

concordances, learners are able to observe how certain lexis and structures come together in target settings.

As for the related literature on pharmaceutical English courses, Diaz-Gilbert (2004) suggests integrating vocabulary-building skills into the pharmacy curriculum in collaboration with ESL instructors and pharmacy professionals at universities. Thus, in her book, Diaz-Gilbert (2009) concentrates on teaching pharmacy-related words and terminology via exercises either in texts or in pharmacy dialogues that are categorized according to patient complaints related to anatomical components, such as mouth and nose, or cardiovascular system, etc. In each unit of her book, she focuses on specific medical vocabulary related to typical medical conditions and patient complaints in addition to exercises on medical vocabulary comprehension. Similarly, Berardo (2017) suggests teaching common medical terms for body parts and medical conditions and idioms typically used in related conversations as well. Additionally, Graham and Beardsley (1986) suggest studying idioms and colloquial terms for parts of the body and bodily functions for vocabulary development. Moreover, Grabowski (2013) recommends teaching keywords that are mostly related to pharmaceutical forms of medicines, and more advisory keywords as well as those related to chemical substances in medicines, medical conditions, side effects and measurements keywords. In addition to topic-based tasks, Woźniak and Acebes de la Arada (2018) recommend teaching strategies for learning pharmaceutical vocabulary, such as differentiating among pharmaceutical prefixes and suffixes in terminological words, and looking up words in genre-specific dictionaries in pharmaceutical contexts to avoid translation problems, etc. Finally, on the teaching of vocabulary in ESP, Dudley- Evans and St. John (1998, p. 82- 86) argue that even if ESP teacher should not be responsible for teaching *technical vocabulary*, in specific contexts, they may check learners' comprehension of such vocabulary while handling a task. Therefore, it is the responsibility of ESP practitioners to concentrate on the comprehension and use of specific terminological vocabulary with typical genre-specific prefixes and suffixes to make-up words while designing the content of the professional tasks. It should be born in mind that in order to correctly teach the field-specific terminology to particular groups of learners, ESP teachers should always consult the people in the community of practice to prevent misinstruction and misunderstandings.

Having considered the contextual and linguistic dimensions of the flipped EAPP syllabus, in the following section, the implementation of flipped learning in English for pharmaceutical context will be discussed, relying on the data gained from the present action research. This will in turn be followed by the revised version of the flipped EAPP syllabus.

The Presentation and the Discussion of the Findings Obtained from the Evaluation of the Flipped Learning Implementation

Similar to the analysis of the findings on the pharmaceutical and linguistic content of the syllabus, the findings on the implementation of flipped learning strategy were examined with references to the participants' responses to the research questions mentioned above, answering the main question "What are the strengths, weaknesses and suggestions to overcome the weaknesses of the flipped EAPP syllabus implementation?" under the two themes, 'individual space learning' and 'group space learning', and the main categories are shown under these themes in Figure 42 below. In the following paragraphs, the implementation process of the flipped learning strategy was evaluated from the learners' points of view and the researcher's field notes and was discussed with references to the related literature.

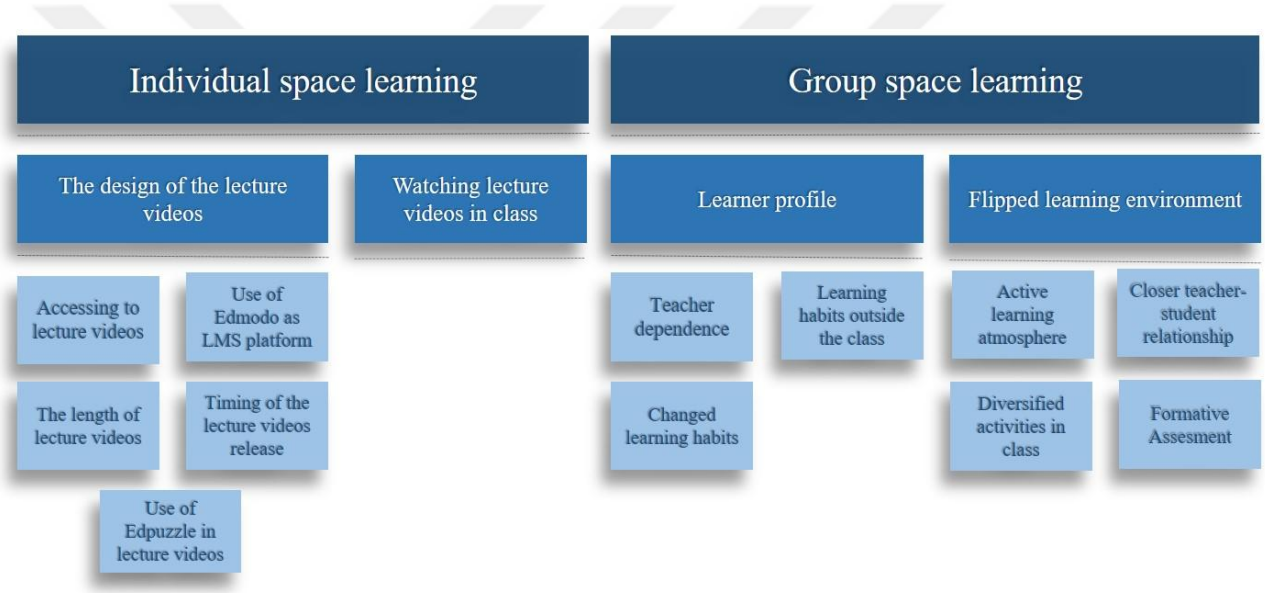

Figure 42. The themes and categories emerged from the evaluation of the flipped learning implementation.

The presentation and the discussion of the findings on the individual space learning of the flipped EAPP syllabus.

As mentioned above, the findings on the individual space learning appeared in two main categories: the design of the lecture videos and watching lecture videos in class, as seen in Figure 43 below, each of which will be dealt and discussed below respectively with references to the researcher's field notes and the participants' responses as well as the references to the related literature.

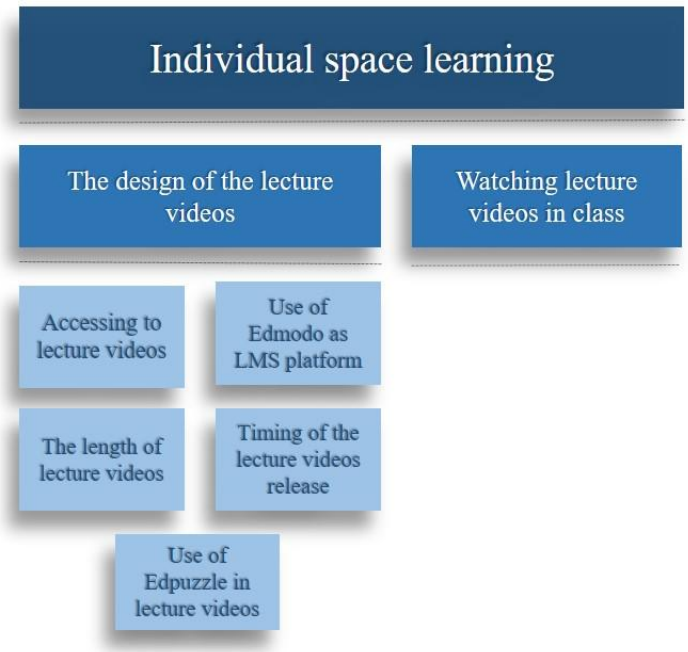

Figure 43. The categories and subcategories emerged from the theme 'individual space learning'.

The design of the lecture videos.

Having analysed the participants' responses and the researcher's field notes, the subcategories emerged from the category, 'The design of the lecture videos'; are shown below in Figure 44, which will be followed by the presentation and the discussion of the related findings.

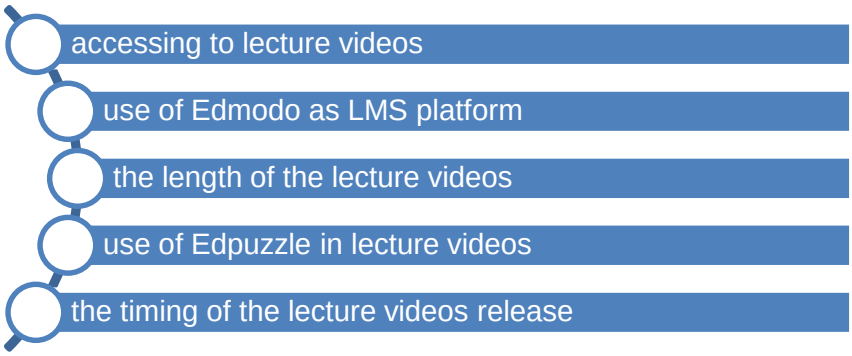

Figure 44. The subcategories emerged from the category 'the design of the lecture videos'.

Accessing to lecture videos.

Accessing to lecture videos was a problematic issue for some learners in the study, which required a change in the implementation in the course of time. At the beginning of the term, the researcher recorded and released lecture videos on the LMS platform supplied by the distance education centre of her institution. The LMS platform could enable lecturers to create synchronous or asynchronous online courses where they can share documents and lecture

videos, which were also recorded and released on the LMS, with learners. In the present study, some of the learners could watch the asynchronous online courses with no difficulty; however, there was a group of learners who either had problems with system incompatibility between their smartphones and the LMS or did not have a personal internet connection on their smartphones or Wi-Fi connection in the places where they lived; therefore, it was difficult for them to watch videos before coming to class. In the anonymous learner journals gathered during the first few weeks, some learners mentioned that it was not practical for them to watch videos on the LMS as it was mostly impossible to use that platform via their smartphones at that time:

> "It is difficult for me to reach the lecture videos as I do not have a personal internet connection nor do I have a PC." [Anonymous learner journal]
>
> "My phone does not support the type of lecture videos, I can only watch them on a PC. I do not have a PC, and when I cannot reach a PC, I cannot watch the videos." [Anonymous learner journal]
>
> "I had difficulty in watching the videos because of internet connection problems where I stay." [Learner P1]
>
> "As each learner's socio-economic state is different, those who do not have a computer had difficulty to reach the videos, or they had internet connection problems. We had also difficulty in using the computer lab in our free time at the faculty as it was mostly locked." [Learner Y4]

One of the learners also suggested receiving all the lecture videos and related printed documents at the beginning of the term so that there will not be such accessing problems:

> "The course content may be given to us as a package; similarly, the videos may be delivered to learners it the beginning via a flash drive because the internet connection is a huge problem. The internet connection problem will be overcome this way. If the printed documents and the videos should have been given to us it the beginning, it would be more efficient." [Learner A3]

This suggestion may be realized by uploading all the lecture videos beforehand to the online class rather than releasing them week by week as was the case with the present study. Similarly, the problem of learners' adaptation to flipped content delivery has been seen in the findings of the previous literature (e.g. Ahmed & Asiksoy, 2018; Akçayır & Akçayır, 2018; Çevikbaş & Argün, 2017; Ekmekçi, 2017; Roehl *et al.*, 2013). The struggle with the use of new technologies especially at the very beginning of the transition to flipped learning has been experienced by various researchers as well (e.g. Boyraz & Ocak, 2017; Turan & Akdag-Cimen, 2019; Webb, Doman & Pusey, 2014). In such cases, the related literature proposes choosing user-friendly technologies if possible and sharing lecture videos through flash drives or on university district server at the campus (e.g. Bergman & Sams, 2012; Chen, Wang, Kinskuk & Chen; Long *et al.*, 2019; Mehring, 2018). As for the present study, after seeing

that sharing videos through the LMS supplied by the university became problematic, the researcher searched for alternatives, and finally, discovered that Edmodo was more practical as an LMS platform and switched to it immediately rather than using the LMS platform supplied by her institution and delivered lecture videos, which she created using a screenscastifying program, on Edmodo.

Use of Edmodo as an LMS platform.

As the LMS platform supplied by the researchers' institution was not user-friendly for some learners due to some system incompatibilities with their android devices, etc. as mentioned above, Edmodo platform was preferred to communicate with learners and share course content documents as well as learners sending assignments on it. Similarly, the researcher sent the lecture videos she created to Edmodo page of the class so that learners had immediate access to the lecture videos. Learners also stated that they benefitted from the Edmodo platform to have access to course documents and lecture videos and to communicate with their teacher and classmates more easily:

> "Rather than teachers instructing the course content on the board, these lecture videos were more beneficial. Meeting online and in the class were better and this reinforced learning. For those who love spending time online-me for example- this strategy was better. I wondered what your videos included, or what you put on Edmodo, like using social media." [Learner E3]
>
> "Using Edmodo was very beneficial because there is a platform that everyone can share something and reach one another online. It was the first time for us to use a platform like Edmodo, thanks to your course." [Learner R4]
>
> "In exam weeks, I almost always lose my course notes. I didn't feel such anxiety to lose my notes as I could reach them on Edmodo. It was very good for me to be organized." [Learner P4]

Highlighting the efficiency of using Edmodo in a flipped learning environment to interact with students outside the class, to share documents, to engage in course content before coming to group space and to increase learner autonomy, similar results were reported in the related literature (e.g. Erdemir & Yangin- Ekşi, 2019; Insani, Suherdi & Gustine, 2018; Öznacar, Köprülü & Çağlar, 2019; Purnawarman, Susilawati & Sundayana, 2016; Rochmahwati, 2014; Serafim & Meireles, 2019). After all, Edmodo in a flipped classroom may be considered useful and effective to a large extent as it creates an interactive and collaborative digital learning environment.

The length of the lecture videos.

At the very beginning of the term, the teacher used to record relatively long videos for learners. However, learners asked for shorter videos that contain the core of course ideas

instead of unnecessarily long videos. At first, the lecture videos were longer than 15 minutes, which is reported to be the case for many teachers who tried flipped learning for the first time (Akçayır & Akçayır, 2018, 340). As emphasized in the related literature, students found the long lecture videos boring and they lost their attention in the related topic (e.g. Başal, 2015; Campbell, Planinz, Morris, & Truitt, 2019; Ekmekçi, 2017; Gilboy, Heinerichs & Pazzaglia, 2015; Turan & Göktaş, 2015), which was also expressed in the present study by the learners themselves in their journals and focus group interviews as in the following:

> "I think videos should be short and clear to understand with samples of conversation." [Anonymous learner journal]
>
> "When the videos are long, I have difficulty to watch them because of the low internet connection." [Anonymous learner journal]
>
> "When I had a look at your first videos on the LMS system, as they took time, I got bored, and I decided not to watch the videos in the very beginning. It was good that you shortened the videos. Now the lecture videos are clear and short, so I do not face any difficulty in watching them." [Learner C1]
>
> "Even if I did not know how to form sentences in the passive voice, the video on the passive voice was very short and clear that I learned it finally." [Learner S4]

On the issue of shortening the length of lecture videos, Correa (2015, p. 122) suggests keeping the duration of video lessons less than 15 minutes and avoiding monotony by using multimedia as well as asking students to take notes or answer short questions in a short online quiz, for instance, to keep learners active and engaged in lecture content. In addition, Campbell *et al.* (2019, p. 219) suggest optimizing video length by adding instructor notes in the forms of preview and/or highlights; breaking down the video into shorter parts to deliver key points piece by piece; and embedding meaningful questions in order to increase student engagement while watching lecture videos. Having collected learner journals at the end of units on learners' own experiences of the flipped class during the implementation, the researcher took into consideration the suggestions made by the learners who demanded shorter lecture videos that contain the core of the course content. Therefore, after conducting a meticulous search for interactive video sharing platforms, she switched to Edpuzzle platform to design more engaging and interactive lecture videos in shorter lengths.

Use of Edpuzzle in lecture videos.

In relation to the issue of the length of lecture videos, the researcher contemplated on creating interactive lecture videos, and she discovered Edpuzzle, where videos either curated from the video-sharing platforms, such as YouTube or Khan Academy or created by the teacher, can be tailored by teachers via embedding multiple-choice and open-ended questions,

trimming and voicing over lecture videos. While watching the lecture videos, learners answer the suddenly-appearing questions on Edpuzzle in the course of a video stream, and by this means, they interact with the content rather than passively watching the videos. Here the researcher observed that the learners found Edpuzzle more interesting and informative for watching the content of the lecture videos:

> "I really liked the Edpuzzle video on lab equipment; we had a chance to rewatch the video content if we did not understand it for the first time." [Learner R1]
>
> "When the learners are asked questions on video content, they want to learn more. Question and answer method is more informative. Even if a student does not know the answer, when they see the answer, they will remember it more." [Learner C3]
>
> "While watching the lecture videos on Edpuzzle, when you see that you could not answer the questions correctly, you feel the need to have a second look at the content." [Learner A4]
>
> "I liked Edpuzzle videos. There were questions during the video stream, which increased our attention." [Learner H2]
>
> "Edpuzzle videos are better because you give your attention as questions will suddenly appear, and you want to answer them correctly. That will be in your mind." [Anonymous learner journal]
>
> "Edpuzzle was useful to learn terminological words and made it easier for me to remember them later." [Anonymous learner journal]
>
> "To be honest I did not watch the very first videos because they made me bored, and I was tired to go on studying for a course outside the class. However, Edpuzzle videos with English subtitles were good. The content of the videos was more enjoyable." [Learner M3]

Similarly, in the related literature, Edpuzzle was found to be effective (e.g. Bakla, 2017; Campbell *et al.*, 2019; Zou & Xie, 2019), in that it makes it possible for learners to understand the key information of the videos whenever a question arises as a sign of an important point in the content, and thus, they get more motivated to learn, which leads to better learner autonomy while engaging in individual space activities.

The timing of the lecture videos release.

As is the case with the first attempts to transition to flipped learning, the timing of the video release has also been an issue for practitioners (e.g. Turan, 2015; Schwartz, Andridge, Sainani, Stangle & Neely, 2016). Therefore, the researcher searched for alternatives to help the learners who had difficulty to watch lecture videos before the class, which also affected the flow of the course. Then the timing of the release of the lecture videos appeared to be very crucial in this process, which was reflected in the researcher's field notes below:

> "I now see that releasing lecture videos in time means a lot in this strategy. It is

> because each student has different time schedules, and they need time to watch the videos and get prepared beforehand. As a teacher, I may also have shared all the lecture videos at the beginning of the term so that some fast-paced learners would not get bored, and they could have access to the lecture videos long before the schedule reached that content. It would also be useful to enable the learners to have a general view of the course syllabus." [The researcher's field notes, February the 21st, 2018]

Some learners also expressed that the timing of video release was crucial in their watching videos beforehand as seen in the following:

> "The videos were good. However, as you sent the videos for the last few days, we could not find a chance to watch them in our busy schedule." [Learner Y2]
>
> "If you could prepare the content at the beginning of the term after the courses finished every week you could release the videos, maybe we could watch the videos during the week." [Learner X4]
>
> "When you upload the lecture videos, we had better receive notifications, and the timing of the video release should be at a specific time on a specific day of the week." [Learner S3]

Turan (2015, p. 93) suggests releasing lecture videos at least one week before group space activities in order to enable them to schedule their time to engage in group space activities as much as possible. In that sense, it can be claimed that the earlier the better principle is at work when it comes to video release. Moreover, Schwartz *et al.* (2016, p. 83) argue that although both approaches have merits to advocate (i.e., "releasing the entire content at once versus releasing it module by module"), it is found out in their study that the gradual release of materials enables instructors to be more flexible to adapt their course content to the current class. Similar to Turan (2015), Schwartz *et al.* (2016, p. 83) recommend releasing current course materials prior to the face-to-face sessions of the following week course content so that with the flexibility they have, learners will be able to arrange their busy weekly schedule across other courses and responsibilities in order to engage in individual space activities before attending group space sessions.

In sum, it is concluded that at the tertiary level, when the lecture videos are kept shorter than 15 minutes; are released almost a week before face-to-face sessions; are delivered through customized video sharing platforms, such as Edpuzzle, where learners are engaged in lecture videos rather than passively watching them; and are shared on a user-friendly LMS platform like Edmodo, learners are more likely to participate in individual space learning activities.

Watching the lecture videos in group space.

In the course of time, the researcher observed that learners at the faculty of pharmacy needed their teacher's support more than expected to help them understand the lecture videos;

and that relatively a small majority of the class frequently kept watching the lecture videos while for others this was not the case due to time constraint for their intensive course schedule changing biweekly at the faculty at that time. Therefore, the researcher spared some class time for such learners to watch the videos in class before doing related exercises. Below are the researcher's observations on the issue:

> "As some learners do not watch lecture videos before the class, I have to let them watch the videos in class time, which interferes with the idea of delivering the content to the learners for the first time in individual space. On the other hand, for learners who did not come to class for a certain week, lecture videos have been beneficial to keep them connected to the flow of the course." [The researcher's field notes, February the 28th, 2018]

Similarly, the learners stated that watching lecture videos was more difficult and took more time for them to understand when compared to their watching them in assistance with their teacher in class. They liked to take notes and study for them with their peers:

> "It was more beneficial for me to watch the video in class because I could get a very quick answer from the teacher to my questions while watching the video." [Learner M1]
>
> "When we watched the video with you again in class today, we remembered the new words were more easily then. When we watch it alone at home, it takes more time, we cannot go deeper. Besides, even if the words belong to our area of study, we don't understand them in English. But with you helping us to understand the video, that course was very efficient for me." [Learner H3]
>
> "Rather than watching the videos before the class, we should watch them in class. It is good we can ask questions to you." [Learner Y3]
>
> "Watching videos in class increases the concentration of the students […] For example, even if you prepare a video in English but we watch it in class, it will definitely increase our attention. It is much better when we watch videos in class." [Learner X4]
>
> "This week learners watched the videos on Edpuzzle platform, but in class time not outside the class. It may be partly because this week was the mid-term examination week, and many learners did not come to the class to study for their exams, and those who came said they did not watch the videos as they studied for their exams. Therefore, I gave them time in class to watch the videos before continuing the activities. In addition, many students in the class have not made the habit of watching videos before class hours." [Researcher field notes, April, the 4th, 2018]

Even if there was a group of learners who kept watching lecture videos from the very beginning, in the course of time, partly because of some learners' low proficiency in English to understand lecture videos, and partly because of the limited time due to their biweekly changing schedule, some learners made the habit of coming to class unprepared, which resulted in their watching lecture videos in class, and this transformed the traditional flipped class into a partly in-class flip by itself. In the beginning, the researcher thought this process

was an unsuccessful attempt of a flipped class; however, as a part of the action research, the researcher searched for the alternatives of flipped class implementations. At the end of the term, the researcher had a clear idea in her mind that an alternative for such a student profile would be “in-class flip” as a response to the unique needs of the learning culture. In-class flip- a term coined by Jennifer González (2014)- is an alternative for teachers who have tried flipped learning but ended up with having their learners coming to class unprepared as well as for those whose school regulations require a no-homework policy. As clarified by Ramirez (2018, p. 94) in-class flip refers to learners having access to content delivery through one of the stations in class and apply what they have learnt within other application stations in class; that is to say, teachers bring individual space activities into the class by making use of a stations-set up. This station configuration is seen as a combination of flipped learning, as the content is delivered through lecture videos or other kinds of media, and station- rotation model, as learners rotate the stations where various kinds of activities are handled to complement content learning and/or skill mastering (Tucker, 2016). Ramirez (2017) categorizes in-class flip station work according to types of configuration of stations in class: simple sequenced, mixed sequenced, looped and half-and-half. In such cases, learners either follow a linear or a looped sequence, for instance, to do station works in class. While the students who have engaged in individual space learning before coming to class may skip the flip station(s) and continue with the practice stations in group space, those who need to cover content may again visit flip stations in the classroom. Depending on the course content, learning outcomes, or class size, the configuration may vary. In order to clarify how a typical in-class flipped classroom station work looks like, a simple sequenced in-class flip station work is demonstrated below in Figure 45 below.

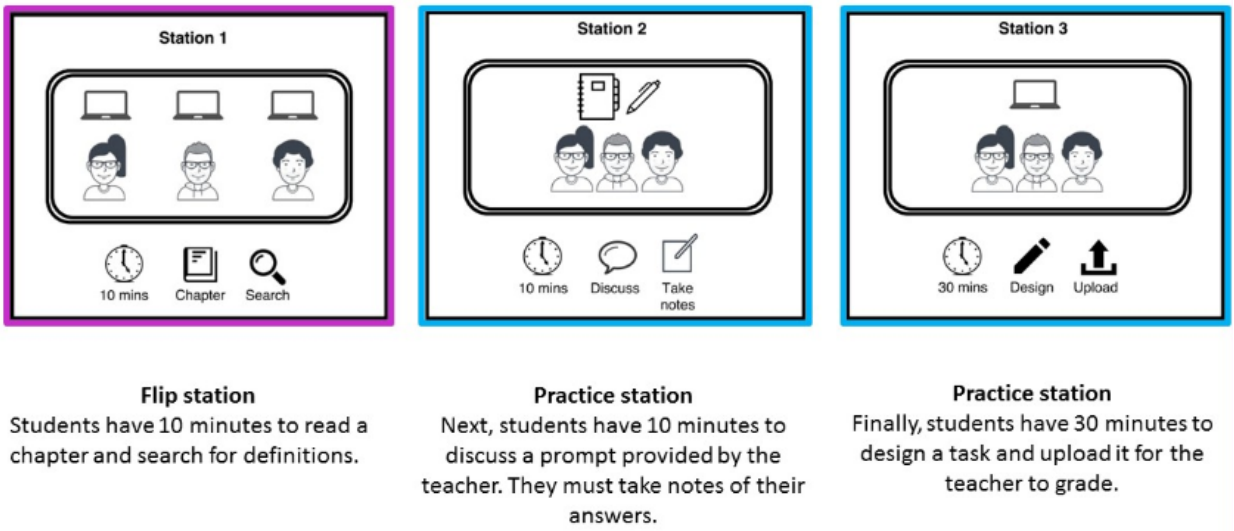

Figure 45. Simple sequenced stations example (Ramirez, 2017).

However, Ramirez (2018, p. 94) claims that in-class flip can also be handled without the station- rotation set up by organising activities to be done individually, in pairs or groups. As is the case with all learning strategies, in-class flip does not come without its challenges. First of all, teachers cannot plan a daily one-period lesson as necessary stations are needed for students who have not watched the lecture videos and for some who have. Gonzales (2016) recommends planning in bigger periods of time for learners to reach their weekly goals at their own paces. Secondly, contrary to the traditional flipped learning model, in-class flip brings in the direct instruction in class, which reduces the amount of classwork that is used to practise what has been learnt. However, Gonzales (2016) compares this with typical situations in the traditional flipped class model where learners do not come to class prepared beforehand, and where teachers struggle catching up those learners who did not see lecture videos with those who did, in such cases. Moreover, Ramirez (2018, p. 94) emphasizes the importance of preparing the station work with proper resources as well as designing the lecture videos, managing rotation of the station work and considering the logistics of the stations while designing lessons in the in-class flip model. Similar to the traditional flipped learning model, through in-class flip, teachers can concentrate their class time more on monitoring and assessing students' learning, clarifying content and giving feedback when necessary. Ramirez (2018, p. 94) also highlights that in-class flip enables learners who fall behind to catch up while allowing those who move fast to advance in their content knowledge and /or skill development as is the case with the well-known version of the flipped learning. On the other hand, she also points out that the advantages of the in-class flip outweigh the challenges. To illustrate, in this type of flip, learners are exposed to a great amount of language input as well as being asked for producing language output via thoughtfully designed station work handled in either individual or group activities. Similarly, as Gonzales (2016) points out, through in-class flipping, teachers are able to make sure whether the learners are exposed to initial lecture content as they watch the lecture videos in class settings. Likewise, teachers can respond to their students' immediate questions while learning lecture content for the first time. All in all, through in-class flipping, flexibility can be gained to address differentiation among students in terms of not only learner characteristics, such as language background or attention span, but learning culture as well, such as needing a knowledgeable person to support their learning, or resisting pre-class work, while implementing the flipped learning strategy. Therefore, in the revised version of the flipped EAPP syllabus, the researcher suggests practitioners who would like to try in-class flipping transform group space activities into stations so that learners rotate the stations where various kinds of activities are handled to complement content learning and/or skill mastering in

addition to the flip station where content is delivered through lecture videos or other kinds of media.

The presentation and the discussion of the findings on the group space learning of the flipped EAPP syllabus.

As mentioned earlier, the findings on the group space learning appeared in two main categories: 'Learner profile' and 'flipped learning environment', subcategories of which are shown in Figure 46 below, each of which will be discussed below respectively with references to the researcher's field notes, the participants' comments and the previous research in the related literature.

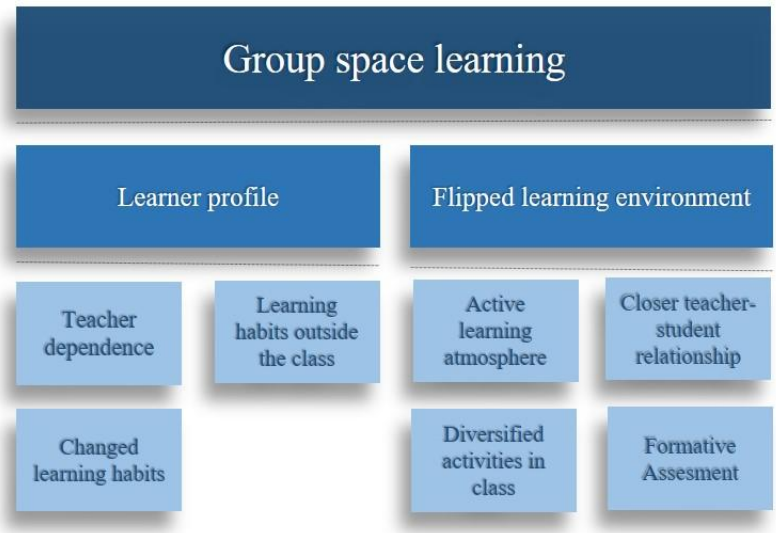

Figure 46. The categories and subcategories emerged from the theme 'group space learning'.

Issues related to the learner profile.

Having analysed the participants' responses and the researcher's field notes, the subcategories emerged from the category, 'learner profile' are shown below in Figure 47, which will be followed by the presentation and the discussion of the related findings.

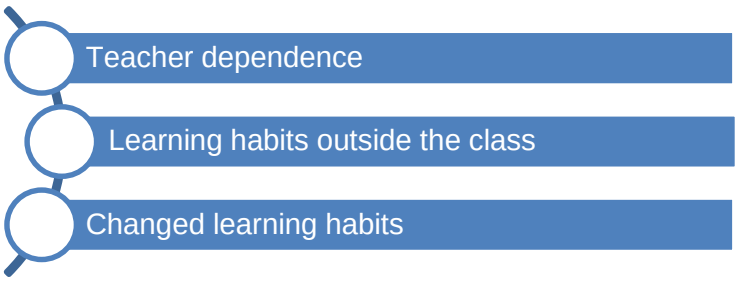

Figure 47. The subcategories emerged from the category 'learner profile'.

Teacher dependence.

As mentioned earlier, learners showed a tendency towards being delivered the course

content in class via teacher leading. Even if they loved the idea of lecture videos, it took time for them to get used to watching the lecture videos without teacher counselling before coming to class. It is observed that learners held a strong dependence on their teacher while learning a new content for the first time; in other words, they were used to traditional content delivery:

> "Even if you are in class, we may watch the content via a video, it takes more attention. Otherwise, when you deliver the content traditionally, it will not again attract attention. When you stop the video and ask questions to us, it becomes catchier." [Learner M4]
>
> "I don't like watching videos, I like the teacher telling me the content, and I like taking notes while listening to the teacher, and I study for my notes later. When a PC or smartphone is used in content delivery, I cannot concentrate. I should have the document of the lesson with me and the teacher in front of me teaching me to learn the content." [Learner X2]
>
> "We are used to a traditional system of learning for years; this also influences our performance in this model." [Learner E3]
>
> "No matter how much we want, the teacher cannot deal with each student; we are 40 students in this class, we have limited time. Won't you tell anything in class in addition to helping students individually?" [Learner S3]

The researcher also challenged herself on continuing being the guide on the side in her new flipped teaching environment rather than having the central role in content delivery as in the past:

> "Even if all the learners complained about the traditional system of instruction, they got used to that system so much that they went on their old learning habit; expecting whole class instruction and being led by the teacher. […] I now think that as we challenge ourselves to become a flipped teacher, we had better always remind ourselves that we are about to change our old habits as a teacher in traditional class as well […] by letting learners lead their own learning." [Researcher field notes, April the 25th, 2018]

Similarly, in the related literature, learners initially showed resistance to flipped learning model as they were not receptive to new ways of teaching, and thus, they viewed teacher-led instruction superior to lecture videos due to their past rigid learning habits, mainly their dependence on their teacher in content delivery (e.g. Ahmed & Asiksoy, 2018; Chen, Wang, Kinshuk & Chen, 2014; Doman & Webb, 2016; Elmaadaway, 2017; Long, Cummins & Waugh, 2017; Roehl, Reddy & Shannon, 2013; Sams & Bergmann, 2013; Webb, Doman & Pusey, 2014). In such situations, as mentioned earlier, in the related literature, it is suggested to help learners adopt active learner habits through self-directed learning strategies, such as giving immediate feedback on their submissions, and compliments upon their accomplishment, etc.; encouraging learners to make decisions on their learning by asking them to write what difficulties they faced during learning and what they suggest to overcome these via brainstorming; and gradually switching to flipped learning model with less amount

of pre-class work and less challenging in-class work (Bergmann and Sams, 2012; Chen *et al.*, 2014; Elmaadaway, 2017; Long, Cummins & Waugh, 2019; Mehring, 2018). It can be concluded that having gradually gained such active learner habits, basically having self-regulation in their learning, and slowly taking control of learning itself with gradually increasing workload, learners may acquire the necessary active learner skills more easily as they engage in the flipped learning environment.

Learning habits outside the class.

Due to the specific conditions of the study group (i.e. having biweekly changing schedule because of visiting scholars coming from other cities, and thus dealing with intensive workload increasing biweekly) learners had a lot of difficulties to engage in individual space activities before face-to-face time. It turned out to be difficult for them to arrange themselves to spare time for English before coming to class:

> "I think this model puts a lot of workload on students. It is okay that students should be active and the teacher should be the guide, but we have a lot of responsibilities related to our department." [Learner X2]
>
> "We stay up late during the week to catch up with our schedule. We do not want to study English. We have to study more in the flipped model as a student. Tasks in class are good for us, but you may turn that syllabus more flexible for our faculty as we are really busy." [Learner S1]
>
> "One day before your course, we had lab courses. When we went home or to the dorm, we felt exhausted. It was difficult to watch your videos." [Learner Y3]
>
> "I could watch videos on the LMS only when I was in the campus. As I am so busy with the biweekly quizzes of other courses, I cannot find time for watching videos." [Anonymous learner journal]
>
> "We have a very intensive program, especially this year, our program gets harder. Not because we do not want, but because of our problem with limited time left to us from our courses, we cannot watch the videos. We have to prepare presentations for almost all courses, we are expected to give weekly reports for lab courses, etc. We think that we should first pass the departmental courses, then I can deal with the English course. If the flipped class were in our first year at the faculty, or we could study in a preparatory class, this model could be more efficient." [Learner R4]

In addition to that, the researcher also observed a resistance to do pre-class work before attending group space activities:

> "Some learners do not want to come to the course by getting prepared beforehand as it took time for them to study outside the class. I observe a strong settled learning habit here." [The researcher's field notes, April the 18th, 2018]

Some of the participants also expressed their unwillingness to get prepared for the

course content before coming to class:

> "I didn't like doing anything outside the class." [Learner X4]
>
> "It is difficult to spend that much time for English before coming to class." [Anonymous learner journal]
>
> "This lesson […] was very different for me in better sense. Using videos was good- even if we had to watch them before the class, which I did not like at first." [Learner E1]
>
> "I think doing tasks in class is a good side of the course, as I do not have time for English outside the class because of my courses in the department." [Anonymous learner journal]

In the related literature, dealing with the increased pre-class workload is a challenging issue as it is totally different from the traditional roles of a passive learner. Therefore, learners can show some resistance to change due to established passive learning habits, and they may have some adoption problems (e.g. Ahmed & Asiksoy, 2018; Gasmi, 2016; Long, Logan & Waugh, 2016; Long, Cummins & Waugh, 2017; Mehring, 2015; McNally *et al.*, 2017; Nguyen, 2018; Sun, 2017; Zainuddin *et al.*, 2019). In such cases, Long, Cummins and Waugh (2019) suggest helping learners to form flipped learning habits by teaching them some self-directed learning strategies. For instance, Chen, Wang, Kinshuk and Chen (2014, p. 26) suggest giving rapid praises and instant feedback to learners' study efforts and/or after the completion of an assignment while they are at home may help them to develop such skills as they are felt that their efforts are appreciated. On the other hand, as mentioned earlier, in-class flipping is also an alternative for carrying flipped content into the class. Students may start with the flipped content station(s) if they have not watched lecture videos, or if they have, they may skip flipped station(s) and go on with practice stations to master their skill development and/or content learning. Providing such flexibility may serve for differentiation among learner profiles, which will hopefully ease learners' adaptation to the flipped learning environment.

Changed learning habits.

Despite the fact that the learners in the study were reluctant to engage in either individual space activities, or in group space activities that require more workload on behalf of the student, and thus, caused resistance to change their old learning habits, there was an increasing number of learners who mentioned a change in their learning habits in the flipped learning environment in the course of time:

> "I can say I am one of the students who learned a lot in this course this term. The course was very useful for me. I started to study personally for English." [Learner H1]

> "As the flipped method is based on individual learning, I can say I started to learn in class this time. I am glad that as learners we are active in class." [Anonymous learner journal]

Learners also expressed that coming to class getting prepared beforehand helped their learning the content better:

> "Because of the lecture videos, we came to class prepared beforehand." [Learner R3]
>
> "Rather than just listening to someone telling me the course content in class, I put effort to learn something about a topic, which was very efficient to really learn something." [Learner S4]

Learners also stated that the chance of listening to the course content whenever suitable for them was also an advantage during the term:

> "When I do not understand a part of the lecture video, I rewind the video stream, or when I get bored, I stop the stream and watch it later, so the content delivery becomes more efficient for me." [Anonymous learner journal]
>
> "I liked that I can listen to content whenever and wherever I want." [Anonymous learner journal]

Learners also remarked that the content delivery outside the class saved in-class time for doing tasks:

> "We save time for making a lot of exercises in class via listening to content delivery outside the class." [Anonymous learner journal]
>
> "I enjoyed that we do not have an English course in a teacher-dependent traditional format." [Anonymous learner journals]

The study results on learners' satisfaction with the flipped learning environment are in line with those in the related literature as well. As is the case with the students in the present study, learners were pleased with the outcomes of this new learning strategy, which are better preparation for the course (e.g. Başal, 2015; Boyraz & Ocak, 2017; Kocabatmaz, 2016; Turan, 2015); more time for practising contextual skills and content knowledge in group space (e.g. Adnan, 2017; Çalışkan, 2016; Çevikbaş & Argün, 2017; Filiz & Benzet, 2018; Gilboy, Heinerichs & Pazzaglia, 2015; Kocabatmaz, 2016; Nguyen, 2018; Turan, 2015; Webb & Doman, 2016); self-paced learning (e.g. Başal, 2015; Chen Hsieh, Wu & Marek, 2017; Çetin-Köroğlu & Çakır, 2017; Hung, 2015); and easier comprehension of the content (e.g. Choe & Seong, 2016; McKeown, 2016; Sun, 2017; Zainuddin, 2017; Boyraz & Ocak, 2017; Kocabatmaz, 2016). Even though it took time to develop active learner habits in the flipped learning environment, the learners in the current study emphasized a change in their learning culture as the time they spent in the flipped class increases.

Issues related to the flipped learning environment.

Having analysed the participants' responses and the researcher's field notes, the subcategories emerged from the category, 'flipped learning environment 'are shown below in Figure 48, which will be followed by the presentation and the discussion of the related findings.

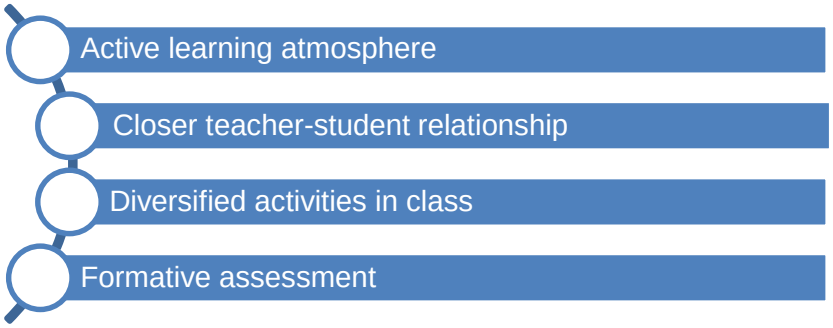

Figure 48. The subcategories emerged from the category 'flipped learning environment'.

Active- learning atmosphere.

Learners engaged in practising the flipped content and strove to master the occupational tasks in the group space. They were pleased with the active learning environment of the flipped class:

> "We have taken English courses from very young ages. We repeat the same topics, again and again, every year. I remember that we always take English courses beginning with English tenses. But this year, I liked English course a lot. I believe English is remembered easily when it is taught via practice. It depends on the learners' profile, but I liked what we did this term, the interactive mode is better." [Learner H3]
>
> "In a traditional class, we feel that the proficient students keep the course busy and let it go, we do not feel obliged to participate in class activities. But now, as we study individually, we feel the need to do it as our work in class will help us learn." [Learner Y4]
>
> "Last year, we just studied the book. But this year, with this flipped model, learning became more individual. I attended your course more this year." [Learner A4]
>
> "Having the lesson in the computer lab motivated the learners, as they saw that the actual application; that is, the task itself was done in class time." [When they were asked to prepare pamphlets on an illness of a specific body system] [Researcher field notes, March the 4th, 2018]

Learners stated that by dealing with the pharmaceutical tasks actively in class time, they acquired the necessary knowledge and ability to perform certain tasks in their field:

> "We spent hours to finish the tasks in class. I think we remember some words from these tasks now. Dealing with the tasks in class led us to attend courses more." [Learner C4]

> "This term I improved my English. The knowledge of vocabulary, self-confidence in doing something in English, and learning some terminology about diseases contributed to my knowledge in English. Last year the course was not efficient for me. The interactive tasks taught me a lot." [Learner P4]
>
> "The occupational English course this year is a lot more fun than previous years as you do not lecture traditionally." [Anonymous learner journal]
>
> "I think instead of a coursebook-based English course, this flipped method that is based on practising language skills in pharmaceutical content helps us remember what we learn more easily, which also makes it more enjoyable and catchier". [Learner M2]

Additionally, the majority of the learners stated that they enjoyed and benefitted from the flexible environment of the class:

> "The tasks we did in class were fun to do. I really enjoyed the lesson, and that is why I say it was one of the best courses I had ever had. I didn't get bored." [Learner Y3]
>
> "The class atmosphere was not tiring, that was good for us. The format was enjoyable and different from the traditional style. As we see you try to change the traditional format, we wanted to help your aim by doing tasks in class." [Learner Y2]
>
> "The flexible class environment, in which learners work in groups and are free to ask questions one another when they have questions, makes them relax and feel free from stress. That atmosphere is good to stimulate their learning." [Researcher field notes, April the 25th, 2018]

The results on the active learning environment of flipped learning strategy are in line with those in the related literature as well. To begin with, flipped learning has been found to allow efficient use of class time, which leads to active learning (e.g. Bishop & Verleger, 2013; Chen Hsieh, Wu & Marek, 2017; Correa, 2015; Çevikbaş & Argün, 2017; Elmaadaway, 2017; Fulton, 2012; Karagöl & Esen, 2019**;** Lo & Hwang, 2018; McNally *et al.*, 2017). Second, since flipped content is delivered outside the class, more time is dedicated to active learning tasks; and thus, the active learners in a flipped class get engaged in deep learning of the subject matter, as is the case with the current study (e.g. Ahmad, 2016; Gasmi, 2016; Karagöl & Esen, 2019; Roehl, Reddy & Shannon, 2013; Wagner-Loera, 2018; Wang, 2017). This promotes learners' academic achievement and skill development as well (e.g. Abaeian & Samadi, 2016; Zainuddin, Haruna, Li, Zhang & Chu, 2019). Finally, the advantages of the flexible learning environment of a flipped class have also been mentioned in the previous studies. The flexible atmosphere in the flipped learning environment, as defined by Flipped Learning Network (2014), creates learning spaces where learners are free to choose whenever and wherever they prefer to learn, and where instructors switch physical arrangement to adapt to tasks handled as either individual or group work in class sessions, thus, making a variety of

learning modes possible in class sessions. This flexibility facilitates learning because learners use the opportunity to rewatch lecture videos and review activities in class as many times as they need in order to fully understand the content (e.g. Çalışkan, 2016; Ekmekçi, 2017; Doman & Webb, 2016; Hung, 2017a; Kang, 2015; Wagner-Loera, 2018).

Closer teacher-student relationship

Learners stated that they were pleased with their teacher's utilizing class time to help them individually while they were doing the tasks. Especially, when there is a huge gap between high and low achiever students in the class, this differentiated learning made it possible to meet the needs of different learner profiles:

> "When we do a task in class, I can have a chance to ask you how to do it in class rather than doing on my own. If you were not there to help me, I would just search for google translate and copy the sentences down." [Learner X3]
>
> "For me, the biggest advantage of this model is that I could find the chance to study with you in class. I needed help to form sentences." [Learner R1]
>
> "I could remember when you told me where to use a specific word in a sentence. In a traditional class, we don't have such a chance to ask you that many questions. For me, the advantageous part of the flipped class was translating and having close interaction with the teacher." [Learner Y1]
>
> "In a traditional class, teachers instruct and then go away without checking students' learning. While doing these tasks in class, you can have a closer relationship with us, when I have a very complicated sentence to form in English, you can help me simplify it. That motivated me that I could translate texts in English." [Learner C1]

The researcher also felt satisfied with helping her learners on an individual basis in the flipped class:

> "When students have questions to ask me, they can immediately take my support. As they see I help them on an individual basis, they become more willing to attend the class activities. The teacher is there when needed for practising the content and crosschecking understandings, etc. Learning is facilitated in this way." [The researcher's field notes, March the 21st, 2018]

The issue of differentiation in the flipped learning environment has been mentioned in the previous studies as well (e.g. Correa, 2015; Cunningham, 2016; Filiz & Benzet, 2018; Gilboy *et al.*, 2015; Mehring, 2018). Bergmann and Sams (2012, p. 23) emphasize reaching out especially the struggling students in order to assess their learning of the key concepts of course content. On the other hand, for students who grasp the content quickly, Bergmann and Sams (2012, p. 28) suggest engaging such students in more advanced topics in less number of activities. All in all, using the face-to-face time to walk around the room to support students along a wide range of abilities help teachers personalize the learning for all, which enables learners to receive immediate feedback that reinforces their learning (e.g. Amiryousefi, 2017;

Choe & Seong, 2016; Lee & Wallace, 2018, Zainuddin, 2017). Additionally, due to the extra time obtained by removing content delivery from in class sessions, instructors connect personally with their students; and thus, they gain insight into their students' learning (e. g. Correa, 2015; Filiz & Benzet, 2018; Lo & Hwang, 2018; Marks, 2015). As Bergmann and Sams (2012, p. 25) emphasize, those mini conversations held with individuals or particular groups, who have difficulty in the same content, result in just-in-time instruction when learners feel exactly ready to learn. As a result, students learn better because teachers know their students better and build better relationships with them, as expressed in one of the journal entries of the researcher:

> "Flipped learning makes learning personalized; that is, the teacher can direct each group of learners to answer to their needs, as some are faster while some are slower to do a task, and the support they may ask for may be either on sentence building or on vocabulary. As a teacher, I feel pleased to be able to help and support different types of learners who need different kinds of support." [The researcher's field notes, May the 2nd, 2018]

Diversified activities in class.

In the flipped learning environment, the key point in designing learning spaces is to bound flipped content to the group space activities in a way that enables learners to practice what they have learned in lecture videos in face-to-face sessions. Therefore, the practitioners of flipped learning should bear this in mind while designing their group space activities. The researcher also observed this in her courses:

> "The group space activities are very effective to understand the course content. No matter how effectively a teacher may prepare a lecture video, when the group space activities are not reinforcing and efficient for practising the content, learning will not occur as desired. […] the group space activities should be designed accordingly so that the students could practice what they have learned by using their content knowledge in English. [The researcher's field notes, March the 7th, 2018]

At the beginning of the term, for the first unit, the major focus was on generating a pamphlet for common diseases by firstly reading a sample pamphlet, and then, searching for common diseases, etc. The learners were engaged in writing a pamphlet in class time while receiving feedback and support from their teacher. As the task of writing a pamphlet itself took up time, learners expressed that group space activities had better be diversified rather than studying on the specific task of that unit:

> "It could be better if we could do the tasks together in class, then that would be more appealing. Dealing with only the tasks becomes a burden, my attention gets lost in the class atmosphere." [Learner R1]
>
> "It is okay that we deal with tasks in class; however, I get bored when we deal

with the same task all through the three hours of a week." [Learner A1]

Having considered the learners' feedback, the teacher modified her activities to be as varied as possible for the following units, including online quiz games and more group works in class, for instance:

> "The varied types of activities call learners' attention and are more informative. They also free the lesson from being boring and answer to different learners' needs who have different learning speeds. […] The activities in class should go from pair or group work to individual or whole class work. Such a variety may be appealing to almost every student's learning style. [The researcher's field notes, March the 21st, 2018]
>
> "I loved it when we have online quiz games on content and/or target vocabulary in addition to some translation works and in-class practices of some pharmacy-related dialogues." [Anonymous learner journal]
>
> "It is great and makes it easy for us to do tasks that we have moved to the computer lab for about two weeks now for the occupational English course so that we can prepare our pamphlets there on computers and finish the tasks in class settings." [Anonymous learner journal]

Additionally, diversifying activity types, even by adding some independent activities for fast finishers, contributes to the differentiation principle of flipped learning strategy, as observed by the researcher as well:

> "The students who finished the task before others asked for what to do next then. I heard one of the students told her partner to start recording in class as they have finished writing the dialogues earlier than the majority of the class. Again, I see that the teacher should present alternative activities to meet the individual speeds of learners. Group space activities have a great impact on learning processes in that the time in class may be well used to practice new learning material and produce original works using that new learning material." [The researcher's field notes, April the 25th, 2018]

The group space activities in flipped learning are aimed at learners' using higher-order cognitive skills, which are application, analysis, synthesis and evaluation in class sessions, either at the individual level or in collaborative works at the group level. The researcher observed that collaborative works in class serve for these purposes in the flipped class:

> "Learners help each other do the tasks in class, using the content and the related language points and consult teacher when necessary. The teacher's role in the class should be guiding not interrupting or taking all the responsibility of content delivery. Learners study together to figure out the content. I see that before they ask me a question, other students in the group try to answer that question. When they could not give the right answer I may interrupt, guide and answer." [The researcher's field notes, March the 21st, 2018]

Learners also stated that they enjoyed engaging in group works in class, which in turn contributed to their learning through peer learning:

> "I do not get bored doing a task when I am together with people whom I feel

> comfortable with. I do not think about what others may think when I speak [she means when she makes a mistake]. You do not want to talk in the class when there are some other people you are not comfortable with." [Learner M1]
>
> "Group work was good. My friend may teach me something I do not know when we study together." [Learner X1]
>
> "Kerem and his friends were asking questions to one another while practising the passive form on the exercise sheet. That helped them learn from each other in groups. The learners may give feedback to one another, give interesting ideas, discuss something, and evaluate other's work, etc. while studying in groups. When designing the activities, the teacher should take those possibilities of peer learning into account and design in-class activities accordingly. [The researcher's field notes, February the 21st, 2018]

Peer interaction has also been found to reinforce learning in a flipped learning environment in the related literature (e.g. Bergmann & Sams, 2012; Filiz& Benzet, 2018; Fulton, 2012; Lo & Hwang, 2018; Schwarzenberg *et al.*, 2017; Strayer, 2012; Wang, 2017). As well as in collaborative activities in group space, such as group discussion, collaborative reading and/or writing tasks, etc., Wang (2017, p. 89) suggests peer interaction can also be achieved via technology-supported collaborative activities, such as online discussions through forum or chat, and asynchronously handled collaborative writing tasks through LMS systems. In addition to facilitating content mastery, learners improve teamwork and leadership skills, and they receive social support from their peers as well, all of which provide benefit among peers in the learning process in group work (DeLozier & Rhodes, 2016, p. 148).

At the end of in-class sessions, as the pharmaceutical content was delivered in English, learners in the study expressed a need for feedback for their understanding of the content. Additionally, in the introductory course of a new topic, the researcher also felt the need to check learners' comprehension of this new content. In the search for alternatives to confirm learners' grasping the new content in English, the researcher found "Kahoot!" as a valuable tool to assess learners' comprehension and application of the concepts they learned in the flipped class. Learners enjoyed Kahoot! exercises in class so much that they asked for a Kahoot! quiz at the beginning and end of almost every class session. Kahoot! is a very effective tool, especially to practice new content vocabulary and grammatical points in related contexts:

> "Kahoot! was really good. It was motivating as there was competition in the class. I remember the lab equipment we studied on Kahoot!. They will become familiar to us when we hear them for the second time in the future. The quiz was long but beneficial. Some of the questions also appeared in the exam, even if we did not study much, we could remember them in the exam." [Learner E2]
>
> "Kahoot! was wonderful. I watched the lab equipment on a lecture video, but I didn't remember them much later when we tried to answer questions on Kahoot! quiz, we saw the incorrect answers and the correct ones, which was

very beneficial for me. I remembered them more easily later on. I learned those words there thanks to Kahoot!." [Learner E4]

"Having a Kahoot! quiz after videos stimulated our interest in lecture videos more. I learned the terminological words we frequently use in our profession." [Learner S2]

Learners stated that Kahoot! converted classroom atmosphere into a livelier one by inviting everyone to join in the activity in the class, which indirectly led to the active participation of the learners:

"Kahoot! was good. Everyone gets involved in the class activity. […] We pay more attention and we learn. It is enjoyable and we feel the need to do the quiz because of the rivalry among us to score best on the quiz." [Learner S4]

"I really liked Kahoot!, it was both enjoyable and inviting everyone in the class to participate in the activities. It was also informative and beneficial." [Learner P1]

"I think when the learning material is enjoyable, we learn it easily and as we feel comfortable while enjoying ourselves, the things stay in our minds longer. Kahoot! was good in that sense." [Learner H2]

"The class atmosphere changed just as the Kahoot! screen reflected on the wall. Learners got excited and curious about what they were going to see. As the quiz continued, learners competed against each other. After each question was answered, we talked about the reason behind choosing the right answer. Learners were glad to do something together and to compete with each other. I observe when the fun element is integrated with the learning atmosphere, learning is stimulated a lot." [The researcher's field notes, March the 28th, 2018]

The student response systems (SRS), in other words, clickers, have been found efficient to activate class atmosphere in the literature, noting its benefits on learning, such as providing instant feedback, increasing learners' engagement in class, and promoting retention (e.g. Chien, Chang, & Chang, 2016; Hunsu, Adesope, & Bayly, 2016). As for Kahoot!, a cloud-based SRS application which can be freely accessed by any device with a web browser, it has been widely preferred in flipped classrooms to date due to its reported positive aspects to the learning environment, namely, stimulating learning, promoting participation, motivation and enthusiasm, creating a rivalry environment in class due to its game-like features, and supporting retention (e.g. Douligeris, Seralidou & Gkotsiopoulos, 2018; Hung, 2017c; Pinna, Mena & Funes, 2017; Wang & Qi, 2018). Such elements contribute to in-class dynamics of a flipped class, and Kahoot! may be used in many alternative ways in flipped language courses, such as checking for any misunderstandings and mislearning of the content in individual space; assessing learners' content knowledge in ESP dimension; vocabulary and grammar knowledge in EGP dimension at the end of the class; and checking learners' listening comprehension by exposing them to authentic listening texts in language courses.

All in all, Kahoot! may be very useful to check, practice, and even expose new content and language input in flipped language classrooms.

Formative Assessment.

As the syllabus under study was based on handling occupational tasks on particular pharmaceutical topics, the assessment was handled accordingly; that is, the task performances were taken into consideration in the passing grade. The main idea behind this decision was to focus on students' learning of the pharmaceutical content and occupational skills in English while they were engaged in specific tasks in class. In addition, the researcher could give individual or group feedback and assistance to her students in mini-talks she had with them while they were engaged in these occupational tasks; when she had Kahoot! quizzes in group space; and when the students submitted their works to her.

The passing grade for the occupational English course had to be delivered in two separate course grades: mid-term and final examination grades, as required by the university regulations. Therefore, the researcher determined the assessment criteria as having %25 weigh of a pen-and-paper test on EAPP vocabulary, and %75 weigh of totally 3 tasks submitted for each examination grade. When the learners were asked about their opinions on the assessment, their responses varied depending on their profiles: while for some learners, the assessment procedure was motivating to study harder in class as the learners knew their efforts in class would be taken into consideration; for some learners, performance-based assessment created anxiety as they thought they could not do well in tasks as much as they did in exams.

To begin with, the issue of tasks' having a higher portion in passing grade motivated some learners to attend in-class activities more voluntarily as they knew their performances in handling occupational tasks are given more importance. Some learners expressed that they even tended to attend the group space activities with the motivation to get some marks from the tasks they submitted as they believed they could not do well in exams:

> "Since I felt the obligation to do the tasks that had more weigh in assessment, I studied hard on them. I thought if I didn't do well in tasks, I could not pass the course because I could not do anything in exams. I learned while I am engaged in doing tasks." [Learner P2]
>
> "I think I must have learnt at least a word this year because I studied individually in class time because the tasks were marked to be added to the passing grade." [Learner E1]
>
> "This term you didn't give much importance to grades, and that made students feel relaxed. You showed us that exams are not that much important, but the tasks in class are important. You told us that it is important that you learn new

words and translate texts. You showed learning is more important. When the course is grade-oriented, we do not want to learn. We focus on passing exams. After passing the course, we give up studying for that topic. We don't study to learn, but to pass the course in such cases." [Learner X3]

"I am glad that what we perform in class will be reflected in our grades. When I study for a pen-and-paper test, learning is not permanent." [Learner C3]

"Even if we were not much volunteered to do tasks, we learned something without noticing while doing the tasks. The students should not be stressed, thinking whether or not they will pass the course. Your method was different from the traditional one in that sense, we did not feel stressed to pass the course. So, we started to feel we should learn something." [Learner P4]

"I really like that tasks in class outweigh the percentage of the final grade when compared to pen-and-paper tests because studying for a pen-and-paper test does not help remember the things we learn, we learn by doing tasks." [Learner R2]

On the other hand, some learners also suggested that the assessment criteria should have been the reverse; that is, they stated that tasks done in the class should have the least portion in the final grade; instead, pen-and-paper tests should be dominant because having their task performances being assessed causes anxiety for them:

"The assessment causes anxiety among us as the tasks we did in class decreases the passing grade." [Learner C4]

"I feel anxious when the tasks cover a higher portion in the final grade." [Anonymous learner journal]

"The portion of the tasks should be lower in the passing grade; those who cannot do well in exams should not get a higher grade from the tasks. We had better have a classical pen-and-paper test marked out of 100." [Anonymous learner journal]

"Doing tasks makes me tired, we should have a pen-and-paper test and the tasks should be added as extra marks to the passing grade." [Anonymous learner journal]

As seen in the responses above, the researcher observed a high rate of test anxiety among the study group as this particular group of learners were exposed to a great number of examinations biweekly in other courses, and their performances were assessed in the relative grading system held in their university, which created a competitive atmosphere among peers:

"Learners are too anxious about assessment. Some learners who are good at pen-and-paper tests and are not much good at doing tasks in class demanded the portion of exams should be higher in assessment when compared to that of tasks, claiming that the teacher may give lower marks to their works as they think marking performances may be subjective when compared to those in pen-and-paper tests." [The researcher's field notes, April the 25th, 2018]

"The third year of the pharmacy program [the year of study for the current study group] was very intensive. It is because due to the lack of faculty members for certain departmental courses, the lecturers were coming from other cities so that they could lecture every two weeks, which pushed students

> for a time. During the term, students kept telling me their anxiety about grades." [The researcher's field notes, May the 2nd, 2018]

As mentioned above, the learners were so anxious about passing the course that they asked for taking pop-quizzes during the term in addition to being assessed by their tasks in the class. Majority of the class stated that only then they got motivated to study:

> "I can only learn English through quizzes. We are nervous about our exam results." [Anonymous learner journal]
>
> "When students have to pass quizzes, they start studying. You had better hold a quiz every week. So, we remember the course content later. Without any contribution to the final exam, you may hold quizzes. The quizzes may be about the content of the last lesson." [Learner P3]
>
> "Rather than doing tasks in class, quizzes may be handled in class and you may tell us that such questions may appear in the exam. So, this time, we study them. This teaches us more than doing tasks in class." [Learner R4]

It is clear that high test anxiety underlies such a point of view. Students in the present study kept telling about what motivated them to study for English was taking high grades, and depending on their learner profile, they demanded the assessment criteria to be handled to serve for this purpose. In fact, under such demands lies the conventional perception of success, which focuses on scores and results rather than the learning process itself. As the researcher gives importance to the whole learning process, she believes in using assessment for learning, rather than of learning, thus, she emphasized the importance of performing certain occupational skills in pharmacy domain by putting weigh on task performances in the overall assessment.

As the assessment of learner performances relied on the tasks they completed in class, the feedback on their assignments was as important as the task itself. The stronger side of the flipped method is that it enables the teacher to give immediate feedback to each individual formatively during the term, which may not be that efficient and possible in the summative form of assessment when learners' performances and/or homework are assessed at the end of the term. When learners receive immediate feedback on their performances, they learn while doing the tasks. By this means, the assessment becomes a part of the learning process:

> "The teacher helps motivated but underachieving learners a lot in this method. When I contact them and give individual answers to their questions while doing something in English and when I give immediate feedback to their work on-site, this stimulates their willingness to participate in tasks in English. In flipped instruction, the in-class time is managed to a great extent to meet learners' situational and personal needs." [Researcher field notes, April, the 18th, 2018]

As Graney (2018, p. 60) states, the formative assessment in flipped classrooms also differs since more in-class time is available for active learning activities and giving feedback

to students. In a flipped classroom, student progress is evaluated constantly in the group learning space, which is the reverse in a traditional class where the teacher makes use of tests to determine where learners are at the time of assessment. In a flipped class, however, the formative assessment shows the teacher how well learners are doing on their way to learn as the assessment is ongoing; that is, the evaluation does not focus on a result, but on the process itself. As is the case with the findings of the present study, formative assessment in flipped learning environment has been found to enable teachers to perform scaffolding, individualization, and differentiation in various ways, including mini-talks between students and teachers, pop quizzes held during the term, and using online tools or applications on smartphones. In these assessments, teachers adjust their teaching and learning material to help unique needs of their students as well as giving them individual feedback and assistance, which makes it characteristic in flipped learning environments to hold assessment "for learning", rather than for evaluating achievement (e.g. Graney, 2018; Khalil & Fahim, 2016; Onodipe & Ayadi, 2020; Zhang, Chen, Ge, Hung & Mei, 2019).

After the implementation of the EAPP syllabus in flipped learning strategy, in order to serve for 'assessment for learning' principle, the researcher decided that portfolio, which was described by Hamp-Lyons and Condon (2000, as cited in Khalil and Fahim, 2016) as a collection of students' works and a reflection on their performance, may be suitable for evaluating learners' performances. Similarly, when asked about their opinions on assessment in focus-group interviews, some learners also commented in favour of portfolio assessment:

> "I think you should take into account personal improvement when you assess learners' works. It means more workload as you have to follow every student." [Learner S2]
>
> "Teacher, we could have a portfolio, we should do the tasks in class and add the written or recorded products of these tasks to the portfolio in the end. We may have two tasks to be graded, but the other tasks should not be graded but put into a portfolio, and they should have a lower portion of the final grade. It is also possible to deliver the final version of the tasks at the end of the term rather than submitting in specific short periods. Then you may ask for our portfolios." [Learner E2]
>
> "It could be better if learners keep a portfolio and submit it at the end of the term as the official paper to be graded for mid-term and final grades. However, I should give feedback to the students at the end of every task. When a student's work is assessed for the first time and they are given feedback- not being graded, the student should take it back and submit the final version of their work in their portfolios, which will be graded at the end of the term." [Researcher field notes, May, the 9th, 2018]

As for feedback on portfolio assessment in a flipped class, feedback is given individually with specific attention to each student's learning. As Khalil and Fahim (2016, p.11) suggest, within the constructivist view to education, in a flipped classroom, portfolio

assessment guides learners to reflect on their performance and to decide what to do next to improve their language proficiency. Moreover, by benefitting from today's digital educational tools to overcome the challenges of paper-based portfolio storage (Meyer & Latham, 2008), it is also possible to handle portfolios in digital platforms; namely, a web portfolio or a webfolio, which can be defined as an online version of a paper portfolio including a collection of student works based on digital tools and demonstrating students' learning experiences and improvements by a specific time (Zakareya & Al-Qahtani, 2020). In the literature, it has been suggested that use of webfolios may offer many advantages over paper-based ones, including being more environmentally friendly, being viewed by multiple users synchronously and enhancing personalization, and creativity (Nicholson, 2018), portability and transportation (Simatele, 2015), low cost (Lynch & Purnawarman, 2004), organized content, especially for helping teachers managing instruction (Sherman, 2006), and fostering students' self-directed learning habits (Zakareya & Al-Qahtani, 2020). In a flipped class, webfolios will surely support the individualized assessment for learning due to its flexibility and abovementioned features that comply with the flipped learning environment. It is the teachers' responsibility to maximize the efficiency of webfolios use by providing personal feedback to meet students' learning needs and encouraging reflection to help them become self-directed learners in a flipped class.

In sum, it is observed in the present action research that not only the dimensions of flipped learning strategy played role in the dynamics of the learning environment under study but the learner profile also affected the implementation process. Therefore, it can be concluded that present results related to the individual and group space activities may have occurred due to the characteristics of the particular group of learners as well; however, the syllabus to be suggested is hoped to meet the need of learners who need English for pharmaceutical purposes and who experience flipped learning for the first time. Having analysed the contextual, linguistic and methodological dimensions of the flipped EAPP syllabus, in the following section, the revised version of flipped EAPP syllabus will be presented, relying on the data gained from the present action research.

A Suggestion of a Flipped EAPP Syllabus for EFL Learners in Higher Education Setting

Having evaluated the learning outcomes of the flipped EAPP syllabus from the aspects of the pharmaceutical and language content, and the flipped learning strategy through the lenses of learners, lecturers of English, faculty members and the researcher herself as the practitioner of the flipped EAPP syllabus, it can be stated that the present action research has reached its goal to design a flipped EAPP syllabus for students at the faculty of pharmacy,

where the researcher challenged her own practices as a teacher and made a difference in her teaching environment via reflective thinking. In the following paragraphs, the revised version of the units to be handled in flipped learning strategy will be introduced in modules that are planned to be delivered in a thirteen-week long period since the present action research aimed at a one-semester-long duration. As is the case with the present study environment, the semester in the researcher's teaching environment takes 15 weeks, and as stated previously, excluding two weeks from the total 15-week-long period due to the introductory week and mid-term exam week in the researcher's institution, the duration of the revised syllabus was decided to take 13 weeks. However, practitioners may expand the duration of the syllabus to one academic year by adding more learning outcomes suggested by the participants or emerged from the needs analysis phase the researcher conducted at the beginning of the action research, which was presented previously in this chapter. As for the revised flipped EAPP syllabus, the revised learning outcomes can be found in Appendix 9. Additionally, practitioners may also adopt the syllabus in an in-class flipping environment, simply by designing stations for each activity, including a flip station where learners can watch lecture video(s) if they have not before class time, and asking learners to work on these stations to complete weekly tasks.

As mentioned earlier, in order to help learners form flipped learning habits, a gradual transformation from being passive to active learner profile should be taken into consideration (Mehring, 2018, p. 4). To deal with the issue of learners' adoption to flipped learning habits, Long, Cummins and Waugh, (2019) suggest teaching them some self-directed learning strategies. Therefore, before starting to teach the flipped EAPP syllabus, an introductory week to engage in a flipped environment is suggested in the revised version of the syllabus as seen in Table 15 below:

Table 15. *The Brand-New First Module, 'The Introduction'*

The Introduction
The Related Learning Outcome
LO1: Learners will be able to form flipped learning habits via some self-directed learning strategies. 1.1. Learners will be able to enter the LMS platform by gaining a learner account. 1.2. Learners will be able to interact with lecture videos by taking notes on graphic organizers. 1.3. Learners will be able to send questions to their teacher online. 1.4. Learners will be able to attend the online forum on the LMS platform. 1.5. (Optional) Learners will be able to work in different activity stations in class. (In case in-class flipping is preferred.)
Source
• An instructional video on how a flipped class looks like. • Guidelines for how to be a flipped learner that demonstrates learners how to engage in learning materials in individual space and activities in group space.

Table 15. (*continued*)

Tasks
• Entering the LMS platform by gaining a learner account. • Taking notes on graphic organizers while watching a lecture video. • Sending questions to their teacher online. • Attending the online forum on the LMS platform. • (Optional) Working in different activity stations in class. (In case in-class flipping is preferred.) • Having a short proficiency test of English on 'Socrative' platform to determine the approximate English level of learners for the teacher to adapt their materials for the language needs of the particular group of learners. • Having a Kahoot! quiz on the learning outcomes of the introductory week that can be used as an exit ticket.

As given above, the self-directed learning strategies may be introduced to the learners at the very first week of the semester. The activities are suggested to demonstrate learners' responsibilities in a flipped learning environment. Obviously, only one week will not be sufficient to form active learning habits at once, as is the case with the present study, and learners may show slow transition to their new habit even in a month or a term. However, the first week will be the foundation and in the following weeks, it is the teachers' responsibility to reinforce learners' active participation in individual and group space activities in the flipped learning environment. As learners rehearse the activities they are expected to perform in the classroom with their teacher demonstrating them in the introductory week, then it will probably help them acquire the new learning habits, such as using online tools on the LMS platform to engage in interacting with the lecture videos, gaining note-taking skills, sending questions to their teacher, or attending online forums, etc. more easily. In case in-class flipping is preferred in the flipped learning environment, learners, with their teacher's demonstration, may even do a rehearsal of working on different stations in group space by handling a series of mini activities in the stations. Moreover, in order to avoid any misunderstanding, a Kahoot! quiz may be managed or a question and answer session may be realized to check whether learners comprehend their responsibilities in the flipped learning environment. On this issue, Chen, Wang, Kinshuk and Chen (2014, p. 26) propose giving immediate praises and instant feedback to learners' study efforts and/or after the completion of an assignment while they are at home may help them develop such skills by giving a clear message that their efforts are appreciated. To do so, the pre-class assignments or activities in class have to be less in the level of difficulty or number for the first time, and then the number and level of difficulty may be increased slowly, considering learners' progress.

Finally, the syllabus was designed to appeal to the learners at the pre-intermediate level of proficiency in English. However, for each specific group of learners, the language

input should be adopted accordingly. Thus, the practitioners should determine the proficiency level of their students in the very first week so that they could adjust the language level of the activities in the syllabus accordingly. Similarly, learners may also be asked for their learning demands to be placed in the syllabus. Relying on this, the researcher suggests creating an archive of lecture videos on English grammar, pronunciation tips, or instructions on sentence making, depending on the learners' needs and demands in addition to the lecture videos related to pharmaceutical content. Additionally, in an in-class flip version, teachers may design stations for each activity in group space, including a flip station where learners can watch lecture video(s) if they have not before class time, and ask learners to work on these stations to complete weekly tasks.

Taking into consideration the participants' feedback on the flipped EAPP syllabus, as mentioned earlier, the first unit was transformed into a module composed of twelve units on common patient complaints related to the twelve body systems. By changing the broad medical approach to anatomy, a narrow pharmacological approach was adopted as suggested by the participants. As seen below, the vocabulary of the most common medical conditions related to 12 body systems and complaints that a pharmacist generally encounters in a pharmacy store are given in sample patient-pharmacist dialogue transcripts in addition to practising listening comprehension. To organize such content, Miriam Diaz- Gilbert's 'English for Pharmacy Writing and Oral Communication', by the Point Publishing is suggested to be used after making certain modifications, such as adjusting the tasks suitable for the EFL context and the intensity of the vocabulary to the target level of certain groups of learners. As well as the change in its scope, its name was also changed from 'Anatomy' to 'Common Patient Complaints'. Additionally, its duration was extended from 4 weeks to 6 weeks because the researcher suggests studying common medical conditions and patient complaints related to two body systems each week, which makes up 6 weeks to cover the content relevant to 12 body systems (see Table 10). The adaptation of the learning outcomes, individual and group space activities are demonstrated in Table 16 below.

Table 16. *The Revised Version of the First Unit, 'Common Patient Complaints'*

1st Module: Common Patient Complaints
The Related Learning Outcome LO2: Learners will be able to differentiate between the English equivalents of the most common medical conditions and patient complaints related to 12 body systems that a pharmacist generally encounters in a pharmacy store. 2.1. Learners will be able to identify the English equivalents of the most common medical conditions and patient complaints related to 12 body systems. 2.2. Learners will be able to interpret the patient-pharmacist dialogues around the most common medical conditions and patient complaints related to 12 body systems in English.

Table 16. (*continued*)

Source Adaptations from Miriam Diaz- Gilbert's 'English for Pharmacy Writing and Oral Communication', by the Point Publishing (2009)

Pharmaceutical content
• The most common medical conditions and patient complaints related to the 12 body systems that a pharmacist generally encounters in a pharmacy store:
  o Unit 1: Skin, Hair, and Nails
  o Unit 2: Ears and Eyes
  o Unit 3: Mouth and Nose
  o Unit 4: Endocrine and Lymphatic System
  o Unit 5: Chest, Lung, and Respiratory System
  o Unit 6: Heart and Cardiovascular System
  o Unit 7: The Abdomen and Gastrointestinal System
  o Unit 8: The Musculoskeletal System
  o Unit 9: Neurologic System and Mental Health
  o Unit 10: The Urinary System
  o Unit 11: Hepatic System
  o Unit 12: Reproductive System

Language Points • The passive form of the present tenses • Relative clauses • Basic knowledge on parts of speech (i.e. noun, verb (infinitive/ past tense uses), adjective, adverb) • Pronunciation of medical vocabulary
Tasks • Identifying the common medical conditions and patient complaints: o doing vocabulary exercises, such as matching words with their definitions; doing odd one out activity or grouping a mixed set of words into categories; solving a crossword puzzle; filling in word family chart or filling in blanks in a sentence with the correct form of the word. • Dictation activity: Listening to the words/word pairs or sentences on the audio files and then writing them down. • Doing grammar exercises on the language points, for instance, attending gamified quizzes on Kahoot!, Socrative, Quizlet or on paper-based exercises; collaborating with peers while forming sentences with the passive form of the present tenses and/or relative clauses to use the new pharmaceutical vocabulary in context.
Duration • 6 weeks (Three 50 minute-long in-class sessions weekly)

Individual space
• Learners interacting with lecture videos; taking notes on graphic organizers or summarizing video content and/or doing a mini quiz on the video content on their LMS about:
  o The language point: Passive form of the present tenses, relative clauses and parts of speech.
  o The pharmaceutical content of the units (2 units per week): comprehension questions and pronunciation of medical vocabulary
• Sending questions to the teacher before the class on the issues that may not be understood. Or using the WSQ method; that is, watching the content; summarizing it; and asking 1 or 2 questions to the teacher.
(To socialize individual space, learners may also send questions to the forum page of their LMS platform and collaborate with their peers to answer to the questions asked by their peers. To hold learners accountable for the pre-class work, their pre-class work may be graded. For instance, doing a mini quiz weekly and sending and answering peers' questions may be graded.)

Table 16. (*continued*)

Group space*	
Bridging Activity	• Answering learners' questions from the lecture videos posed at the beginning of the class session or submitted online to the teacher before class time. • Having a Kahoot!, Socrative, or Quizlet quiz on the language points at the very first week for this module. Checking whether any misunderstandings are corrected.
Vocabulary Activity	• Doing one or more vocabulary exercise(s) mentioned in the task section above.
Pronunciation activity	• Dictation activity mentioned in the task section above. (When time is limited, the learners may be asked for which typical problematic words/ word pairs are difficult for them to pronounce, and that part of the course may focus on these words.)
Closing Activity	• Learners may be asked for sending the teacher what they have learned in the lesson that week in a few sentences as an 'exit ticket' via using 'Socrative' platform.

* The abovementioned workflow will be duplicated for the second unit of a week, all of which make up a 150-minute-long period. This template may be used for all the six weeks that make up this module.

Having analysed the feedback gathered from the participants of the research, the second unit was transformed into a module composed of two units to serve for practising patient counselling. In this module, the researcher did not make any major changes in the scope as participants found it sufficient to reach the learner outcomes. However, as can be seen below, some proposed improvements have definitely been done according to the suggestions made by the participants. To organize such content, adaptations from the textbooks of pharmaceutical consultation skills and pharmaceutical technology may be compiled after making certain modifications, such as adjusting the intensity of the vocabulary to the target level of certain group of learners. Additionally, samples of a patient information leaflet of a medicine can also be obtained from the pharmaceutical company websites on the internet. To clarify the learning outcome of the module, the name of the module was changed from 'rational medicine use' to 'patient counselling' as well as narrowing its duration from 5 weeks to 3 weeks because the first module will set the ground for the second module in terms of teaching the medical words for common medical conditions and complaints of patients so that in the second module, learners will be able to use their medical vocabulary knowledge in giving consultation and/or comprehending a patient information leaflet. In other words, as mentioned earlier, even if learners will be exposed to the samples of patient-pharmacist dialogues throughout the first 6 weeks of the syllabus, it will be in the 'Patient Counselling' module that the learners will be purposefully instructed the specific steps of pharmaceutical consultation as well as the practical utterances to use in each step. The adaptation of the learning outcomes, individual and group space activities are demonstrated in Table 17 below.

Table 17. *The Revised Version of the Second Unit, 'Patient Counselling'*

2nd Module: Patient Counselling
The Related Learning Outcome **LO3: Learners will be able to inform patients on how to take medicine in English.** 3.1. Learners will be able to recognize the sections of a patient information leaflet in English. 3.1.1. Learners will be able to identify the terminology and phrases related to the sections of a patient information leaflet in English 3.1.2. Learners will be able to identify the forms of medicine in English. 3.2. Learners will be able to give consultation to patients in dialogues around the most common medical conditions and patient complaints related to 12 body systems in English. 3.2.1. Learners will be able to participate in dialogues in English with patients who come to the pharmacy store with a prescription. 3.2.2. Learners will be able to participate in dialogues in English with patients who come to the pharmacy store with typical symptoms of a health problem to buy an OTC medicine.
Source • Adaptations from the textbooks that can be obtained from the pharmacy department on pharmaceutical consultation skills and pharmaceutical technology • Sample of a patient information leaflet of medicine in English which can be found on the internet.
Pharmaceutical content Unit 1: Patient information leaflet • Forms of medicines o Liquid o Solid o Powdery o Topical • Patient information leaflet of medicine, the terminology and phrases related to the sections: o the composition, o use of the medicine, o warnings, o how to take: drug dosage forms, o side effects, o overdose, o storage and disposal, o presentation, o identification of a specific medicine. Unit 2: Pharmaceutical consultation skills • How to take medicines: drug dosage forms, phrases related to caution and how to take medicine. • Pharmacist-patient dialogues with or without a prescription o welcoming the patient, o talking about the symptoms of the patient or checking their prescript o briefly mentioning the cause and problems of the health problem o instructing the direction for use of the medicine o giving recommendations for use of the medicine o informing the patient on the possible side effects of the medicine o seeing off the patient
Language points • Specific Modals used in o Offering (can, could, may) o Requesting (would like to, can, could) o Suggesting (can, will) o Advising (had better, should) o Permission (can, could) o Possibility (may, can, should, will) • The imperative form of the verbs • The Present Tenses to talk about a health problem (i.e. The present simple, continuous and perfect tenses)

Table 17. (*continued*)

Tasks

- Doing grammar exercises on the language points, for instance, attending gamified quizzes on Kahoot!, Socrative, Quizlet or on paper-based exercises; collaborating with peers while forming sentences with the specific use of modals, the present tenses and imperative forms of the verbs to use the new pharmaceutical vocabulary and phrases in context.
- Identifying the forms of medicines:
  - doing vocabulary exercises, such as matching words with their definitions; doing odd one out activity or grouping a mixed set of words into categories; solving a crossword puzzle; filling in word family chart or filling in blanks in a sentence with the correct form of the word.
- Reading a patient information leaflet of a medicine, answering comprehension questions and interpreting the text.
- Listening to and interpreting the patient-pharmacist dialogues around the most common medical conditions and patient complaints related to 12 body systems:
  - answering listening comprehension questions on the patient-pharmacist dialogues
  - filling in the missing sentences in the scripts of the patient-pharmacist dialogues with a partner who has blanks in different parts of their dialogue scripts.
- Writing a consultation dialogue between a pharmacist and a patient for a learner-created case.

Performing pharmacist-patient dialogues for a series of made-up cases of patients with two or more health problems by acting out the roles of the patient and the pharmacist in pairs. Switching roles and then responding to immediate scenarios separated by the teacher in small pieces of papers in class time by using the knowledge of patient counselling and related utterances in English.

Duration

- 3 weeks (Three 50-minute-long in-class sessions weekly)

First week: Individual space

- Learners interacting with lecture videos; taking notes on graphic organizers or summarizing video content and/or doing a mini quiz on the video content on their LMS about:
  - The language point: The imperative form of the verbs
  - The pharmaceutical content: Forms of medicines and the terminology and phrases related to the specific sections of a patient information leaflet of a medicine.
- Sending questions to the teacher before the class on the issues that may not be understood; or using WSQ method; that is, watching the content; summarizing it; and asking 1 or 2 questions to the teacher.

(In order to socialize individual space, learners may also send questions to the forum page of their LMS platform and collaborate with their peers to answer to the questions asked by their peers. To hold learners accountable for the pre-class work, their pre-class work may be graded.

First week: Group space

Bridging activity	• Answering learners' questions from the lecture videos posed at the beginning of the class session or submitted online to the teacher before the class time. Checking whether any misunderstandings are corrected. • Having a Kahoot!, Socrative, or Quizlet quiz on the language point and the new vocabulary. Checking whether any misunderstandings are corrected.
Reading activity	• Reading a patient information leaflet of a medicine, answering comprehension questions and interpreting the text.
Vocabulary activity	• Doing one or more vocabulary exercise(s) mentioned in the task section above.
Closing activity	Learners may be asked for sending the teacher what they have learned in the lesson that week in a few sentences as an 'exit ticket' via using 'Socrative' platform.

Second week: Individual space

- Learners interacting with lecture videos; taking notes on graphic organizers or summarizing video content and/or doing a mini quiz on the video content on their LMS about:
  - The language point: The present tenses to talk about a health problem (i.e. The present simple, continuous and perfect tenses) and specific modals used in giving consultation to patients
- The pharmaceutical content: Pharmaceutical consultation skills:
  - How to take medicines: drug dosage forms, phrases related to caution and how to take medicine.
  - Pharmacist-patient dialogues with or without a prescription

Table 17. (*continued*)

• Sending questions to the teacher before the class on the issues that may not be understood. Or using the WSQ method; that is, watching the content; summarizing it; and asking 1 or 2 questions to the teacher. (To socialize individual space, learners may also send questions to the forum page of their LMS platform and collaborate with their peers to answer to the questions asked by their peers. To hold learners accountable for the pre-class work, their pre-class work may be graded.	
Second week: Group space	
Bridging activity	• Answering learners' questions from the lecture videos posed at the beginning of the class session or submitted online to the teacher before class time. Checking whether any misunderstandings are corrected. • Having a Kahoot!, Socrative, or Quizlet quiz on the language points and the new vocabulary. Checking whether any misunderstandings are corrected.
Listening comprehension activity	• Doing a listening comprehension exercise mentioned in the task section above. • Interpreting the typical utterances of the dialogues in context by studying the scripts distributed to the learners after completing listening comprehension activities.
Writing activity	• Writing a consultation dialogue between a pharmacist and a patient for a learner-created case
Closing activity	Learners may be asked for sending the teacher what they have learned in the lesson that week in a few sentences as an 'exit ticket' via using 'Socrative' platform.
Third week: Individual space	
• Learners interacting with lecture videos; taking notes on graphic organizers or summarizing video content and/or doing a mini quiz on the video content on their LMS about: o The pharmaceutical content: Pharmaceutical consultation skills: o How to take medicines: drug dosage forms, phrases related to caution and how to take medicine. o Pharmacist-patient dialogues with or without a prescription • Sending questions to the teacher before the class on the issues that may not be understood. Or using the WSQ method; that is, watching the content; summarizing it; and asking 1 or 2 questions to the teacher. (To socialize individual space, learners may also send questions to the forum page of their LMS platform and collaborate with their peers to answer to the questions asked by their peers. To hold learners accountable for the pre-class work, their pre-class work may be graded.	
Third week: Group space	
Bridging activity	• Answering learners' questions from the lecture videos posed at the beginning of the class session or submitted online to the teacher before the class time. Checking whether any misunderstandings are corrected. • Having a Kahoot!, Socrative, or Quizlet quiz on the phrases related to caution and how to take medicine. Checking whether any misunderstandings are corrected.
Speaking activity	• Performing pharmacist-patient dialogues to a series of made-up cases of patients with two or more health problems by acting out the roles of the patient and the pharmacist in pairs. Switching roles and then responding to immediate scenarios in class time by using the knowledge of patient counselling and related utterances in English. Learners' giving feedback to their peers' dialogue performances in groups of four.
Closing activity	• Learners may be asked for sending the teacher what they have learned in the lesson that week in a few sentences as an 'exit ticket' via using 'Socrative' platform.

As mentioned earlier, the participants of the study suggested a pharmacological approach for the scope of the unit 'chemistry laboratory', which led the researcher to redesign the scope of the unit and to focus on the equipment and terminology in pharmaceutical technology branch that was mostly suggested by the participants of the research for the revised version. By purposefully choosing the area where English is mostly used and needed

by the study group, the scope of the unit changed from chemistry laboratory in broad terms into pharmaceutical technology laboratory to meet learners' immediate English language needs in their education life as well as those in their professional career in the future. Therefore, the name of the unit was decided to be 'Pharmaceutical Technology Laboratory' as well as transforming the unit into a module. As for the duration, two weeks will be enough to study on the tasks as is the case with the previous version. Additionally, the tasks in the module changed from talking about chemical experiments and writing the experimental section of a chemistry laboratory report into translating texts on manufacturing pharmaceutical products, writing on manufacturing medicines, and giving verbal directions on manufacturing, etc. To organize such content, the practitioners may compile the related content from the textbook of pharmaceutical technology, or the texts in 'Martindale', which is complete medicine reference, and the pharmacopoeia, which is an official publication containing a list of medicines with their effects and directions for their use. The adaptation of the learning outcomes, individual and group space activities are demonstrated in Table 18 below.

Table 18. *The Revised Version of the Third Unit, 'Pharmaceutical Technology Laboratory'*

3rd Module: Pharmaceutical Technology Laboratory
The Related Learning Outcome **LO4. Learners will be able to engage in tasks of manufacturing pharmaceutical products in English.** 4.1. Learners will be able to translate texts on manufacturing pharmaceutical products. 4.1.1. Learners identify the English equivalents of the basic pharmaceutical technology laboratory equipment. 4.2. Learners will be able to write about the directions od manufacturing pharmaceutical products in English. 4.3. Learners will be able to participate in dialogues in English about the directions of manufacturing pharmaceutical products.
Source Adaptations from the textbooks that can be obtained from the pharmacy department on pharmaceutical technology, or the texts in 'Martindale', which is a complete medicine reference, and the pharmacopoeia, which is an official publication containing a list of medicines with their effects and directions for their use.

Pharmaceutical Content
Unit 1: Laboratory equipment
• Basic pharmaceutical technology laboratory equipment
  o Glassware
  o Porcelain Tools
  o Machines
  o Burners
  o Clamps
  o Holders
Unit 2: Manufacturing pharmaceutical products
• Basic phrases used in directions on manufacturing pharmaceutical products in English

Language points • Passive forms of the verbs in the simple present and the simple past tenses • Process transition words

Table 18. (*continued*)

Tasks • Doing grammar exercises on the language points, for instance, attending gamified quizzes on Kahoot!, Socrative, Quizlet or on paper-based exercises; collaborating with peers while forming sentences with the passive form of the verbs in the simple present and the simple past tenses; process transition words and basic phrases used in the imperative form of the verbs in context. • Identifying the English equivalents of the basic pharmaceutical technology laboratory equipment: o doing vocabulary exercises, such as matching words with their definitions; doing odd one out activity or grouping a mixed set of words into categories; solving a crossword puzzle; filling in word family chart or filling in blanks in a sentence with the correct form of the word. • Translating the directions on manufacturing pharmaceutical products. • Writing about the directions for manufacturing pharmaceutical products. • Participating in dialogues in English about the directions of manufacturing pharmaceutical products.
Duration 2 weeks (Three 50-minute-long in-class sessions weekly)
First week: Individual space

• Learners interacting with lecture videos; taking notes on graphic organizers or summarizing video content and/or doing a mini quiz on the video content on their LMS about:
  o The language point: Process transition words
  o The pharmaceutical content: Basic pharmaceutical technology laboratory equipment.
• Sending questions to the teacher before the class on the issues that may not be understood; or using WSQ method; that is, watching the content; summarizing it; and asking 1 or 2 questions to the teacher.
(To socialize individual space, learners may also send questions to the forum page of their LMS platform and collaborate with their peers to answer to the questions asked by their peers. To hold learners accountable for the pre-class work, their pre-class work may be graded.

First week: Group space

Bridging activity	• Answering learners' questions from the lecture videos posed at the beginning of the class session or submitted online to the teacher before the class time. Checking whether any misunderstandings are corrected. • Having a Kahoot!, Socrative, or Quizlet quiz on the language point and the new vocabulary. Checking whether any misunderstandings are corrected.
Vocabulary activity	• Doing one or more vocabulary exercise(s) mentioned in the task section above.
Reading activity	• Reading sample texts on the directions of manufacturing pharmaceutical products, answering comprehension questions and interpreting the text.
Closing activity	• Learners may be asked for sending the teacher what they have learned in the lesson that week in a few sentences as an 'exit ticket' via using 'Socrative' platform.

Second week: Individual space

• Learners interacting with lecture videos; taking notes on graphic organizers or summarizing video content and/or doing a mini quiz on the video content on their LMS about:
  o The language point: Passive forms of the verbs in the simple present and the simple past tenses
  o The pharmaceutical content: Basic phrases used in directions on manufacturing pharmaceutical products in English.
• Sending questions to the teacher before the class on the issues that may not be understood; or r using WSQ method; that is, watching the content; summarizing it; and asking 1 or 2 questions to the teacher.
(To socialize individual space, learners may also send questions to the forum page of their LMS platform and collaborate with their peers to answer to the questions asked by their peers. To hold learners accountable for the pre-class work, their pre-class work may be graded.

Table 18. (*continued*)

Second week: Group space	
Bridging activity	• Answering learners' questions from the lecture videos posed at the beginning of the class session or submitted online to the teacher before class time. Checking whether any misunderstandings are corrected. • Having a Kahoot!, Socrative, or Quizlet quiz on the phrases related to manufacturing pharmaceutical products. Checking whether any misunderstandings are corrected.
Writing activity	• Writing some sample directions of manufacturing pharmaceutical products by using the imperative form of the verbs and process transition words. • Writing a laboratory report on manufacturing pharmaceutical products by using the passive form of the simple past tense and process transition words.
Speaking activity	• Participating in dialogues in English about the directions of manufacturing pharmaceutical products by using the imperative form of the verbs, process transition words and the passive form of the simple present tense. Switching roles and then responding to immediate scenarios in class time by using the knowledge of manufacturing pharmaceutical products and related utterances in English. Learners' giving feedback to their peers' dialogue performances in groups of four.
Closing activity	• Learners may be asked for sending the teacher what they have learned in the lesson that week in a few sentences as an 'exit ticket' via using 'Socrative' platform.

In the previous version of the syllabus, due to time constraints, only the task of CV and cover letter writing could be realized in the fourth unit; however, in the revised version of the syllabus, the researcher suggests adding the task of verbally attending job application in English, which was also demanded by the participants as well. This required expanding the duration of the unit content by one more week, making time duration as 2 weeks to complete. Therefore, as is the case with the units in the previous version of the syllabus, the final unit was also expanded to be a module by having one more task but serving for the same learning outcome-applying for a job interview. In order to prepare learners for the speaking activity in class, some listening activities were also added to the revised version of the syllabus so that learners may become accustomed to the context of a job interview. Finally, in order to organize such content, practitioners may use the Europass website, (https://europa.eu/europass/en), to reach for the templates for cover letter and CV writing; as for attending a job interview, practitioners may also compile typical expressions to use in a job interview via professional guidelines on job application online, and sample job interview videos online. The adaptation of the learning outcomes, individual and group space activities are demonstrated in Table 19 below.

Table 19. *The Revised Version of the Fourth Unit, 'Job Application'*

4th Module: Job Application
The Related Learning Outcome **LO5: Learners will be able to apply for a job in English.** 5.1. Learners will be able to write a CV with a cover letter in English. 5.2. Learners will be able to attend a job interview in English.
Source The templates composed of typical phrases for CV and cover letter writing on Europass website (https://europa.eu/europass/en); typical expressions to use in a job interview that can be compiled by teachers via professional guidelines on job application online, and sample job interview videos online.

Pharmaceutical content
Unit 1: Writing for job application in English
• Writing a cover letter (templates are also available on Europass website)
  ○ referring to the position
  ○ pointing out important qualifications
  ○ referring to future interview
• Writing a CV (templates are available on Europass website)
Unit 2: Speaking for job application in English
• Attending a job interview in English
  ○ introducing yourself at a job interview: educational background, work experience, other interests and qualifications and training
  ○ asking someone to repeat a question
  ○ emphasizing your strengths
  ○ thanking the interviewer at the end of the interview

Language points • Asking and answering questions on the present simple, the present perfect, the simple past and the future tenses to engage in dialogues in a job interview.

Tasks
• Doing grammar exercises on the language points, for instance, attending gamified quizzes on Kahoot!, Socrative, Quizlet or on paper-based exercises; collaborating with peers while asking and answering to questions on the present simple, the present perfect, the simple past and the future tenses to engage in dialogues in a job interview context.
• Reading a CV with a cover letter, answering comprehension questions and interpreting the text.
• Writing a CV with a cover letter using the Europass template
• Listening to / watching a video of a job interview:
  ○ answering to listening comprehension questions
  ○ filling in the missing sentences in the scripts with a partner who has blanks in different parts of their dialogue scripts.
• Roleplaying a job interview using the typical expressions in groups of four, acting out the roles of three interviewers and an interviewee. Switching roles and then responding to the peers' questions in class time by relying on their peers' CVs to ask questions in a job. interview. Learners' giving feedback to their peers' dialogue performances in groups of four.

Duration 2 weeks (Three 50-minute-long in-class sessions weekly)
First week: Individual space
• Learners interacting with lecture videos; taking notes on graphic organizers or summarizing video content and/ or doing a mini quiz on the video content on their LMS about: ○ The pharmaceutical content: The typical phrases used in a cover letter and a CV and sample texts

Table 19. (*continued*)

• Sending questions to the teacher before the class on the issues that may not be understood. Or using the WSQ method; that is, watching the content; summarizing it; and asking 1 or 2 questions to the teacher. (To socialize individual space, learners may also send questions to the forum page of their LMS platform and collaborate with their peers to answer to the questions asked by their peers. To hold learners accountable for the pre-class work, their pre-class work may be graded.	
First week: Group space	
Bridging activity	• Answering learners' questions from the lecture videos posed at the beginning of the class session or submitted online to the teacher before the class time. Checking whether any misunderstandings are corrected.
Reading activity	• Reading some sample CVs with cover letter, answering comprehension questions and interpreting the texts.
Writing activity	• Writing a cover letter and a CV using the templates on the Europass website (https://europa.eu/europass/en).
Closing activity	• Learners may be asked for sending the teacher what they have learned in the lesson that week in a few sentences as an 'exit ticket' via using 'Socrative' platform.
Second week: individual space	
• Learners interacting with lecture videos; taking notes on graphic organizers or summarizing video content and/ or doing a mini quiz on the video content on their LMS about: o The language content: Asking and answering to questions on the present simple, the present perfect, the simple past and the future tenses to engage in dialogues in a job interview context. o The pharmaceutical content: Attending a job interview in English • Sending questions to the teacher before the class on the issues that may not be understood. Or using the WSQ method; that is, watching the content; summarizing it; and asking 1 or 2 questions to the teacher. (To socialize individual space, learners may also send questions to the forum page of their LMS platform and collaborate with their peers to answer to the questions asked by their peers. To hold learners accountable for the pre-class work, their pre-class work may be graded.	
Second week: group space	
Bridging activity	• Answering learners' questions from the lecture videos posed at the beginning of the class session or submitted online to the teacher before class time. Checking whether any misunderstandings are corrected. • Having a Kahoot!, Socrative, or Quizlet quiz on the language points. Checking whether any misunderstandings are corrected.
Listening comprehension activity	• Doing a listening comprehension exercise mentioned in the task section above. • Interpreting the typical utterances of the dialogues in context by studying the scripts distributed to the learners after completing listening comprehension activities.
Speaking activity	• Roleplaying a job interview using the typical expressions in groups of four, acting out the roles of three interviewers and an interviewee. Switching roles and then responding to the peers' questions in class time by relying on their peers' CVs to ask questions in a job interview. Learners' giving feedback to their peers' dialogue performances in groups of four.
Closing activity	• Learners may be asked for sending the teacher what they have learned in the lesson that week in a few sentences as an 'exit ticket' via using 'Socrative' platform.

Taking the participants' suggestions and field notes of the researcher into consideration, not only the content-related changes have been reflected in the abovementioned revised version of the flipped EAPP syllabus, but the methodological aspects of flipped

learning strategy have also been embedded in the revised syllabus. First of all, a brand-new unit for the introductory week was added to the syllabus in order to help practitioners who will try flipped learning for the first time in their teaching environment. Having a template for an introductory course in a flipped class will probably support the gradual transformation of traditional classes into flipped classes. Secondly, as can be seen above, from the methodological aspect, individual and group space activities were enriched by adding multiple activities ranging from easy to difficult in the related contexts of the modules. Similarly, from the contextual dimension, the researcher added more listening and pronunciation activities as well as vocabulary practice to the content in the revised version, as demanded by the participants in the action research. After the implementation of the EAPP syllabus in flipped learning strategy, in order to serve for 'assessment for learning' principle, the researcher suggests portfolio assessment will be suitable for evaluating learners' performances. As for feedback on portfolio assessment, in a flipped class, feedback can be given individually with specific attention to each student's learning. In addition, by benefitting from today's digital educational tools, it is also possible to handle portfolios in digital platforms; that is, by using a webfolio, student works can be stored via digital tools and can help demonstrate their learning experiences and improvements by a specific time. In a flipped class, webfolios will surely support the individualized assessment for learning due to its advantageous features mentioned previously as long as teachers provide personal feedback to meet students' learning needs and encourage reflection to help them become self-directed learners in a flipped class. Finally, as the syllabus was based on purposeful tasks the learners need to perform in English via using specific language skills, the syllabus was designed around a series of tasks to be accomplished within the community of practice rather than the conventional way of language teaching. Rather, the researcher focused on mastering learners' specific language skills in the pharmaceutical context; thus, the language to be taught comes out of the task, in other words, the linguistic aspects are of secondary place in the design of the syllabus. Therefore, as mentioned previously, for ESP courses in EFL context, the researcher suggests creating a supplementary archive of videos of grammar and pronunciation in addition to lecture videos of the specific content domain for supporting language needs of learners with mixed ability in English. In the following chapter, the conclusion of the findings with implications for action, recommendations for further research and concluding remarks will be presented.

CHAPTER FIVE

Conclusion

In this chapter, a summary of the study and important conclusions drawn from the data presented in Chapter 4 will be presented in addition to implications for professional practice and recommendations for further research.

Overview of the Study

Unlike the ESP courses held in ESL contexts, where practitioners mainly work in English-speaking countries and design EOP courses for populations of immigrants, refugees, business people and students; or EAP courses for non-native speakers in the academic sector, in a growing number of ESP courses held in EFL countries, practitioners design courses for learners who have personal motivation to learn English for academic or occupational purposes to follow their studies or careers in English in international scope (García Laborda & Litzler, 2015; Johns and Price, 2014). Due to the context-driven differences, the delivery of ESP courses in EFL settings inevitably features certain characteristics, such as learners' low proficiency level of English, which requires ESP content to include certain language points; limited chances to practice English learnt in ESP classes; the lack of authentic ESP materials in EFL settings, which accordingly influence the ESP course design and related activities that are often limited to time constraints; and finally, international requisites of English proficiency in professional domains, which necessitates the ESP courses to involve some cultural issues and global uses and forms of English.

Within the scope of the current dissertation, lacking the contextual advantage that ESL settings have, the occupational English courses at pharmacy faculty in the researcher's EFL teaching environment had various challenges such as having limited opportunities to practice pharmacy-related communication skills outside the class; lacking authentic ESP materials for pharmaceutical purposes that are appropriate for the proficiency level and contextual needs of the particular group of learners the researcher had; and finally, having students of varying proficiency levels of English who needed a great amount of language support to handle pharmaceutical tasks in English. These typical features of the particular context led the researcher to search for remedies to design an ESP course which could be the combination of an ESP course and an EAP course due to the amount of language support the context required.

Besides, having students of varied language backgrounds in overcrowded classrooms also required differentiation in instruction, which also led the researcher to search for alternatives for an individualised language learning environment. As a result, the researcher decided on conducting action research in collaboration with learners, faculty members and instructors of English in decision-making processes to design and implement an EAPP course in one of the recent 21st-century teaching strategies of blended learning environments; that is, in a flipped learning environment to transform her teaching environment into an individualised learning environment that contextually serves for pharmaceutical English learning purposes.

In order to realize the aim, the researcher conducted first-person action research as she challenged her teaching practice by taking action toward the problem and using reflective thinking in collaboration with the other stakeholders in the issue to enhance learning and teaching environment. To conduct the action research, first of all, the researcher handled a needs analysis via semi-structured interviews with 5 faculty members, and the review of existing syllabuses and coursebooks for teaching English for pharmacy; then designed an EAPP syllabus in the flipped learning environment based on the learning outcomes emerged in the needs analysis phase. She made a two-dimensional evaluation of the syllabus; firstly, while implementing the designed syllabus by video recording the 12 weekly three-class-hour courses, asking the participants to keep reflective journals on their experiences of flipped class during the term and keeping field notes as the researcher; and secondly, after finishing the implementation of the syllabus by holding separate focus group interviews with the 38 students, 3 English lecturers who taught English at the faculty of pharmacy, and with 2 faculty members, who did not attend the interviews in the needs analysis phase, to gather their suggestions for the revised design of the syllabus, which helped the researcher to have multiple perspectives to revise and improve the pharmaceutical and English language content and the elements of flipped instruction in the syllabus. At that point, the formative feedback gathered from the participants during the implementation enabled the researcher to reflect on her practices and run micro action plans to improve the EAPP content and the flipped learning model of the syllabus whenever a problematic issue emerged throughout the implementation. As for the summative feedback obtained at the end of the implementation, they were used to compensate the weaknesses of the pharmaceutical and language content and the flipped learning methodology, and to provide a more efficient flipped EAPP syllabus for students of pharmacy. Finally, having finished the evaluation of the syllabus, the researcher proposed a revised version of the flipped EAPP syllabus by integrating the principles of flipped learning strategy, occupational skills in pharmacy domain, and the linguistic content to support learners' language needs.

Composed of different sources of data, the data analysed by inductive content analysis via using NVivo 11 Pro were discussed with references to the formative and evaluative feedback of the learners, the lecturers of English, and the faculty members during and at the end of the term and with related research in the field. The researcher interpreted the data in association with the research questions of the current study. The first research question, 'What are the context-driven tasks to handle in English for pharmaceutical purposes?' led to a needs analysis to discover the learners' needs to use English for pharmaceutical purposes as the first phase of data collection. The data gathered were used to generate the pool of learning outcomes of the flipped EAPP syllabus for undergraduate students of the faculty of pharmacy. As for the second, third and fourth research questions, which are respectively 'What are the views of learners towards learning English for pharmaceutical purposes through the flipped EAPP syllabus?'; 'What are the views of lecturers of English towards the linguistic dimension of the flipped EAPP syllabus?'; 'What are the views of faculty members towards the pharmaceutical content of the flipped EAPP syllabus?', the opinions of learners, lecturers of English, and faculty members towards the implemented flipped EAPP syllabus were sought respectively in terms of strengths, weaknesses and suggestions to overcome the weaknesses in the flipped EAPP syllabus. The data gathered during and at the end of the implementation were interpreted to gain an understanding of what could be included in and/or excluded from the pharmaceutical content of the flipped EAPP syllabus, and what kind of improvements could be realized in the implementation of the flipped learning model.

Taking the participants' suggestions, field notes of the researcher and the conclusions drawn from the empirical research into consideration, the major findings that resulted in changes in the revised version of the flipped EAPP syllabus are summarized below in the following dimensions: flipped learning strategy, pharmaceutical content, and language content.

Based upon the first flipped learning practice, the researcher derived lessons from her experiences in a flipped ESP class. These lessons are presented in the order of individual space and group space learning settings. Accordingly, it is concluded from the individual space learning experience that at the tertiary level, when the lecture videos are kept shorter than 15 minutes; are released almost a week before face-to-face sessions; are delivered through customized video sharing platforms, such as Edpuzzle, where learners are engaged in lecture videos rather than passively watching them; and are shared on a user-friendly LMS platform like Edmodo, learners are more likely to participate in individual space learning activities. On the other hand, in-class flipping may be an alternative for teachers who have

tried flipped learning but ended up with having their learners coming to class unprepared as well as for those whose school regulations require a no-homework policy. Therefore, flexibility can be gained to address differentiation among students in terms of not only learner characteristics, such as language background or attention span, but learning culture as well, such as needing a knowledgeable person to support their learning, or resisting pre-class work, while implementing the flipped learning strategy.

As for group space learning experience, first of all, as it is observed in the present study, teacher dependence may be a challenging issue in flipped learning for the first time. In other words, learners may initially show resistance towards learning new content by watching lecture videos before coming to class as they are used to traditional content delivery. However, as a result of the study, it is concluded that learners may acquire the necessary active learner skills more easily as they are engaged in flipped learning environment after gradually gaining active learner habits, basically adopting self-regulation in their learning, and slowly taking control of learning itself by teachers' gradually increasing workload.

Secondly, learners may also show some resistance to change due to established passive learning habits, and they may have some adoption problems as a result of increased pre-class workload for the first flipped learning experience as it is different from the traditional roles of a learner. In such cases, as mentioned earlier, in-class flipping may also be an alternative for carrying flipped content into the class. Providing such flexibility may serve for differentiation among learner profiles, which will hopefully ease learners' adaptation to the flipped learning environment in parallel with the time they spent in the flipped class. Therefore, the researcher suggests for the first-time practitioners of flipped learning to gradually transform their traditional classes into flipped classes by teaching their students to adopt flipped learning habits via a series of hands-on self-directed learning strategies such as rehearsing notetaking while watching lecture videos in face-to-face sessions, sending online questions to their teacher, etc. with their teacher demonstrating them in the introductory week, then it will probably help them acquire the new learning habits more easily.

Thirdly, the active learning atmosphere of the flipped learning strategy allows efficient use of class time, which promotes learners' academic achievement and skill development as well. It is because learners can find chances to better prepare for courses owing to lecture videos they got engaged before face-to-face sessions; to improve self-paced learning because of the flexible learning environment, where learners are free to choose whenever and wherever they prefer to learn and as many times as they need to fully understand the content; and therefore, to have easier comprehension of the content in a flipped learning environment.

Because more time is dedicated to active learning tasks by practising contextual skills and content knowledge in group space, the active learners in a flipped class get engaged in deep learning of the subject matter.

Fourthly, peer interaction has been found to reinforce learning in a flipped learning environment. It is because in addition to facilitating content mastery, learners improve teamwork and leadership skills, and they receive social support from their peers in collaborative activities in the learning processes of the group space.

Finally, the issue of differentiation is one of the strongest dimensions of the flipped learning strategy. Using the face-to-face time to walk around the room to support students along a wide range of abilities help teachers personalize the learning for all, which enables learners to receive immediate feedback that reinforces their learning. That is, through mini conversations held with individuals or particular groups, who have difficulty in the same content, result in just-in-time instruction when learners feel exactly ready to learn. On the other hand, for students who grasp the content quickly, engaging such students in more advanced topics in less number of activities will probably benefit them more. Due to the extra time obtained by removing content delivery from face-to-face sessions, instructors connect personally with their students; and thus, they gain insight into their students' learning. As a result, students learn better because teachers know their students better and build better relationships with them. Accordingly, when learners receive immediate feedback on their performances, they learn while doing the tasks. By this means, the formative assessment becomes a part of the learning process. Therefore, in a flipped class, the assessment shows the teacher how well learners are doing on their way to learn as the assessment is ongoing. As is the case with the findings of the present study, formative assessment in the flipped learning environment has been found to enable teachers to perform scaffolding, individualization, and differentiation in various ways. In these assessments, teachers adjust their teaching and learning material to help unique needs of their students as well as giving them individual feedback and assistance, which makes it characteristic in flipped learning environments to hold assessment "for learning", rather than for evaluating achievement.

As for the major findings related to the pharmaceutical content of the syllabus that resulted in changes in the revised version of the flipped EAPP syllabus, individual and group space activities were enriched by adding multiple activities ranging from easy to difficult in the related contexts of the modules. The revised flipped EAPP syllabus is composed of four modules which are renamed and placed in the syllabus as in the following order: 'Common Patient Complaints', 'Patient Counselling', 'Pharmaceutical Technology Laboratory', and

‘Job Application’. Accordingly, the first change on a large scale was on transforming units into modules composed of related units so that practitioners may expand the content of the modules by adding more learning outcomes emerged in the needs analysis phase of the present study. Taking the participants’ suggestions and the implementation experience into consideration, the scopes of the first and the third modules were narrowed while those of the second and the fourth modules remained the same, even adding or removing a few activities to or from the content. To briefly mention these changes, in the first module, the broad medical approach to anatomy was narrowed into a pharmacological one in the revised version. Thus, differently from the previous version, the vocabulary of the most common medical conditions related to 12 body systems and complaints that a pharmacist generally encounters are introduced in sample patient-pharmacist dialogue transcripts in addition to studying listening comprehension practices in the revised version of the syllabus. As well as the change in its scope, the name of the first module was also changed from ‘Anatomy’ to ‘Common Patient Complaints’, and the duration was expanded from 4 weeks to 6 weeks because the researcher suggests studying common medical conditions and patient complaints related to two body systems each week, which makes up 6 weeks to cover the content relevant to 12 body systems. As mentioned above, the scope of the second module remained the same. To clarify the learning outcome of the module, the name of the module was also changed from ‘Rational Medicine Use’ to ‘Patient Counselling’ as well as narrowing its duration from 5 weeks to 3 weeks because the first module is aimed to set the ground for the second module in terms of teaching the English equivalents and pronunciation of the vocabulary for common medical conditions and complaints of patients so that in the second module, learners will be able to use their medical vocabulary knowledge in giving consultation and/or comprehending a patient information leaflet. As for the third module, the scope of the content changed from ‘Chemistry Laboratory’ into ‘Pharmaceutical Technology Laboratory’ to meet learners’ immediate English language needs in their education life as well as those in their professional career in the future. Therefore, the name of the unit was decided to be ‘Pharmaceutical Technology Laboratory’ as well as changing the tasks in the module from talking about chemical experiments and writing the experimental section of a chemistry laboratory report into translating texts on manufacturing pharmaceutical products, writing on manufacturing medicines, and giving verbal directions on manufacturing, etc. Additionally, the duration of the module remained the same, two weeks, as in the previous version. Finally, in the revised version of the fourth module, to serve for the learning outcome of the entire module, applying for a job in English, the task of attending a job interview in English was added in addition to writing a CV and a cover letter. This required expanding the duration of the unit content by

one more week, making time duration as 2 weeks to complete. Accordingly, to prepare learners for the speaking activity in class, some listening activities were also added so that learners may become accustomed to the context of a job interview. Actually, what makes the end-product of the present dissertation, that is, the EAPP syllabus, different from the existing syllabuses for English for pharmaceutical purposes is, in fact, this final module, which focuses on two basic job application skills. Practitioners who would like to design an EAPP course for a longer period may place this module to the end of the syllabus after finishing pharmaceutical content.

Finally, as for the major findings related to the language content of the syllabus that resulted in changes in the revised version of the flipped EAPP syllabus, more listening and pronunciation activities as well as vocabulary practice were added to the content in the revised version, as a result of the action research. To be more precise, speaking activities were dominantly placed in the second module; however, in the revised version, related speaking activities are suggested in the second, the third and the fourth modules as well as listening comprehension activities. Similarly, differently from the previous version, pronunciation of medical terms is placed in the revised first module of the syllabus. As for the vocabulary knowledge, the first module is dedicated to the most commonly used medical vocabulary on medical conditions and patient complaints, which will serve for the foundation of the following modules. Moreover, as the researcher did not follow a grammatical structure, but aimed for achieving tasks relying on related structural and vocabulary knowledge to reach the learning outcomes, in the implementation of the syllabus, the differences among learners' proficiency levels often necessitated a review of previously learned structures; and thus, the researcher observed a need to support EAPP syllabus with more lecture videos on grammar topics especially for lower-level learners. Therefore, relying on the feedback gathered from learners during the term, the researcher felt the need of creating a supplementary archive of lecture videos on English grammar, pronunciation tips, or instructions on sentence making, depending on the learners' needs and demands in addition to the lecture videos related to pharmaceutical content.

In sum, it is observed in the present action research that not only the dimensions of flipped learning strategy played role in the dynamics of the learning environment under study but the learner profile also affected the implementation process. Therefore, it can be concluded that present results related to the individual and group space activities may have occurred due to the characteristics of the particular group of learners as well; however, the

syllabus to be suggested is hoped to meet the needs of learners who need English for pharmaceutical purposes and who experience flipped learning for the first time.

Practical Implications for Professional Practice

The target audience of the present action research is essentially the ESP teachers, first-time practitioners of flipped learning in language classes, and in particular ESP teachers who teach English for pharmaceutical purposes in a flipped learning environment. On a larger scale, teachers of varied branches who wish to flip their classes or conduct action research in their teaching environment may also benefit from the phases of the present study. Considering the findings of the present research, the practical implications for practice for varied profiles of professionals are presented below, in the hope of the study providing beneficial suggestions for practice in the field.

Implications for teachers interested in flipped learning.

First of all, in the flipped learning environment, the key point in designing learning spaces is to bound flipped content to the group space activities in a way that enables learners to practice what they have learned in lecture videos in group space learning, then learning is reinforced by this way. Therefore, the practitioners of flipped learning should ask themselves the question, "What is the best use of my face-to-face class time with students?", and they should bear this in mind while designing their group space activities. Accordingly, taking the flipped learning version of the Bloom's Taxonomy into consideration (Şahin & Fell Kurban, 2016, p. 16), while the individual space activities are supposed to be aimed at achieving the tasks of 'remembering' and 'understanding', the group space activities in the flipped learning environment should be aimed at learners' using higher-order cognitive skills, such as 'applying', 'analysing', 'evaluating' and 'creating'. This simple rule of thumb will pave the way for designing diversified activities that promote active learning in a flipped class.

Secondly, before starting to teach a flipped class, an introductory week to engage learners in a flipped environment should be considered. As mentioned earlier, the self-directed learning strategies may be introduced to the learners at the very first week of the semester. The activities should demonstrate learners' responsibilities in a flipped learning environment. Even though only one week may not be sufficient to form active learning habits at once, the first week will be the foundation for the following weeks. All in all, teachers are responsible for fostering learners' attendance in individual and group space learning. By following a slow progression in the level of difficulty or in terms of quantity in the design of the assignments, teachers may increase the participation of students in the flipped learning

atmosphere. First-time flipped learning practitioners may even spend the first three weeks for letting the learners engage in lecture videos/texts in class and take notes on what they watch/read, and then learners may be asked for doing what they have done in class to do at home. This rehearse will most likely promote their forming flipped learning habits in their first experience.

Thirdly, the flipped learning practitioners should consider enabling learners to interact with new learning materials not by just watching lecture videos or reading texts, etc., but by engaging in the learning process via note-taking, using graphic organizers or answering short quizzes based on new learning content either embedded in lecture videos or through online quiz platforms in the individual space. In addition, as mentioned earlier, when the lecture videos are kept shorter than 15 minutes; are released almost a week before face-to-face sessions; are delivered through customized video sharing platforms that are engaging; and are shared on user-friendly LMS platforms, learners are more likely to participate in individual space learning activities.

Fourthly, the practitioners who would like to try in-class flipping can transform group space activities into stations in class and learners rotate the stations where various kinds of activities are handled to complement content learning and/or skill mastering in addition to the flip station where content is delivered through lecture videos or other kinds of media in class. Similarly, as mentioned above, in order to promote learners' adaptation to flipped learning habits in the very first weeks, learners, with their teacher's demonstration, may rehearse working on different stations in group space by using a series of mini activities in the stations.

Moreover, being part of a professional network will surely benefit teachers, especially the first-time practitioners of flipped learning, in order to develop courses in flipped learning strategy. FLGI is a global community that offers resources and tools to support successful flipped learning from K12 to higher education. The practitioners from varied responsibilities in the education sector such as teachers teaching at various levels, principals, deans, faculty members at university, or education inspectors, etc. share their expertise and experiences on flipped learning on the official web sites of the FLGI community. The academic body of FLGI, AALAS offers internationally accredited online flipped learning certification programs as well as organizing global conferences in order to enhance flipped learning practice worldwide. The AALAS also announced a framework for 'the global standards', including certain benchmarks for flipped learning practitioners to reach and adopt the most current international best practices. The global standards are composed of 187 international best practices to build a common vocabulary, a tool for planning, troubleshooting when instruction

goes wrong and self-assessment for needed professional development for flipped learning practitioners worldwide. Therefore, rather than coping with the challenges of the transition to flipped learning alone, the practitioners of flipped learning should benefit from being a member of an accredited global community, which supplies its members with the fundamental knowledge behind flipped learning course design as well as best practices in flipped learning worldwide.

Finally, regarding the unexpected scenarios that may result in having less face-to-face time with students in the teaching environment, as is the case with the COVID-19 pandemic, the flipped learning practitioner should keep asking themself the question, 'What is the best use of my face-to-face class time with students in these unexpected situations?', such as teaching all remote, in some form of hybrid or face-to-face. As mentioned above, at this point, the levels of Bloom's taxonomy should be set as a rubric to design learning spaces. That is to say, lower levels of Bloom's can be done when students study the easier stuff independently in the individual space, and higher levels of Bloom's can be done when students are in a synchronous class studying hard stuff in the group space. In either case, as there will most likely be less face-to-face class time with students, due to sanitary measures, it is the teacher's responsibility to provide support for students in the individual space that will probably increase in time. To consider such possibilities, in case of face-to-face learning, even if there will probably be less in-class time due to sanitary measures, the conventional way of flipped learning will be in practice, but with more support in individual space. As for hybrid mode, where teachers may teach sperate cohorts of the same class in different days while supporting face-to-face teaching via online platforms, the key is to present easier content in online platforms while teaching harder contents or tasks in face-to-face time. While doing so, teachers have to design meaningful tasks when students are working in both learning spaces, again providing more support for higher cognitive tasks that have to be learnt in the individual space due to less in-class time so that deeper learning can be achieved. Finally, in the case of full remote learning, a methodology similar to hybrid mode may be followed, but exchanging the face-to-face time with synchronous online sessions this time. That is, the easier content can be introduced to the students via online platforms while harder content that may require social interaction and the presence of the teacher can be delivered in synchronous online sessions as if in face-to-face sessions. In either case, flipped learning strategy enables teachers the flexibility to adapt to such unexpected scenarios, with its key principle to consider the best use of face-to-face time with students, keeping in mind the use of Bloom's taxonomy while designing the learning spaces.

Implications for language teachers interested in flipped learning.

In a typical language class held in a foreign language setting, it is possible to have different groups of learners from varied language proficiencies, which requires teachers to provide supplementary materials or tasks to handle in class so that low-achievers can catch up with their peers as much as possible. What the flipped learning strategy supplies teachers with is to enable differentiation in the design of learning materials and tasks in teaching practice. Accordingly, teachers having learners of varied language backgrounds may create a supplementary archive of lecture videos on basic grammar rules, pronunciation tips, or instructions on sentence making, depending on the learners' needs and demands in addition to the lecture videos related to the specific content. Such an archive will likely to support learners' language learning process so that learners can check language content whenever and wherever they prefer and as many times as they need to fully develop an understanding.

As the authentic listening experience plays a huge role in improving EFL learners' listening comprehension, in a flipped language class, teachers may expose learners to listening audio or video clips in the individual space. Similarly, online platforms can be more socialized through forums for extra listening, speaking and writing practice for learners; for instance, learners may be asked to send audio files to respond to certain speaking topics in an EGP course or rehearse occupational skills in an ESP course. To handle such interactive exercises, online tools can be utilized, especially for speaking and listening practice.

As the formative assessment is ongoing in the flipped learning environment, in order to serve for 'assessment for learning' principle, flipped language teachers may ask learners to keep portfolio or webfolio to evaluate their performances by supplying individualized feedback to reinforce their learning. As mentioned earlier, by performing scaffolding, individualization, and differentiation through making use of portfolio or webfolio in a flipped class, teachers adjust their teaching and learning material to help unique needs of their students as well as giving them individualized feedback and assistance. In a flipped class, it is the teachers' responsibility to maximize the efficiency of portfolio or webfolios use by providing personal feedback to meet students' learning needs and by encouraging reflection to help them become self-directed learners in a flipped class.

Implications for teachers who teach EAPP and are interested in flipped learning.

The flipped EAPP syllabus suggested in the present action research is proposed as the end-product of a teacher's attempt to find a solution to a practical problem in her teaching environment. Therefore, the pool of learning outcomes, due to the nature of ESP course

design, pertain to the suggestions of the particular group of participants in the context of the study. That is to say, the flipped EAPP syllabus proposed in the present study is a suggestion to be implemented in similar contexts, but it should be born in mind that each ESP context is already unique in its own setting, and thus, brings in its own contextual features to the learning environment, which may or may not be compatible with those of the present study environment. Accordingly, the ESP practitioners should be aware of such parameters while adapting the present syllabus to their contexts, considering the expectations of their particular group of learners, which may result in supplementary learning outcomes in addition to those of the present study. All in all, the process of designing the present syllabus is hoped to serve as a practical example of how to design an ESP course, beginning from the needs analysis phase to the phases of implementation and evaluation processes.

The scope of the syllabus is introduced to serve for teaching EAPP because the intention behind to add 'academic' dimension to the scope derives from the necessity to support the language needs of ESP learners in an EFL environment. Therefore, as mentioned above, the EAPP practitioners should take into consideration the language support EFL learners need due to the contextual disadvantages they have. Additionally, the word 'academic' also refers to the course being held at a higher education setting, which may require EAP skills in case the medium of instruction is English, rather than a professional setting, as suggested by Belcher (2009).

As mentioned earlier, in the ESP course design to be held in a higher education setting, all the stakeholders should be included in decision-making processes in the long-run. Otherwise, in terms of content delivery in English, lecturers of English naturally lack necessary departmental knowledge, which decreases the efficiency of teaching and practising occupational tasks in English. On the other hand, faculty members or other content experts are not adequately knowledgeable about teaching English while delivering occupational content, but rather they transform ESP courses into translation courses, where only grammar teaching and translation are the dominant methods to practice English. Therefore, faculty members or other content experts and lecturers of English are supposed to collaborate on generating learning outcomes to use English for pharmaceutical purposes, considering the weight of English courses in the program curriculum in the long-term. Similarly, practitioners who wish to teach EAPP course may expand the duration of the syllabus from one academic semester, as is the case in the present study, to two academic semesters or more by adding more learning outcomes emerged in the needs analysis phase the researcher conducted at the beginning of the action research.

Finally, the present study was conducted in a small-scale city in the eastern part of Turkey, and therefore, it was not much common to see a foreign patient visiting the pharmacy store on an ordinary day. However, the ESP practitioners who teach in an ESL environment, or in a larger city or a touristic spot in an EFL setting where the foreign population is high may design tasks to be handled directly in pharmacy stores so that learners contact with foreign patients and rehearse what they have learnt in ESP courses while engaging in patient counselling dialogues with them. As mentioned previously, the contextual advantages or disadvantages determine the scope of ESP syllabuses, and it is the ESP practitioners' responsibility to consider such contextual features while designing and implementing the ESP syllabuses.

Recommendations for Further Research

Researchers who would like to conduct action research in a similar context may benefit from the limitations of the current action research, which do not necessarily reduce the contribution of the current study to design a flipped EAPP syllabus for pharmacy students, but they definitely need to be considered in future research.

To begin with, the present action research depends solely on qualitative data sources, depending on participants' meaning-making of their experiences, as is the case with the learners and the researcher herself; and suggestions based on their expertise, as is the case with lecturers of English and faculty members. The reason for listening to the voices of all the parties involved in the learning environment enabled the researcher to have multiple perspectives to suggest a practical solution that may satisfy the expectations of all. Therefore, practical action research was preferred to concentrate on improving the quality of educational practice in a specific setting with a narrow context of teaching English for pharmaceutical purposes, relying on naturally occurring events in local grounds to discover the lived experience of participants. However, in case researchers wish to concentrate on the efficiency of the learning outcomes of the syllabus, the present study may need supporting quantitative data as well. Researchers may conduct studies in mixed-methods design to determine the efficiency of learning outcomes on specific learner characteristics via attitude scales, achievement tests or portfolio assessment so that the practitioners can contribute to the variety of activities in the syllabus according to the evaluation of learner characteristics of the particular group of learners.

Similarly, due to the aim of present action research, which is to make on-site decisions as the action takes place to solve a specific problem in the research site, researchers' priorities require shorter-term solutions as is the case with the current action research; however, some

further studies on needs analysis or syllabus evaluation analysis can be conducted to design an EAPP syllabus on a larger scale. In the present study, to enrich the pool of learning outcomes composed of the faculty members' suggestions, the researcher also reviewed the present syllabuses of occupational English courses in the 29 faculties of pharmacy that are active in education in 2017. Among these 29 faculties, only 7 of them, including the researcher's institution, published course contents online in their undergraduate course information packages and involved occupational English courses in their curriculums at the same time. In addition to the duration of time, the researcher also analysed the syllabus content of the existing occupational English courses at different faculties of pharmacy in terms of pharmaceutical contexts and language skills. Supporting the results of this analysis, the ESP teachers who teach the occupational English courses in these faculties and faculty members of these faculties as content experts may be involved in the evaluation of the existing occupational English course syllabuses in a larger-scale study. With reference to this larger-scale evaluation of occupational English syllabus at faculties of pharmacy, further needs analysis studies can be conducted to serve for the design of an EAPP syllabus that appeals to the needs and pharmaceutical language learning demands of larger populations in Turkey. Similar studies can be conducted to serve for generating syllabuses for occupational English courses of different domains as well.

Moreover, the knowledgeable people who are content experts in their fields play an important role in generating learning outcomes for an ESP course because they are the actual members of the particular community of practice, and thus, they supply the ESP teacher with the contextual language needs of ESP learners in such settings. When the academic and/or professional background of the participants vary, then the pool of learning outcomes becomes enriched and appeals to varied language profiles. Therefore, within the specific pharmacy domain, researchers may also expand the scope of their needs analysis by involving the pharmacists themselves or the people responsible in human resources unit of pharmaceutical companies in the process of generating learning outcomes by asking their opinions on what kind of occupational skills are handled in English so that such suggestions can be added to the syllabus scope of the targeted larger-scale EAPP syllabus.

Finally, researchers may benefit from action research design as a powerful tool of professional development for in-service teachers who are interested in flipped learning strategy as well as in any other aspects that are aimed to be developed in their professional identity. To realize action research on developing a flipped learning environment, teachers may collaborate on syllabus design, implementation and evaluation phases of course

development. Within the ESP domain, as mentioned above, action research on needs analysis, program evaluation, or developing innovative teaching methods in classes can be conducted as well as digitalizing their learning environment to create flipped learning experience better, especially, regarding the unexpected scenarios that may result in differences in teaching practice, as is the case with the COVID-19 pandemic. Through in-service training, teachers may also be given chances to conduct action research in their environment and exchange their ideas with their colleagues on a professional platform, which will contribute to teaching endeavour on a professional lifelong learning basis. Such projects may be handled nationwide composed of specific branches in education as well.

Concluding Remarks

As a result of the present action research, by listening to the voices of all the stakeholders on the learning outcomes of the flipped EAPP syllabus from the aspects of the pharmaceutical and language content, and the flipped learning strategy, it can be stated that the present action research has reached its goal to design a flipped EAPP syllabus for students at the faculty of pharmacy, where the researcher challenged her practices as a teacher and made a difference in her teaching environment via reflective thinking.

The researcher regards all the process as a gain in her professional development. To begin with, her teaching practice has improved when compared to the very beginning of the study, especially in designing more interactive in-class activities and engaging lecture videos for a flipped class. Following the cycles of action research when the problematic situations emerged during the design and implementation phases of the study, the researcher searched for best practices in flipped learning practice, and syllabus design in the course of time. For instance, having finished the implementation of the flipped EAPP syllabus, the researcher attended 'Flipped Learning 3.0 Global Standards Summit' held at Modern Eğitim& Fen [i.e. Modern Education& Science] (henceforth, MEF) University in Istanbul, Turkey, on November the 13th, 2018, where she could meet the pioneers of flipped learning and hundreds of practitioners who transferred their knowledge and experience with one another. Attending such an event motivated the researcher to become a member of the global flipped learning community, and then, she attended two accredited flipped learning online certificate courses as well, which contributed much to her professional development as a flipped learning practitioner. As for her identity as an ESP practitioner, the researcher also observed the high contribution of the present study in her syllabus design skills. Relying on the empirical data in the literature on best practices of syllabus design and involving in the experience of syllabus design from scratch enabled the researcher to learn phases of course design while in action.

Collaborating with all the stakeholders in the whole process of design and implementation of the flipped EAPP syllabus and evaluation of her teaching practice helped the researcher to engage in teamwork and develop a professional identity. All these endeavours to become a better practitioner of flipped learning in ESP field have planted the seeds of taking the responsibility to convey her experience and knowledge to all the stakeholders involved in teaching practice in ELT field in the higher education sector. Therefore, beginning with the inspiration of the present study, the researcher aims at conducting further research on enhancing syllabus design phases of flipped learning strategy in ELT, and especially in the ESP field.

Moreover, adding the implementation of the first version of the syllabus into the entire design process of the revised version helped the researcher to upgrade her teaching and syllabus design practices as well as building up her reflective thinking habits while engaging in action, which contributed much to her professional development. The researcher mainly benefitted from the ongoing evaluation phases of the action research which also coincide with the steps in generating the syllabus design. As the researcher faced her weaknesses in her teaching practice and focused on remedies to mend and reform the problematic situations in practice, she gained an understanding of her previous practices. In order to do so, the researcher followed the basic four-step cyclical process in action research, which are planning, taking action, evaluating the action, and leading to further planning. Through this dynamic process, the researcher handled the cycles concurrently, which means gathering scientific knowledge while simultaneously involving in action. Therefore, the researcher acknowledges the contributions of the reflection cycles in action research design to her professional development. Eventually, the action research is an ongoing process in practitioners' professional lives; thus, the end result is always open to innovations either in teaching practice or in designing syllabuses in new learning strategies as the best is yet to come.

It is hoped that the dissertation will satisfy the existing need in the higher education sector by providing a flipped EAPP syllabus for pharmacy students at university, and an example of an action research process as a model of professional development practice on the design, implementation and evaluation processes of teaching an EAPP course in a flipped learning environment at a tertiary level EFL setting.

REFERENCES

Abaeian, H., & Samadi, L. (2016). The effect of flipped classroom on Iranian EFL learners' L2 reading comprehension: Focusing on different proficiency levels. *Journal of Applied Linguistics and Language Research, 3*(6), 295-304. Retrieved from http://www.jallr.com/index.php/JALLR/article/view/442

Abu Bakar, A. H., Abidin, N. A. Z., Ali, Z., Isa, N. M., Sahar, N. S. (2018). Teachers' perceptions of the use of flipped learning approach in learning grammar. *Journal of Global Business and Social Entrepreneurship (GBSE), 4* (13), 66-73. Retrieved from http://gbse.com.my/V4%20NO.13%20(DECEMBER2018)/Paper-195-.pdf

[Active learning lab]. (2018)[Digital image]. Retrieved from https://blogs.shu.ac.uk/learningspaces/classroomconfigurations/?doing_wp_cron=1530 61395.1148529052734375000000

Adnan, M. (2017). Perceptions of senior-year ELT students for flipped classroom: A materials development course. *Computer Assisted Language Learning, 30* (3-4), 204-222. doi: 10.1080/09588221.2017.1301958

Ahmad, S. Z. (2016). The flipped classroom model to develop Egyptian EFL students' listening comprehension. *English Language Teaching, 9*(9). doi: 10.5539/elt.v9n9p166

Ahmed, H. D., & Asiksoy, G. (2018). Flipped classroom in language studies: A content analysis of recent articles. *Near East University Online Journal of Education (NEUJE),1*(1), 11-19. Retrieved from https://dergipark.org.tr/tr/pub/neuje/issue/42721/515508

Ahmed, M. A. A. (2016). The effect of a flipping classroom on writing skill in English as a foreign language and students' attitude towards flipping. *US-China Foreign Language, 14*(2), 98-114. doi: 10.17265/1539-8080/2016.02.003

Akçayır, G., & Akçayır, M. (2018). The flipped classroom: A review of its advantages and challenges. *Computers & Education, 126*,334- 345. doi: 10.1016/j.compedu.2018.07.021

Akçor, G. (2018). *Exploring the perceptions of pre-service English language teachers of flipped classroom* (Master thesis). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=hcgrYffRbz0Z44UJEuLtwaj Y2vbIxhi8vu5dYd4LIwUb7dfWZbOhycMDACl1hU_B (Thesis ID. 515728).

Alderson, J. C., & Urquhart, A.H. (Eds.), (1984). *Reading in a foreign language*. London: Longman.

Aliyasin, H., & Pouyan, P. (2014). An investigation into Iranian university students' views about who should teach ESP courses: A specialist-in the field instructor, or an EFL teacher? *English Language Teaching, 1*(1), 75-96. Retrieved from http://jmrels.journals.ikiu.ac.ir/article_444_5a064f574bb6458439fb4917a93d6217.pdf

Allen, J.P.B. (1978). Teaching the communicative use of English. In R. Mackay & A. Mountford (Eds.), *English for Specific Purposes* (pp. 56-77). London: Longman.

Allen, J. P. B. & Widdowson, H. G. (1975). *English in focus series*. Oxford: Oxford University Press.

Allwright, J. & Allwright, M. (1977). An approach to the teaching of medical English. In S. Holden (Ed.), *English for Specific Purposes* (pp. 58-62). Oxford: Modern English Publications.

Alnuhayt, S. S. (2018). Investigating the use of the flipped classroom method in an EFL vocabulary course. *Journal of Language Teaching and Research, 9*(2), 236-242. doi: 10.17507/jltr.0902.03

Alousque, I. N. (2016). Developments in ESP: From register analysis to a genre- based and CLIL- based approach. *Revista de Lenguas para Fines Especificos, 22*(1), 190-212. doi: 10.20420/rlfe.2016.0096

Alpat, M. F. (2019). *The effect of flipped learning-supported critical thinking instruction on the critical disposition and l2 writing skills* (Master thesis). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=Mir2lXQK1dkmQ9Ige3PZbngbP4b1CMzH2CFnv2WE0TxY88LvVsSAPrYU1yEeNHU3 (Thesis ID. 557254). Alsowat, H. (2016). An EFL flipped classroom teaching model: Effects on English language higher-order thinking skills, student engagement and satisfaction. *Journal of Education and Practice, 7*(9). Retrieved from https://www.iiste.org/Journals/index.php/JEP/article/view/29629/30422

Alvarez, B. (2012). Flipping the classroom: Homework in class, lessons at home. *Education Digest: Essential Readings Condensed for Quick Review, 77*(8), 18-21. Retrieved from https://search.proquest.com/docview/1008666019/fulltextPDF/55F4631712C7447APQ/1?accountid=8403

Amiryousefi, M. (2017). The incorporation of flipped learning into conventional classes to enhance EFL learners' L2 speaking, L2 listening, and engagement. *Innovation in Language Learning and Teaching, 13*(2), 147-161. doi:10.1080/17501229.2017.1394307

Amiryousefi, M. (2019). The incorporation of flipped learning into conventional classes to enhance EFL learners' L2 speaking, L2 listening, and engagement. *Innovation in Language Learning and Teaching,13*(2),147-161.doi: 10.1080/17501229.2017.1394307

Asghar, J.(2013). Critical paradigm: A preamble for novice researchers. *Life Science Journal.* 10(4), 3121-3127.

Asri, A. N., & Rochmawati, D. (2016, September). *Technological tools for English language teaching flipped classrooms.* Paper presented at the 63rd International TEFLIN Conference, Universitas PGRI Adi Buana, Surabaya. Retrieved from https://www.researchgate.net/publication/329641414_Technological_Tools_for_English_Language_Teaching_Flipped_Classrooms

Aydemir, E. (2019). *The impact of flipped classroom approach on the reading and writing achievement, self-regulated learning, and classroom interaction of pre-service English teachers* (Doctoral dissertation). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=jNRDC1RLfVd4_T7x7ZXm medSmbpSty01TkHiH4Uv--ba8k5DpwzR7CiPacF9HxyE (Thesis ID. 570398).

Badea, S. (2016). ESP developments: Stages and core concepts. In I. Boldea & C. Sigmirean (Eds.), *Multicultural representations. Literature and Discourse as Forms of Dialogue, Section: Language and Discourse* (1st ed., *pp*. 124-129). Tirgu Mureş: Arhipelag XXI Press.

Bahlai, O., Machynska, N., Matviiv-Lozynska, Y., Senkovych, O., & Voloshyn, M. (2019). Developing students' intercultural communicative competence in foreign language classroom. *Advanced Education, Special Issue 11,* 55-59. doi:10.20535/2410-8286.158078

Baker, J. W. (2000). The "Classroom Flip": Using web course management tools to become the guide by the side. In J. A. Chambers (Ed.), *Selected papers from the 11th*

International Conference on College Teaching and Learning (pp. 9-17). Jacksonville, FL: Florida Community College at Jacksonville.

Bakla, A. (2017). Interactive videos in foreign language instruction: A new gadget in your toolbox. *Mersin University Journal of the Faculty of Education, 13*(1),124-137. doi:10.17860/mersinefd.305769

Başal, A. (2015). The implementation of a flipped classroom in foreign language teaching. *Turkish Online Journal of Distance Education, 16*(4). doi: 10.17718/tojde.72185

Basturkmen, H. (2006). *Ideas and options in English for specific purposes*. Mahwah, New Jersey, London: Lawrence Erlbaum Associates, Inc., Publishers.

Basturkmen, H. (2010). *Developing courses in English for specific purposes*. London: Palgrave Macmillan.

Basturkmen, H., & Elder, C. (2004). The practice of LSP. In A. Davies & C. Elder (Eds.), *The handbook of applied linguistics* (1st ed., *pp.* 672-694*)*. Oxford: Blackwell Publishing.

Bates, M. & Dudley-Evans, T. (1976). *Nucleus. English for science and technology*. London: Longman.

Bauer- Ramazani, C., Graney, J. M., Marshall, H. W., & Sabieh, C. (2016). Flipped learning in TESOL: Definitions, approaches, and implementation. *TESOL Journal, 7*(2), 429-437. doi:10.1002/tesj.250

Belcher, D. (2006). English for specific purposes: Teaching to perceived needs and imagined futures in worlds of work, study and everyday life. *TESOL Quarterly, 40*(1), 133-156. doi: 10.2307/40264514

Belcher, D. (2009).What ESP is and can be: An introduction. In D. Belcher (Ed.), *English for specific purposes in theory and practice* (1st ed., *pp*.1-20). MI: Michigan ELT.

Berardo, M. (2017). On creating an English for specific purposes course for pharmacy. *Issues in Language Instruction at the Applied English Center, 6*(1), 18-28. Retrieved from https://journals.ku.edu/ili/article/download/7028/6361

Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day.* Washington, DC: International Society for Technology in Education.

Bergmann, J., & Sams, A. (2014). *Flipped learning: Gateway to student engagement.* Washington, DC: International Society for Technology in Education.

Bhatia, V., Anthony, L., & Noguchi, J. (2011). ESP in the 21st Century: ESP Theory and Application Today. Paper presented at the JACET 50th Commemorative International Convention (JACET 50). pp. 143-150. Fukuoka, Japan: Seinan Gakuin University. Retrieved from http://www.laurenceanthony.net/research/20110830_0902_jacet_ national_ pres/ jacet50_bhatia_anthony_noguchi.pdf

Bhatia, V. K. (1993). *Analysing genre: Language use in professional settings.* London: Longman.

Bhatia, V. K. (2004). *Worlds of Written Discourse: A Genre-Based View*. London: Continuum.

Bhatia, V. K. (2008). Genre analysis, ESP and professional practice. *English for Specific Purposes, 27* (2), 161-174. doi: 10.1016/j.esp.2007.07.005

Biber, D., Connor, U. & Upton, T.A. (2007). *Discourse on the move, using corpus analysis to describe discourse structure.* Amsterdam/Philadelphia: John Benjamins.

Bishop, J. L., & Verleger, M. A. (2013). The flipped classroom: A survey of the research. Paper presented at the 120th ASEE Annual Conference & Exposition. Atlanta, GA.

Bley-Vroman R. (1978). Purpose, device and level in rhetorical theory. In M.T. Trimble, L. Trimble, & K. Drobnic (Eds.), *English for Specific Purposes: Science and Technology* (pp. 278- 88). English Language Institute: Oregon State University.

Bocanegra-Valle, V. (2010). Evaluating and designing materials for the ESP classroom. In M.F. Ruiz-Garrido, J.C. Palmer- Silveira & I. Fortanet- Gómez (Eds.), *English for professional and academic purposes* (1st ed., *pp.* 141-166*).* Amsterdam: Rodopi.

Bogdan, R. C.& Biklen, S. K. (2007). *Qualitative research in education: An introduction to theory and methods* (5th ed.). London: Pearson Education, Inc.

Bohman, J. (2013). Critical Theory, The Stanford Encyclopaedia of Philosophy. Edward N. Zalta (Ed.). Retrieved from https://plato.stanford.edu/entries/critical-theory/ (7 June 2018).

Bowen, R. S. (2017). Understanding by design. Vanderbilt University Center for Teaching [Web log post] Retrieved [2019, December 1] from https://cft.vanderbilt.edu/understanding-by-design/

Boyraz, S., & Ocak, G. (2017). Implementation of flipped education into Turkish EFL teaching context. *Journal of Language and Linguistic Studies, 13*(2), 426-439. Retrieved from http://www.jlls.org/index.php/jlls/article/view/728

Brown, J. D. (1995). *The elements of language curriculum*. Boston, MA: Heinle & Heinle.

Brown, A. F. (2018). Implementing the flipped classroom: Challenges and strategies. In J. Mehring & A. Leis (Eds.), *Innovations in Flipping the Language Classroom* (pp. 11-21). [eBook] doi: 10.1007/978-981-10-6968-0

Brown, C. J. (2018). Flipping the ESL/ EFL academic reading classroom: A group leader discussion activity. In J. Mehring & A. Leis (Eds.), *Innovations in Flipping the Language Classroom* (pp. 147-166). [eBook] doi: 10.1007/978-981-10-6968-0

Buitrago, C. R., & Díaz, J. (2018). Flipping your writing lessons: Optimizing time in your EFL writing classroom. In J. Mehring & A. Leis (Eds.), *Innovations in Flipping the Language Classroom* (*pp.* 69- 91). [eBook] doi: 10.1007/978-981-10-6968-0

Bulut, C. (2018). *Impact of flipped classroom model on EFL learners' grammar achievement: Not only inversion, but also integration* (Master thesis). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=MzP7PYssFqdb3WIjlroAkbP4HbYYOKN6H6_VIeK443Hwl5qZG9eSZPy6Yf01A9-O (Thesis ID. 508187)

Campbell, L.O., Planinz, T., Morris, K., & Truitt, J. (2019). Investigating undergraduate students' viewing behaviors of academic video in formal and informal settings. *College Teaching, 67*(4), 211-221. doi: 10.1080/87567555.2019.1650703

Candlin, C. N., Kirkwood, J.M. & Moore, H. M. (1978). Study skills in English: theoretical issues and practical problems. In R. Mackay & A. Mountford (Eds.), *English for Specific Purposes* (pp. 190-219). London: Longman.

Chambers, F. (1980). A re-evaluation of needs analysis. *ESP Journal, 1* (1), 25-33. doi: 10.1016/0272-2380(80)90007-4

Chavangklang, T., & Suppasetseree, S. (2018). Enhancing Thai EFL university students' reading comprehension through a flipped cooperative classroom. *PEOPLE: International Journal of Social Sciences, 4*(3), 238-261. doi:10.20319/pijss.2018.43.238261

Chen, Y., Wang, Y., Kinshuk, & Chen, N.S. (2014). Is FLIP enough? Or should we use the FLIPPED model instead? *Computers & Education, 79*, 16–27. doi: 10.1016/j.compedu.2014.07.004

Chen Hsieh, J. S., Wu, W.-C. V., & Marek, M. W. (2017). Using the flipped classroom to enhance EFL learning. *Computer Assisted Language Learning, 30*(1–2),1–21. doi:10.1080/09588221.2015.1111910

Cheng, W. (2010). What can a corpus tell us about language teaching? In Anne O'Keeffe, Michael McCarthy (Eds.), *The Routledge Handbook of Corpus Linguistics*, (*pp.* 319-332). Abingdon: Routledge.

Chien, Y. T., Chang, Y. H., & Chang, C. Y. (2016). Do we click in the right way? A meta-analytic review of clicker-integrated instruction. Educational Research Review, 17, 1–18. doi: 10.1016/j.edurev.2015.10.003

Choe, E., & Seong, M.-H. (2016). A case study of the flipped classroom in a Korean university general English course. *Journal of Pan-Pacific Association of Applied Linguistics, 20*(2), 71-93. Retrieved from https://eric.ed.gov/?id=EJ1129484

Chuang, H. - H., Weng, C.- Y., & Chen, C.- H. (2018). Which students benefit most from a flipped classroom approach to language learning? *British Journal of Educational Technology,49*(1), 56–68. doi: :10.1111/bjet.12530

Close, R. A. (1965). *The English we use for science.* London: Longman.

Coe, R.M. (1994). Teaching genre as process. In A. Freedman & P. Medway (Eds.), *Learning and teaching genre* (pp. 157-169). Portsmouth, NH: Boynton/Cook.

Coghlan, D.& Brannick, T. (2005).*Doing action research in your own organization.* Thousand Oaks, London, New Delhi: Sage Publications.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). London: Routledge.

Connor, U., & Upton, T. (2004). Introduction. In U. Connor 8c T. Upton (Eds.), *Discourse in the professions: Perspectives from corpus linguistics* (pp. 1-8). Amsterdam: John Benjamins.

Correa, M. (2015). Flipping the foreign language classroom and critical pedagogies: A (new) old trend. *Higher Education for the Future, 2* (2), 114–125. doi:10.1177/2347631115584122

Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (2nd ed.). Upper Saddle River, New Jersey: Pearson Prentice Hall.

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, London, New Delhi: Sage Publications.

Cunningham, U. (2016). Language pedagogy and non-transience in the flipped classroom. *Journal of Open, Flexible and Distance Learning, 20*(1), 44- 58. Retrieved from https://files.eric.ed.gov/fulltext/EJ1112349.pdf

Çalişkan, N. (2016). *Examining the influence of flipped classroom on students learning English as a foreign language* (Master thesis). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=OykDDeWBWTL9-Wm52sZBrBAXlymGhS1udBjzN8QGhPnU59N_J1eRyfsmX-ByPE6z (Thesis ID. 445646).

Çavdar, Ö. E. (2017). *Integrating flipped classroom approach into traditional English class* (Master thesis). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=MzP7PYssFqdb3WIjlroAkT-wNabICSQ8rT-rq1VffSUDkDZ9DioADzessLo3MziA (Thesis ID. 508195).

Çevikbaş, M., & Argün, Z. (2017). An innovative learning model in digital age: Flipped classroom. *Journal of Education and Training Studies, 5*(11), 189-200. doi:10.11114/jets.v5i11.2322

Çetin- Köroğlu, Z. (2015). *The effects of flipped instruction on pre-service English language teachers' speaking skills development* (Doctoral dissertation). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=WY5CM7tPNE2z_YM6pBu0t5OR9XU1i4B6drqU9qKbN0mHaX_Aa4VauS0Fe36zU752 (Thesis ID. 419458).

Çetin- Köroğlu, Z., & Çakır, A. (2017). Implementation of flipped instruction in language classrooms: An alternative way to develop speaking skills of pre-service English language teachers. *International Journal of Education and Development Using Information and Communication Technology (IJEDICT), 13* (2), 42-55. Retrieved from https://www.semanticscholar.org/paper/Implementation-of-Flipped-Instruction-in-Language-K%C3%B6ro%C4%9Flu-%C3%87ak%C4%B1r/3cafcfbc14194b098e53e4e176464e930b61d392

Çibik, B. (2017). *The effects of flipped classroom model on learner autonomy* (Master thesis). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=RrI-Krk3A-RkF4YfHofuk_MEZVuFC1OhnlAY-DZwOZS7RxJ0yCrmwnUmX2AOozki (Thesis ID. 483102).

deBoer, M. (2018). Dialogic inquiry as a process in the flipped EFL classroom. In J. Mehring& A. Leis (Eds.), *Innovations in Flipping the Language Classroom* (*pp.* 123-145). [eBook] doi: 10.1007/978-981-10-6968-0

DeLozier, S. J., & Rhodes, M. G. (2016). Flipped classrooms: A review of key ideas and recommendations for practice. *Educational Psychology Review, 29*(1), 141–151. doi: 10.1007/s10648-015-9356-9

Dewi, S., & Chakim, N. (2017). English material development for pharmacy program based on 2013 curriculum at Smk Satria Bhakti Nganjuk. Retain, 5(3), 302-310. Retrieved from https://jurnalmahasiswa.unesa.ac.id/index.php/retain/article/view/21404

Diaz-Gilbert, M. (2004). Vocabulary knowledge of pharmacy students whose first or best language is not English. American Journal of Pharmaceutical Education, 68(4), 1-8. doi: 10.5688/aj680491

Diaz-Gilbert, M. (2009). English for pharmacy writing and oral communication. Philadelphia: Lippincott Williams & Wilkins.

Doman, E., & Webb, M. (2016). The flipped experience for Chinese university students studying English as a foreign language. *TESOL Journal, 8*(1), 102- 141. doi: 10.1002/tesj.264

Douglas, D. (2013). ESP and assessment. In B. Paltridge & S. Starfield (Eds.), *The handbook of English for specific purposes,* (1st ed., *pp*.367-383). Malden, Ma. : John Wiley & Sons Inc.

Douligeris, C., Seralidou, E., & Gkotsiopoulos, P. (2018). Let's learn with Kahoot! In *IEEE Global Engineering Education Conference (EDUCON)* (pp. 677-685). Tenerife,Spain.doi: 10.1109/EDUCON.2018.8363296.

Duan, W., & Chen, H. (2019, June). *Development and application of online tourism English teaching platform.* Paper presented at the 2019 3rd International Workshop on

Education, Big Data and Information Technology, Guilin, China. doi: 10.1145/3352740.3352755

Dudley-Evans, T. (1977). Planning a course for science and engineering students. In S. Holden (Ed.), *English for Specific Purposes* (pp. 38-40). Oxford: Modern English Publications.

Dudley-Evans, T. (1987). *Genre analysis and ESP*. Birmingham: English Language Research.

Dudley-Evans, T. (1994) Genre analysis: An approach for ESP. In M. Coulthard (Ed.), *Advances in written text analysis* (pp. 219–22). London: Routledge.

Dudley-Evans, T. (1995). Common core and specific approach to the teaching of academic writing. In D. Belcher & G. Braine (Eds.), *Academic Writing in a Second Language* (pp. 293- 312). Norwood, N.J.: Ablex.

Dudley-Evans, T. (1997). *Genre: How far can we, should we go? World Englishes, 16* (3), 351-58. doi: 10.1111/1467-971X.00069

Dudley-Evans, T., & St. John, M.J. (1998). *Developments in English for specific purposes: A multi-disciplinary approach.* Cambridge: Cambridge University Press.

Eckerley, C., & Knufmann, W. (1973). *English for Business*. Oxford: Oxford University Press.

Eggins, S. & Martin, J.R. (1997). Genres and registers of discourse. In T. A. van Dijk (Ed.), *Discourse as Structure and Process* (pp. 230-256). London: Sage.

Ekmekçi, E. (2014). *Flipped writing class model with a focus on blended learning* (Doctoral dissertation). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=1zw6GvYMe-q3Hf6HR-3US2Cpg0Pj7AYkSEjYDcCT-gqUcgW1HluIBCs4hUNEaUIj (Thesis ID. 356650).

Ekmekçi, E. (2017). The flipped writing classroom in Turkish EFL context: A comparative study on a new model. *Turkish Online Journal of Distance Education,18*(2), 151-167. doi: 10.17718/tojde.306566

ElDeen, H., & El- Sawy, A. (2018). Flipping EFL university classes with blackboard system. *English Language Teaching, 11*(2), 31-43. doi: 10.5539/elt.v11n2p31

Elfatah, M.A., & Ahmed, A.S. (2016). The effect of a flipping classroom on writing skill in English as a foreign language and students' attitude towards flipping. *US-China Foreign Language,14*(2), 98-114. doi: 10.17265/1539-8080/2016.02.003

Elmaadaway, M.A. (2017). The effects of a flipped classroom approach on class engagement and skill performance in a blackboard course. *British Journal of Educational Technology, 49*(3), 479-491. doi:10.1111/bjet.12553

Engin, M. (2014). Extending the flipped classroom model: Developing second language writing skills through student created digital videos. *Journal of the Scholarship of Teaching and Learning, 14*(5), 12-26. doi: 10.14434/josotlv14i5.12829

Engin, M., & Donanci, S. (2014). Flipping the classroom in an academic writing course. *Journal of Teaching and Learning with Technology, 3* (1), 94-98. doi: 10.14434/jotlt.v3n1.4088

Erdemir, N., & Yangın Ekşi, G. (2019). The perceptions of student teachers about using an online learning environment 'Edmodo' in a 'flipped classroom'. *SDU International Journal of Educational Studies, 6*(2), 174-186. doi: 10.33710/sduijes.638795

Erlinda, R. (2018, Sepember). *Flipped classroom: An inventive learning approach in engaging 21st century learners in digital age.* Paper presented at the 3rd International

Conference on Education, Teachers in the Digital Age, Batusangkar. Retrieved from https://www.semanticscholar.org/paper/FLIPPED-CLASSROOM-%3A-AN-INVENTIVE-LEARNING-APPROACH-Batusangkar-Sumatera/56a164912a65b572ecd1d9a1a75d709e372b443e

Evseeva, A., & Solozhenko, A. (2015, October). Use of flipped classroom technology in language learning. *Procedia- Social and Behavioral Sciences, 206*, 205-209. doi:10.1016/j.sbspro.2015.10.006

Ewer, J. R., & Hughes-Davies, G. (1971). Further notes on developing an English programme for students of science and technology (1), *ELT Journal, 26*(1), 65–70. doi:10.1093/elt/XXVI.1.65

Ewer, J. R., & Latorre, G. (1969). Preparing an English course for students of science. *English Language Teaching, 21*(3), 221-229. doi:10.1093/elt/XXI.3.221

Far, M. (2008). On the relationship between ESP & EGP: A general perspective. *English for Specific Purposes World, 1*(17).Retrieved January 29, 2019 from http://www.esp-world.info/Articles_17/PDF/On%20the%20Relationship%20between%20ESP%20&%20EGP%20(Mohseni%20Far).pdf

Fauzan, A., & Ngabut, M. N. (2018). EFL students' perception on flipped learning in writing class. *Journal on English as a Foreign Language, 8*(2), 115-129.doi: 10.23971/jefl.v8i2.792

Filiz, S.,& Benzet, A. (2018). A content analysis of the studies on the use of flipped classrooms in foreign language education. *World Journal of Education, 8*(4), 72- 86. doi: 10.5430/wje.v8n4p72

Flipped Learning Network (FLN). (2014). *The Four Pillars of F-L-I-P™*. Retrieved from https://flippedlearning.org/definition-of-flipped-learning/

Flowerdew, L. (2000). Using a genre-based framework to teach organizational structure in academic writing. *ELT Journal, 54* (4), 369-78. doi: 10.1093/elt/54.4.369

Flowerdew, L. (2004). The argument for using English specialized corpora to understand academic and professional language. In U. Connor & T. Upton (Eds.), *Discourse in the professions: Perspectives from corpus linguistics* (pp. 11-33). Amsterdam: John Benjamins.

Flowerdew, L. (2005). An integration of corpus-based and genre-based approaches to text analysis in EAP/ESP: Countering criticisms against corpus-based methodologies. *English for Specific Purposes, 24* (3), 321- 332. doi: 10.1016/j.esp.2004.09.002

Fortanet- Gomez, I., & Dudley- Evans, T. (1998). *Genre studies in English for academic purposes.* Castelló de la Plana : Universitat Jaume I.

Freedman, A., & Medway, P. (1994). Introduction: New views of genre and their implications for education. In A. Freedman & P. Medway (Eds.), *Learning and teaching genre* (pp. 1-22). Portsmouth, NH: Boynton/Cook.

Friedenberg, J., Kennedy, D., Lomperis, A., Martin, W., & Westerfield, K. (2003). *Effective practices in workplace language training: Guidelines for providers of workplace English language training services.* Virginia: Teachers of English Speakers of Other Languages, Inc. (TESOL).

Fulton, K. P. (2012). 10 Reasons to Flip. *New Styles of Instruction, 94*(2), 20-24. Retrieved from https://www.jstor.org/stable/41763589?seq=1#metadata_info_tab_contents

García Laborda, J. (2011). Revisiting materials for teaching languages for specific purposes. *The Southeast Asian Journal of English Language Studies, 17*(1), 102-112. Retrieved from http://ejournals.ukm.my/3l/article/view/980

García Laborda, J., & Litzler, M. F. (2015). Current perspectives in teaching English for specific purposes. *Onomàzein: Journal of Linguistics, Philology and Translation, 31*(1), 38-51. doi: 10.7764/onomazein.31.1

Gasmi, A. A. (2016). An exploratory study of students' lived experiences in a blended-flipped writing class. *Arab World English Journal, 3*, 210–226. Retrieved from https://awej.org/index.php/special-issues/67-special-issue-on-call-july-2016/962-afef-ahmed-gasmi

Gatehouse, K. (2001, October). Key issues in English for specific purposes (ESP) curriculum development [online exclusive]. *The Internet TESL Journal*, 7(10). Retrieved from http://iteslj.org/Articles/Gatehouse-ESP.html.

Gavioli, L. (2005). *Exploring corpora for ESP learning*. Amsterdam/ Philadelphia: John Benjamins.

GEEFL. (n.d.). Retrieved from https://flglobal.org/elements/

Gilboy, M. B., Heinerichs, S., & Pazzaglia, G. (2015). Enhancing student engagement using the flipped classroom. *Journal of Nutrition Education and Behavior, 47*(1), 109-114. doi: 10.1016/j.jneb.2014.08.008.

Goh, C.C.M. (2013). ESP and listening. In B. Paltridge & S. Starfield (Eds.), *The handbook of English for specific purposes,* (1st ed., *pp*.55-76). Malden, Ma. : John Wiley & Sons Inc.

González, J. (2014, March 24). *Modifying the flipped classroom: The "in-class version"* [Blog post].Retrieved from https://www.edutopia.org/blog/flipped-classroom-in-class-version-jennifer-gonzalez

González-Pueyo, I., Foz, C., Siso, M. & Luzón, M.J. (Eds.) (2009). *Teaching Academic and Professional English Online.* Bern: Peter Lang.

Gök, D. (2016). *The effect of an online flipped reading classroom model on pre-service English language teachers' foreign language reading anxiety* (Master thesis). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=Br_XTptK8CZ70f0JGX9xElMCueZ_QbKDZVYB6O4kxGxYnJVD8AWZdI4njUm8BAwU (Thesis ID. 429767).

Grabowski, L. (2013). Register variation across English pharmaceutical texts: A corpus-driven study of keywords, lexical bundles and phrase frames in patient information leaflets and summaries of product characteristics. *Procedia- Social and Behavioral Sciences, 95*, 391-401. doi: 10.1016/j.sbspro.2013.10.661

Graham, J. G., & Beardsley, R. S. (1986). English for specific purposes: Content, language, and communication in a pharmacy course model. *TESOL Quarterly, 20*(2), 227-245. doi: 10.2307/3586542

Graney, J. M. (2018). Flipped learning and formative assessment in an English language class. In J. Mehring &A. Leis (Eds.), *Innovations in Flipping the Language Classroom* (pp. 59- 68). [eBook] doi: 10.1007/978-981-10-6968-0

Graves, K. (2000). *Designing language courses: A guide for teachers*. Boston: Heinle& Heinle.

Grellet, F. (1981). *Developing reading skills.* Cambridge: Cambridge University Press.

Grix, J. (2004). *The foundations of research*. London: Palgrave Macmillan.

Guba, E. G. & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In Denzin, N.K. & Lincoln, Y.S. *Handbook of qualitative research* (3rd ed.) (*pp*. 105-117). California: Sage.

Guy, R., & Marquis, G. (2016). The flipped classroom: A comparison of student performance using instructional videos and podcasts versus the lecture-based model of instruction. *Issues in Informing Science and Information Technology, 13*, 1-13. doi: 10.28945/3461

Güler, A., Halıcıoğlu, M.B.& Taşğın, S. (2013). *Sosyal bilimlerde nitel araştırma.*[Qualitative research in social sciences]. Ankara: Seçkin Yayıncılık.

Gürlüyer, M. (2019). *Examining EFL students' achievements and perceptions in terms of writing skills in flipped classroom environment* (Master thesis). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=T1mWGp9MngYYkCSgiJvtVu_Ef-nzzdqkBz2gPKrfxV9V8TyOOzziExN_SkZX2-JD (Thesis ID. 543516).

Güvenç, G. (2018). The flipped classroom approach in teaching writing: An action research. *International Journal of Social Sciences and Education Research Online*, *4*(3), 421-432. doi: 10.24289/ijsser.434493

Haghighi, H., Jafarigohar, M., Khoshsima, H., & Vahdany, F. (2018). Impact of flipped classroom on EFL learners' appropriate use of refusal: Achievement, participation, perception, *Computer Assisted Language Learning*, *32*(3), 261-293. doi: 10.1080/09588221.2018.1504083

Halliday, M. A. K., Mclntosh, A., & Strevens, P. (1964). The linguistic sciences and language teaching. London: Longman.

Han, Y. J. (2015). Successfully flipping the ESL classroom for learner autonomy. NYS TESOL Journal, *2*(1), 98- 109. Retrieved from http://journal.nystesol.org/jan2015/Han_98- 109_NYSTJ_Vol2Iss1_Jan2015.pdf

Han, Y. J. (2018). Flipping tech- enhanced, content- based EAP courses with online content. In J. Mehring &A. Leis (Eds.), *Innovations in Flipping the Language Classroom* (pp. 203- 220). [eBook] doi: 10.1007/978-981-10-6968-0

Herbert, A. J. (1965). *The structure of technical English*. London: Longman.

Homma, J. E. B. (2015). Learner autonomy and practice in a flipped EFL classroom: Perception and perspectives in new digital environments. *NCID, 52*(2), 253- 275. Retrieved from https://cuc.repo.nii.ac.jp/?action=repository_action_common_download&item_id=2543&item_no=1&attribute_id=18&file_no=1

Hopkins, A. & Dudley-Evans, T. (1988). A genre-based investigation of the discussion sections in articles and dissertations. *English for Specific Purposes*, *7* (2), 113-121. doi: 10.1016/0889-4906(88)90029-4

Huddleston, R. D., Hudson, R.A., Winter, E.O., & Henrici, A. (1968). *Sentence and clause in scientific English, mimeo.* London: Communication Research Centre, Department of General Linguistics, University College.

Hung, H.-T. (2015). Flipping the classroom for English language learners to foster active learning. Computer Assisted Language Learning, 28(1), 81-96. doi: 10.1080/09588221.2014.967701

Hung, H.-T. (2017a). Design-based research: Redesign of an English language course using a flipped classroom approach. *TESOL Quarterly*, *51*(1), 180-192. doi: 10.1002/tesq.328

Hung, H.-T. (2017b). The integration of a student response system in flipped classrooms. *Language Learning & Technology, 21*(1), 16–27. Retrieved from http://llt.msu.edu/issues/february2017/hung.pdf

Hung, H.-T. (2017c). The integration of a student response system in flipped classrooms. *Language Learning & Technology, 21*(1), 16–27. Retrieved from http://llt.msu.edu/issues/february2017/hung.pdf

Hunsu, N. J., Adesope, O., & Bayly, D. J. (2016). A meta-analysis of the effects of audience response systems (clicker-based technologies) on cognition and affect. *Computers & Education, 94*, 102–119. doi: 10.1016/j.compedu.2015.11.013

Hussin, V. (2013). Student and teacher reflections on indirectness as a pragmatic feature of pharmacist- patient simulations. *English for Specific Purposes, 32* (2), 110-121. doi: 10.1016/j.esp.2013.01.001

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

Hyland, K. 2000. *Disciplinary discourses: Social interactions in academic writing.* Harlow, U.K.: Longman.

Hyland, K. (2004). *Genre and second language writing.* Ann Arbor: University of Michigan Press.

Hyon, S. (1996). Genre in three traditions: Implications for ESL. *TESOL Quarterly, 30*, 693-722. doi: 10.2307/3587930

Insani, H. N., Suherdi, D., & Gustine, G. G. (2018). Undergraduate students' perspectivesin using Edmodo as an educational social network. *English review: Journal of English education, 6*(2), 61-68. doi: 10.25134/erjee.v6i2.1254.

International Definition. (n.d.). Retrieved from https://flglobal.org/international_definition/

İyitoğlu, O. (2018). *The impact of flipped classroom model on EFL learners' academic achievement, attitudes and self-efficacy beliefs: A mixed method study* (Doctoral dissertation).Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=vbVkXe1KChYWNElr1MuLZkpu-sPxVt1SJA_ID73K4zv3D6DCRUB5UA38O1odQvY0 (Thesis ID. 491434).

Jafarigohar, M., Haghighi, H., Khoshsima, H., & Vahdany, F. (2019). Incorporation of flipped learning into EFL classrooms performance and perception. *Iranian Journal of English for Academic Purposes, 8*(3), 1- 14. Retrieved from http://journalscmu.sinaweb.net/article_92139.html

Jehma, H. (2016). Flipped learning as a strategy for an effective EFL classroom. In P. Robertson, J. Adamson, & A. Damnet (Eds.), *The Asian EFL Journal Professional Teaching Articles, 90* (pp. 54- 65). Australia: The English Language Education Publishing. Retrieved from http://asian-efl-journal.com/wp-content/uploads/AEJ- TA-90-February-2016f.pdf

Johns, A.M. (1997). *Text, Role and Context: Developing Academic Literacies*. Cambridge: Cambridge University Press

Johns, A. M., & Dudley- Evans, T. (1991). International in scope, specific in purpose. *TESOL Quarterly, 25*(2), 297-314. doi: 10.2307/3587465

Johns, A.M., & Price, D. (2014). English for specific purposes: International in scope, specific in purpose. In M. Celce-Murcia, D. Brinton & M.A. Snow (Eds.), *Teaching English as a second or foreign language,* (4th ed., *pp.* 471-487). Boston: National Geographic Learning.

Johnson, A. P. (2015). *Eylem araştırması el kitabı*[A short guide to action research]. (4th ed., Trans. Eds. Y. Uzuner& M. Özten Anay). Ankara: Anı Yayıncılık.

Kabakçı Yurdakul, I. (2016). Nitel Veri Analizinin Temelleri.[The Fundamentals of Qualitative Data Analysis]. In I. Kabakçı Yurdakul (Ed.). *Nitel veri analizinde adım adım NVivo kullanımı.*[Using NVivo in Qualitative Data Analysis: A step-by-step guide].(p. 1-20). (1st ed.). Ankara: Anı Yayıncılık.

Kang, N. (2015). The comparison between regular and flipped classrooms for EFL Korean adult learners. *Multimedia- assisted language learning, 18*(3), 41- 72. doi: 10. 15702/mall.2015.18.3.41

Kang, N. (2018). Flipping student-athletes' ESP course using teacher-crafted YouTube videos and an OMP strategy. *STEM Journal, 19* (3), 83-108. doi: 10.16875/stem.2018.19.3.83

Karakurt, L. (2018). *Flipped and blended grammar instruction for b1 level EFL classes at tertiary education* (Master thesis). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=hcgrYffRbz0Z44UJEuLtwRViYxkKkvCgkFvd8tfH4t9OcS29-lxcibvNz9pIfpSN (Thesis ID. 516091).

Karapetian, A. O. (2020). Creating ESP-based language learning environment to foster critical thinking capabilities in students' papers. *European Journal of Educational Research, 9*(2), 717-728. doi: 10.12973/eu-jer.9.2.717

Karimi, M., & Hamzavi, R. (2017). The effect of flipped model of instruction on EFL learners' reading comprehension: learners' attitudes in focus. *Advances in Language and Literary Studies, 8*(1), 95 103. doi:10.7575/aiac.alls.v.8n.1p.95

Karagöl, İ., & Esen, E. (2019). The effect of flipped learning approach on academic achievement: A meta-analysis study. *Hacettepe University Journal of Education, 34*(3), 708-727. doi: 10.16986/HUJE.2018046755

Khalil, R. M. R., & Fahim, S. S., (2016). Assessment as a learning tool in a flipped English language classroom in higher education. *Arab World English Journal (AWEJ),*4-19. doi: 10.2139/ssrn.2895534

Khan, I. A. (2017). Revisiting ESP curriculum for pharmacy: An exploratory analysis of EFL learners. *International Research Journal of Human Resources and Social Sciences, 4*(7), 406- 420. Retrieved from http://www.aarf.asia/download.php?filename=../current/2017/Jul/RD5ztDQxqLBzW39.pdf&new=

Khan, S. (2012). *The one world schoolhouse: Education reimagined*. New York, USA: Twelve

Kim, M. K., Kim, S.M., Khera, O., & Getman, J. (2014). The experience of three flipped classrooms in an urban university: An exploration of design principles. *Internet and Higher Education, 22*(1), 37- 50. doi: 10.1016/j.iheduc.2014.04.003

King, A. (1993). From sage on the stage to guide on the side. *College Teaching, 41*(1), 30- 35. Retrieved from http://www.jstor.org/stable/27558571

Kirk, S. J., & Casenove, D. (2015). Flipping the ESP classroom. *OnCUE Journal, 9* (2),119-128.Retrieved from https://jaltcue.org/files/OnCUE/OCJ9.2/OCJ9.2_pp119-128_Kirk_Casenove.pdf

Kivunja, C. & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education,* 6(5), 26-41.

Kobayashi, A., Yazawa, K., Saguchi, K., & Tanaka, S. (2018). Medication counselling in English for Japanese pharmacy students. *JAS4Q0L, 4*(3), 1-10. Retrieved from http://as4qol.org/wordpress/wp-content/uploads/2018/09/jas4qol-4-3-3.20180930.pdf

Kocabatmaz, H. (2016). The ideas of pre-service teachers regarding the flipped classroom model. *Journal of Research in Education and Teaching, 5*(4), 14-24. Retrieved from http://www.jret.org/FileUpload/ks281142/File/02a.handan_kocabatmaz.pdf

Kokkinn, B., & Stupans, I. (2011). Identifying the needs of students with English- as- an- additional- language for pharmacist- patient counselling: An interdisciplinary research approach. *Journal of Academic Language & Learning, 5*(1), A-129-A-138. doi: http://www.journal.aall.org.au/index.php/jall/article/view/141

Kostka, I., & Brinks Lockwood, R. (2015). What's on the internet for flipping English language instruction? *TESL-EJ, 19*(2), 1-12. Retrieved from http://www.tesl-ej.org/pdf/ej74/int.pdf

Kvashnina, O. S., & Martynko, E. A. (2016). Analyzing the potential of flipped classroom in ESL teaching. *International Journal of Emerging Technologies in Learning, 11*(3), 71-73. doi:10.3991/ijet.v11i03.5309

Lackstrom, J.E., Selinker, L., & Trimble, L. (1973). Technical rhetorical principles and grammatical choice, *TESOL Quarterly, 7*(2), 127-136. doi: 10.2307/3585556

Lage, M. J., Platt, G. J., & Treglia, M. (2000). Inverting the classroom: A gateway to creating an inclusive learning environment. *The Journal of Economic Education, 31*(1), 30- 43. doi:10.1080/00220480009596759

Larsen, K. & Cottrell, A. (2006). *Action research: The underlying approach of the understanding communities project (C1) within the bushfire cooperative research centre.* (Briefing Paper: July 2006). Retrieved from http://www.bushfirecrc.com/sites/default/files/managed/resource/c1.0_action_research_project_1_6_09_.pdf

Lee, B. (2017). Tell us ESP in a flipped classroom. *EURASIA Journal of Mathematics Science and Technology Education, 13*(8), 4995- 5007. doi:10.12973/eurasia.2017.00978a

Lee, D., & Swales, J. (2006). A corpus-based EAP course for NNS doctoral students: Moving from available specialized corpora to self-compiled corpora. *English for Specific Purposes, 25*(1), 56–75. doi: 10.1016/j.esp.2005.02.010

Lee, G., & Wallace, A. (2018). Flipped learning in the English as a foreign language classroom: Outcomes and perceptions. *TESOL Quarterly, 52*(1), 62- 84. doi: 10.1002/tesq.372

Lee, J. S., Nakamura, Y., & Sadler, R. (2016). Design and implementation of a videoconferencing- embedded flipped classroom (VEFC) in college-level EFL. *The IALLT Journal, 46*(1), 105-118. doi: 10.17161/iallt.v46i1.8557

Leis, A. (2015). Dynamics of effort in flipped classrooms in an EFL environment. *Educational Informatics Research,14,* 15-26. Retrieved from https://www.semanticscholar.org/paper/Dynamics-of-Effort-in-Flipped-Classrooms-in-an-EFL-Leis/f616d0c8603b03a5f80df5285d66a45344f60838

Leis, A. (2016). Flipped learning and EFL proficiency: An empirical study. *TELES Journal, 36,*77- 90. Retrieved from https://www.researchgate.net/publication/303759005_Flipped_Learning_and_EFL_Proficiency_An_Empirical_Study

Leis, A., & Brown, K. (2018). Flipped learning in an EFL environment: Does the teacher's experience affect learning outcomes? *The EuroCALL Review, 26*(1). doi:10.4995/eurocall.2018.8597

Leis, A., Cooke, S., & Tohei, A. (2015). The effects of flipped classrooms on English composition writing in an EFL environment. *International Journal of Computer-Assisted Language Learning and Teaching, 5*(4), 1-15. doi: 10.4018/IJCALLT.2015100103

Lesiak-Bielawska, E.D. (2015). English for specific purposes in historical perspective. *English for Specific Purposes World,* 46. Retrieved from http://www.esp-world.info/Articles_46/E_Lesiak- Bielawska%20ESPinHistoricalPerspective.pdf

Li, H., & Zhang, Y. (2016, March). *Application of Flipped Classroom in Medical Oral English Teaching.* Paper presented at the 8th International Conference on Measuring Technology and Mechatronics Automation, Macau, China. doi:10.1109/ICMTMA.2016.34

Li, S., & Suwanthep, J. (2017). Integration of flipped classroom model for EFL speaking. *International Journal of Learning and Teaching, 3*(2), 118- 123. doi: 10.18178/ijlt.3.2.118- 123

Li, Z., Wang, H.- M., Wang, D.- G., & Jia, X.- J. (2017). Application of flipped classroom in grammar teaching. In H. Z. Lin (Ed.), *Proceedings of the 3rd Annual International Conference on Social Science and Contemporary Humanity Development (SSCHD 2017)* (pp. 254- 260). Paris, France: Atlantis Press. doi:10.2991/sschd-17.2017.51

Lin, C. J., & Hwang, G. J. (2018). A learning analytics approach to investigating factors affecting EFL students' oral performance in a flipped classroom. *Journal of Educational Technology & Society, 21*(2), 205-219. Retrieved from https://www.j-ets.net/ETS/journals/21_2/18.pdf

Lin, C.-J., Hwang, G.-J., Fu, Q.-K., & Chen, J.-F. (2018). A flipped contextual game-based learning approach to enhancing EFL students' English business writing performance and reflective behaviors. *Educational Technology & Society, 21*(3), 117-131. Retrieved from https://www.jstor.org/stable/26458512

Liu, L. (2017). Discussion on the medical English teaching based on flipped classroom. In W. Jing, X. Ning, & Z. Huiyu (Eds.), *Proceedings of the 7th International Conference on Education, Management, Information and Computer Science* (pp. 813-817). Paris, France: Atlantis Press. doi:10.2991/icemc-17.2017.164

Lo, C. K., & Hwang, G. J. (2018). How to advance our understanding of flipped learning: Directions and a descriptive framework for future research. *Knowledge Management & E-Learning, 10*(4), 441–454. doi: 10.34105/j.kmel.2018.10.027

Long, T., Cummins, J., & Waugh, M. (2017). Use of the flipped classroom instructional model in higher education: Instructors' perspectives. *Journal of Computing in Higher Education, 29*(2),179-200. doi: 10.1007/s12528-016-9119-8

Long, T., Cummins, J., & Waugh, M. (2019). To flip or not in higher education: A tale of three instructors. *The Asia-Pacific Education Researcher.* doi:10.1007/s40299-019-00470-4

Long, T., Logan, J., & Waugh, M. (2016). Students' perceptions of the value of using videos as a pre-class learning experience in the flipped classroom. *TechTrends,60* (3), 245–252.

Luzón, M. J., Ruiz-Madrid, M.N. & Villanueva, M.L. (2010). *Digital Genres, New Literacies and Autonomy in Language Learning.* Newcastle upon Tyne, UK: Cambridge Scholars Publishing.

Lynch, L., & Purnawarman, P. (2004). Electronic portfolio assessments in U.S. educational & instructional technology programs: Are they supporting teacher education? *TechTrends, 48*(1), 50-56. doi:10.1007/BF02784865

Maleki, A. (2008). ESP teaching: A matter of controversy. *ESP-World, 7* (17). Retrieved from http://www.esp-world.info/Articles_17/issue_17.htm

Marks, D.B. (2015). Flipping the classroom: Turning an instructional methods course upside down. *Journal of College Teaching & Learning (TLC), 12*(4), 241–248. doi: 10.19030/tlc.v12i4.9461

Maykut, P.& Morehouse, R. (1994). *Beginning qualitative research: A philosophic and practical guide.* London, Washington: The Falmer Press.

Mayo, M. G., & Antón,V.N. (1995). Needs identification for an ESP pharmacy course. Revista de Lenguas para Fines Específicos, 2(1), 82-94. Retrieved from https://dialnet.unirioja.es/descarga/articulo/175294.pdf

McMillan, J. H. & Schumacher, S. (2006). *Research in education: Evidence- based inquiry* (6th ed.). Boston: Pearson Education, Inc.

McNally, B., Chipperfield, J., Dorsett, P., Fabbro, L.D., Frommolt, V., Goetz, S.,…Rung, A. (2017). Flipped classroom experiences: Student preferences and flip strategy in a higher education context. *Higher Education, 73*(2), 281-298. doi:10.1007/s10734-016-0014-z

McKeown, J. (2016). From "sage on the stage to guide on the side": A case study of a transition to flipped English language learning in a higher education setting in Turkey. *ELT Research Journal, 5*(2), 145-154. Retrieved from http://dergipark.ulakbim.gov.tr/eltrj/article/view/5000194876

Mehring, J. (2015). *An exploratory study of the lived experiences of Japanese undergraduate EFL students in the flipped classroom.* Paper presented at the 4th International Conference on Communications and Information Technology. ICCIT, Abu Dhabi. Retrieved from https://www.semanticscholar.org/paper/An-exploratory-study-of-the-lived-experiences-of-in-Mehring/60c55cc8b938920925a1420faf1b101c98f4d0cd#citing-papers

Mehring, J. (2016). Present research on the flipped classroom and potential tools for the EFL classroom. *Computers in the Schools, 33*(1), 1-10. doi: 10.1080/07380569.2016.1139912

Mehring, J. (2018). The flipped classroom. In J. Mehring &A. Leis (Eds.), *Innovations in Flipping the Language Classroom* (pp. 203- 220).[eBook]doi:10.1007/978-981-10-6968-0

Meléndez, L., & Iza, S. (2017). Application of the flipped classroom methodology in a virtual platform for teaching English language grammar in level B1. *Revista Publicando, 4(*12), 236-246. Retrieved from https://revistapublicando.org/revista/index.php/crv/article/view/655/pdf_462

Melrose, M. J. (1996). Got a Philosophical Match? Does it matter? In O. Zuber-Skerritt(Ed.), *New Directions in Action Research* (p. 41-53). London: The Falmer Press.

Merriam, S. B. (2013). *Nitel araştırma: Desen ve uygulama için bir rehber*[Qualitative Research: A guide to design and implementation]. (3rd ed., Trans. Ed. S. Turan). Ankara: Nobel Yayın Dağıtım.

Meyer, B., & Latham, N. (2008). Implementing electronic portfolios: Benefits, challenges, & suggestions. *Educause Quarterly, 31*(1), 34-41. Retrieved from

https://er.educause.edu/articles/2008/2/implementing-electronic-portfolios-benefits-challenges-and-suggestions

Miles, M.B. & Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook.* (2nd ed.). Thousand Oaks, London, New Delhi: Sage Publications.

Miller, L. (2001). English for engineers in Hong Kong. In J. Murphy & P. Byrd (Eds.), *Understanding the courses we teach* (pp. 236–255). Ann Arbor: University of Michigan Press. doi: 10.3998/mpub.11352

Mo, J., & Mao, C. (2017). An empirical study on the effectiveness of college English reading classroom teaching in the flipped classroom paradigm. *Revista de la Facultad de Ingeniería U.C.V., 32*(10), 632-639. Retrieved from https://pdfs.semanticscholar.org/efd7/db66b71beecc5cef4277a30fc4fc39c26d27.pdf

Mousavi, S. H., Gholami, J., & Sarkhosh, M. (2019). Key stakeholders' attitudes in ESP courses on the right teachers. *International Journal of Instruction, 12*(1), 1041-1058. doi: 10.29333/iji.2019.12167a

Munby. J. (1978). *Communicative Syllabus Design*. Cambridge: Cambridge University Press.

Murphy, R. S. (2018). The concept of syllabus design and curriculum development. In A. Faravani, M. Zeraatpishe, M. Azarnoosh, & H. M. Kargazari (Eds.), *Issues in syllabus design* (1st ed., *pp*.1-23). Rotterdam: Sense Publishers.

Nicholson, D. (2018). Enhancing student engagement through online portfolio assessment. *Practitioner Research in Higher Education, 11*(1), 15-31. Retrieved from https://files.eric.ed.gov/fulltext/EJ1180130.pdf

Nickerson, C. (2018). Mobile and multidimensional: Flipping the business English classroom. *ESP Today, 6*(1), 46-67. doi: 10.18485/esptoday.2018.6.1.4

Nghi, T. T. (2018). Designing network-based materials and applying flipped classroom model in teachıng English for accounting at Ho Chi Minh city university of food industry. *International Conference on Language Teaching 2014 (ICELT)* (pp. 545-576). Ho Chi Minh city: The Youth Publication.doi:10.5281/zenodo.3365466

Nguyen, T. (2018). Implementation of English flipped classrooms: Students' perceptions and teacher's reflection. *International Journal of Research Studies in Language Learning,7*(3), 87-108. doi: 10.5861/ijrsll.2017.1876

Nhat, N. Q., Lee, K. W., & Dung, N. N. P. (2019). Incorporating the flipped classroom model in an ESP class: A quantitative study. *The Asian ESP Journal, 15* (3), 126-163. Retrieved from https://www.elejournals.com/asian-esp-journal/asian-esp-journal-volume-15-issue-3-december-2019/

Norazmi, D., Dwee, C. Y., Suzilla, J., & Nurzarina, A. S. (2017). Exploring student engagement in writing using the flipped classroom approach. *Social Sciences & Humanities, 25*(2), 663– 674. Retrieved from https://core.ac.uk/download/pdf/153832341.pdf#page=177

Nunan, D. (1993). *Syllabus design.* Oxford: Oxford University Press.

Nuttal, C. (1982). *Teaching reading skills in a foreign language.* London: Heinemann Educational Books

O'Flaherty, J., & Phillips, C. (2015). The use of flipped classrooms in higher education: A scoping review. The Internet and Higher Education, 25, 85–95. doi: 10.1016/j.iheduc.2015.02.002

Oki, Y. (2016). Flipping a content-based ESL course: An action research report. *Hawaii Pacific University TESOL Working Paper Series, 14*, 62-75.

Onodipe, G., & Ayadi, M. F. (2020). Using smartphones for formative assessment in the flipped classroom. *Journal of Instructional Pedagogies,23,*1-20. Retrieved from https://eric.ed.gov/?id=EJ1241944

Orr, T. (2002). Introduction. In T. Orr (Ed.), *English for specific purposes* (1st ed., *pp.*1-2). Alexandria, VA: TESOL.

Özkal, C. (2019). *Flipped vocabulary learning among Turkish learners of English as a foreign language: A sequential explanatory mixed method study* (Master thesis). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=FgmkGchPKo23qQqBeqzVZvCBFZ81xPR8y_LDvpaTAYkNSND3OM-3rc_VFr9QuV-u (Thesis ID. 567756).

Özkurkudis, M. J. M., & Bümen, N. T. (2019). Flipping the writing classroom: Using grammar videos to enhance writing. *Journal of Education and Future,* (15), 1-16. Retrieved from https://search.proquest.com/docview/2236677670?accountid=8403

Öznacar, B., Köprülü, F., & Çağlar, M. (2019). The success of implementing flipped classroom in teaching foreign language for international students. *BRAIN: Broad Research in Artificial Intelligence and Neuroscience, 10* (2), 151- 158. Retrieved from http://www.edusoft.ro/brain/index.php/brain/article/view/913

Öztürk, M. (2018). *Investigating the students' development of self-regulated learning skills in a flipped classroom model: Case of foreign language course* (Doctoral dissertation). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=MzP7PYssFqdb3WIjlroAkVBMpLrRb1wsEteQ1yxXk7HUpZ4KdRZ1n-33Z-C0CLcH (Thesis ID. 508210).

Öztürk, S. Y. (2018). *The impact of flipped classroom model on the academic achievement of student teachers of English* (Unpublished master thesis).Gazi Üniversitesi, Ankara, Turkey.

Păcurar, E. (2018). Steps towards flipping classes in higher education: ESP. In A. Curado (Ed.), *Proceedings of the 16th International AELFE Conference: EPIC Series in Language and Linguistics, LSP in Multi-Disciplinary Contexts of Teaching and Research* (pp.47- 52). Mérida, Spain: Easy Chair. doi:10.29007/2m9h

Patterson, D. (2018, August). *The flipped EFL classroom: A teaching approach for the information age.* Paper presented at the 38th Thailand TESOL International Conference, Chiang Mai, Thailand. Retrieved from https://www.researchgate.net/publication/327109516_The_Flipped_EFL_Classroom_A_Teaching_Approach_for_the_Information_Age

Patton, M. Q. (2002). *Qualitative Research& Evaluation Methods.* (3rd ed.). Thousand Oaks, London, New Delhi: Sage Publications.

Pavanelli, R. (2018). The flipped classroom: A mixed methods study of academic performance and student perception in EAP writing context. *International Journal of Language and Linguistics, 5*(2), 16- 26. doi:10.30845/ijll.v5n2p3

Pavlova, E., Valeeva, N., Rudneva, M., & Nigmatzyanova, Y. (2019). Expectation and reality: Flipped classroom in teaching English for specific purposes. In L. Gomez-Chova, A. Lopez- Martinez, & I. Candel- Torres (Eds.), *Proceedings of the 13th International Technology, Education and Development Conference* (pp. 4007- 4013). Valencia, Spain: INTED. doi:10.21125/inted.2019.1007

Pinna, G., Mena, J., & Funes, S. (2017). Undergraduate students' perceptions about the use of Kahoot as part of the flipped classroom methodology. In Editors: M. Á. C. González, F. J. R. Sedano, C. F. Llamas, & F. J. García-Peñalvo (Eds.), *TEEM'19: Proceedings of the Seventh International Conference on Technological Ecosystems for Enhancing Multiculturality* (pp. 619–625). New York, NY, United States: Association for Computing Machinery. doi: 10.1145/3362789.3362900

Prabawanti, F. E., Sumardi, A., Supriyadi, S., & Fauzi, A. (2019, May*). Teaching strategies in EFL flipped classroom: A trend towards education 4.0.* Paper presented at the 2nd International Conference on Language, Literature, and Teaching, Surakarta, Indonesia. Retrieved from https://publikasiilmiah.ums.ac.id/handle/11617/11137

Pudin, C. S. J. (2017). Exploring a flipped learning approach in teaching grammar for ESL students. *Indonesian Journal of English Language Teaching and Applied Linguistics, 2*(1), 51-64. doi: 10.21093/ijeltal.v2i1.47

Purnawarman, P., Susilawati, S., & Sundayana, W. (2016). The use of Edmodo in teaching writing in a blended learning setting. *Indonesian Journal of Applied Linguistics, 5*(2), 242-252. doi:10.17509/ijal.v5i2.1348

Purpose of FLGI. (n.d.) Retrieved from https://flglobal.org/about/

Quyen, T. T. T., & Loi, N. V. (2018). Flipped model for improving students' English speaking performance. Can Tho University Journal of Science, 54(2), 90- 97. doi: 10.22144/ctu.jen.2018.012

Rajabi, P., Kiany, G. R., & Maftoon, P. (2011). The impact of ESP inservice teacher training: Programs on Iranian ESP teachers' beliefs, classroom practices and students' achievements. *The Iranian EFL Journal, 7*(3), 202-226. Retrieved from https://profdoc.um.ac.ir/articles/a/1022998.pdf

Ramirez, M. (2017, May, 30). *What is an in-class flip?* [Blog post]. Retrieved from https://flippedlearning.org/syndicated/whats-class-flip/

Ramirez, M. (2018) In-Class Flip: Flipping a Literature Class for Student-Centered Learning. In J. Mehring & A. Leis (Eds.), *Innovations in Flipping the Language Classroom* (pp. 93-103). [eBook] doi: 10.1007/978-981-10-6968-0

Richards, J. C. (2001). *Curriculum development in language teaching.* Cambridge: Cambridge University Press.

Roberts, C. M. (2010). *The dissertation journey: A practical and comprehensive guide to planning, writing and defending your dissertation.* Thousand Oaks, California: Corwin.

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

Rochmahwati, P. (2014). Developing learner autonomy online through micro blogging Edmodo. *Lingua Scientia, 6*(2), 151-158. doi: 10.21274/ls.2014.6.2.213-221

Roehl, A., Reddy, S. L., & Shannon, G. J. (2013). The flipped classroom: An opportunity to engage millennial students through active learning strategies. *Journal of Family & Consumer Sciences, 105*(2), 44-49. Retrieved from https://pdfs.semanticscholar.org/daa3/b94cdc7b52b3381a7c7e21022a7a8c005f84.pdf

Rudneva, M. A., & Valeeva, N. G. (2017). Implementation of LMS into teaching ESP to ecological faculty students. *RUDN Journal of Ecology and Life Safety, 25*(2), 317-324. doi: 10.22363/2313-2310-2017-25-2-317-324

Sağlam, D. (2016). *The effect of flipped classroom model on the academic achievements and attitudes of students in English language teaching* (Master thesis). Retrieved from

https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=DPTyuy3wRPq_qvCPSqUB685SEl0LRDUIh7z2xeJR6cd-kqPQod11VkiS2QNknfv0 (Thesis ID.).

Sakulprasertsri, K. (2017). Flipped learning approach: Engaging 21st century learners in English classrooms. *LEARN journal: Language education and acquisition research network journal, 10*(2). Retrieved from https://www.tci-thaijo.org/index.php/LEARN/article/view/111741/87203

Salem, A. A. (2018). Engaging ESP university students in flipped classrooms for developing functional writing skills, HOTS, and eliminating writer's block. *English Language Teaching, 11*(12), 177-198. doi: 10.5539/elt.v11n12p177

Sams, A., &Bergmann, J. (2013). Flip your students learning. *Educational Leadership,70*(6), 16-20. Retrieved from http://www.ascd.org/publications/educational-leadership/mar13/vol70/num06/Flip-Your-Students'-Learning.aspx

Santikarn, B., & Wichadee, S. (2018). Flipping the classroom for English language learners: A study of learning performance and perceptions. *iJET, 13*(9), 123- 135. doi: 10.3991/ijet.v13i09.7792

Schwarzenberg, P., Navon, J., Nussbaum, M., Pérez-Sanagustín, M., & Caballero, D. (2017). Learning experience assessment of flipped courses. *Journal of Computing in Higher Education, 30*(2), 237-258. doi: 10.1007/s12528-017-9159-8

Schwartz, T. A., Andridge, R.R., Sainani, K. L., Stangle, D. K., & Neely, M. L. (2016). Diverse perspectives on a flipped biostatistics classroom. *Journal of Statistics Education, 24*(2), 74-84. doi: 10.1080/10691898.2016.1192362

Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching,* 5(9), 9-16.

Seidlhofer, B. (2010). Giving VOICE to English as a lingua franca. In R. Facchinetti, D. Crystal & B. Seidlhofer (Eds.), *From international to local English and back again (pp.* 147- 163). Frankfurt: Peter Lang.

Serafim, V. F., & Meireles, A. R. (2019). Affordances of Edmodo for the flipping and expansion of the L2 classroom. *BELT - Brazilian English Language Teaching Journal, 9*(2), 293-307. doi: 10.15448/2178-3640.2018.2.31963

Shannon-Chastain, J., & Fell Kurban, C. (2016). Just one more hit: Student engagement with pre-class videos in the evolution of an English for academic purposes course from traditional to flipped. *The Global elearning Journal, 5*(2), 1-7. Retrieved from https://ctl.tedu.edu.tr/sites/default/files/content_files/jashua.pdf

Sherman, G. (2006). Instructional roles of electronic portfolios. In A. Jafaria, & C. Kaufman (Eds.), *Handbook of research on eportfolios* (*pp*. 1-14). Hershey, PA: Idea Group Reference. doi:10.4018/978-1-59140-890-1.ch001

Shyr, W., & Chen, C. (2018). Designing a technology-enhanced flipped learning system to facilitate students self-regulation and performance. *Journal of Computer Assisted Learning, 34*(1), 53-62. doi:10.1111/jcal.12213

Simatele, M. (2015). Enhancing the portability of employability skills using e-portfolios. *Journal of Further & Higher Education, 39*(6), 862-874. doi: 10.1080/0309877X.2014.953461

Skills for learning (1980). Walton on Thames, Surrey: Nelson.

Smith, R (1993): Potentials for empowerment in critical education research. *Australian Educational Researcher*, 20(2), 75-93.

Soliman, N. A. (2016, April). *Teaching English for academic purposes via the flipped learning approach.* Paper presented at the International Conference on Teaching and Learning English as an Additional Language (GlobELT 2016), Antalya, Turkey. doi: 10.1016/j.sbspro.2016.10.036

Soltanpour, F., & Valizadeh, M. (2018). A flipped writing classroom: Effects on EFL learners' argumentative essays. *Advances in Language and Literary Studies, 9*(1), 5-13.doi: 10.7575/aiac.alls.v.9n.1p.5

Sözler, S. (2018). Flipping a prep school EFL class: Students' perspective. *Karaelmas Journal of Educational Sciences, 6,* 317-325. Retrieved from http://ebd.beun.edu.tr/index.php/KEBD/article/viewFile/183/240

Staker, H., & Horn, M. (2012). Classifying K-12 blended learning. Retrieved from the Innosight Institute website http://files.eric.ed.gov/fulltext/ED535180.pdf

Strayer, J. F. (2012). How learning in an inverted classroom influences cooperation, innovation and task orientation. *Learning Environments Research, 15*(2), 171–193. doi: 10.1007/s10984-012-9108-4

Suo, J., & Hou, X. (2017). A study on the motivational strategies in college English flipped classroom. *English Language Teaching, 10*(5), 62-67. doi: 10.5539/elt.v10n5p62

Sun, Y.-C. (2017). Flipping every student? A case study of content-based flipped language classrooms. *E-Learning and Digital Media, 14*(1–2), 20–37. doi: 10.1177/2042753017692428

Suranakkharin, T. (2017). Using the flipped model to foster Thai learners' second language collocation knowledge. *3L: The Southeast Asian Journal of English Language Studies, 23*(3), 1 – 20.doi: 10.17576/3L-2017-2303-01

Swales, J. M. (1971). *Writing Scientific English*. London: Nelson.

Swales, J. M. (1981). *Aspects of Article Introductions. Aston ESP Research Reports.* Birmingham: Language Studies Unit, University of Aston.

Swales, J. M. (1988). Discourse communities, genres and English as an international language. *World Englishes, 7* (2), 211-220. doi: 10.1111/j.1467-971X.1988.tb00232.x

Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University.

Swales, J. (2004). *Research genres: Exploration and applications*. Cambridge, England: Cambridge University Press.

Swales, J. M. & Feak, C.B. (1994). *Academic Writing for Graduate Students: Essential Tasks and Skills. A Course for Non-Native Speakers of English* (2nd ed). Ann Arbor, M.I: University of Michigan Press.

Şahin, M., & Fell Kurban, C. (2016). *The flipped approach to higher education: Designing universities for today's knowledge economies and societies.* Bingley: Emerald Group Publishing Limited.

Temizyurek, F., & Ünlü, N.A. (2015). The use of technology in language teaching material as an example: "Flipped classroom". *Bartın University Journal of Faculty of Education, 4*(1), 64–72. doi:10.14686/BUEFAD.2015111015

Teng, M. F. (2018). Flip your classroom to improve EFL students' speaking skills. In J. Mehring & A. Leis (Eds.), *Innovations in Flipping the Language Classroom* (pp. 113-122). [eBook] doi: 10.1007/978-981-10-6968-0

Thai, N.T., Wever, B.D., &Valcke, M. (2017). The impact of a flipped classroom design on learning performance in higher education: Looking for the best 'blend' of lectures and guiding questions with feedback. *Computers & Education, 107,* 113-126. doi:10.1016/j.compedu.2017.01.003

Trace, J., Hudson, T., & Brown, J.D. (2015). An overview of language for specific purposes. In J. Trace, T. Hudson, & J. D. Brown (Eds.), *Developing courses in languages for specific purposes (*1st ed., *pp.* 1-22). Honolulu: National Foreign Language Resource Center, University of Hawai'i.

Tri, N. M., & Trang D. X. P. (2019, May). *Applying flipped classroom approach in business writing courses: A case study at HCMC university of education.* Paper presented at the 7th OpenTESOL International Conference, Ho Chi Minh City Open University, Vietnam. Retrieved from http://opentesol.ou.edu.vn/uploads/5/9/9/8/59980917/ proceedings_of_the_7th_opentes ol_interntional_conference_2019.pdf#page=69

Trimble, L. (1985). *EST: A discourse approach.* Cambridge: Cambridge University.

Tucker, C. (2016, January, 7). *In-class flip: The flipped classroom meets station rotation model* [Blog post]. Retrieved from https://catlintucker.com/2016/01/inclassflip/

Tulay, Z. (2019). *Let student learning drive the class: An investigation of the impact of flipped learning on EFL students' language skills, digital literacy and attitudes toward the learning environment* (Master thesis). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=FgmkGchPKo23qQqBeqzVZp0alIUjPfbxQGQmaj4tge4tlZf6gyXNTdmulaLx2LGo (Thesis ID. 560239).

Tuna, G. (2017). *An action study on college students' EFL writing skills development through flipped classroom environments* (Master thesis). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=MzP7PYssFqdb3WIjlroAkT1ow4xuLntyu01Ge8hapxeTHh7KeWlftLLwRilQvvcJ (Thesis ID. 502967).

Turan, Z. (2015). *The evaluation of flipped classroom method and examination of its effects on academic achievement, cognitive load and motivation.* (Doctoral dissertation). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/

Turan, Z., & Akdag-Cimen, B. (2019). Flipped classroom in English language teaching: A systematic review. *Computer Assisted Language Learning,1*, 1-17. doi: 10.1080/09588221.2019.1584117 [Taylor & Francis Online]

Turan, Z., & Göktaş, Y. (2015). Yükseköğretimde yeni bir yaklaşım: Öğrencilerin ters yüz sınıf yöntemine ilişkin görüşleri [A new approach in higher education: The students' views on flipped classroom method]. *Yükseköğretim ve Bilim Dergisi,5*(2), 156-164. doi: 10.5961/jhes.2015.118

Umutlu, D. (2016). *Effects of different video modalities on writing achievement in flipped English classes* (Master thesis). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key=Br_XTptK8CZ70f0JGX9xEppB7qMBRiE33YtvNI2gYW0m4g7nIcpwFxTnafHolk9Y (Thesis ID. 429982).

Uztosun, M. S. (2013). *The role of student negotiation in improving the speaking ability of Turkish university EFL students: An action research study.* (Doctoral dissertation). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/

Van de Poel, K., Van Dyk,T., Gasiorek,J., & Blockmans, I. G. E. (2015). A needs analysis for communication by pharmacists in a multilingual setting: First steps towards syllabus and materials design. *Stellenbosch Papers in Linguistics, 44* (1), 189-212. doi: 10.5774/44-0-184

Wagner-Loera, D. (2018). Flipping the ESL/ EFL classroom to reduce cognitive load: A new way of organizing your classroom. In J. Mehring &A. Leis (Eds.), *Innovations in Flipping the Language Classroom* (pp. 169-184). [eBook] doi: 10.1007/978-981-10-6968-0

Wang, F.H. (2017). An exploration of online behaviour engagement and achievement in flipped classroom supported by learning management system. *Computers & Education, 114*, 79-91. doi: 10.1016/j.compedu.2017.06.012

Wang, S., & Liu, C. (2018). Task- based flipped classroom in Chinese college EFL teaching: An empirical study in oral English course. *International Journal of Contemporary Education,1*(1), 12-18. doi:10.11114/ijce.v1i1.3086

Wang, Y., & Qi, G. Y. (2018). Mastery-based language learning outside class: Learning support in flipped classrooms. *Language Learning & Technology, 22*(2), 50–74. doi:10125/44641

Webb, M., & Doman, E. (2016). Does the flipped classroom lead to increased gains on learning outcomes in ESL/EFL contexts? *The CATESOL Journal, 28*(1), 39-67. Retrieved from http://www.catesoljournal.org/wp-content/uploads/2016/06/CJ28.1_webb.pdf

Webb, M., & Doman, E. (2019). Impacts of flipped classrooms on learner attitudes towards technology-enhanced language learning. *Computer Assisted Language Learning,*1 .doi: 10.1080/09588221.2018.1557692 [Taylor & Francis Online].

Webb, M., Doman, E., & Pusey, K. (2014). Flipping a Chinese university EFL course: What students and teachers think of the model. *The Journal of Asia TEFL, 11*(4), 53-87. Retrieved from http://www.asiatefl.org/main/download_pdf.php?i=389&c=1420009720&fn=

Widdowson, H. G. (1978). *Teaching language as communication*. Oxford: Oxford University Press.

Widdowson, H. G. (Ed.), (1979). *Reading and thinking in English: Discovering discourse*. Oxford: Oxford University Press.

Widdowson, H. G. (1983). *Learning purpose and language use*. Oxford: Oxford University Press.

Woźniak, M., & Acebes de la Arada, D. (2018). English for pharmacy: An ESP course in a CLIL context. *The Journal of Teaching English for Specific and Academic Purposes, 6* (2), 265-275. doi: 10.22190/JTESAP1802265W

Wu, W., Chen Hsieh, J., & Yang, J. (2017). Creating an online learning community in a flipped classroom to enhance EFL learners' oral proficiency. *Educational Technology & Society, 20*(2), 142-157. Retrieved from https://www.semanticscholar.org/paper/Creating-an-Online-Learning-Community-in-a-Flipped-Wu-Hsieh/568b0ca1220019af4fa446599cd67202cab68f7f

Yang, L. (2019). Exploration of medical English teaching model based on flipping classroom. In Y. Cang (Ed.), *Selected papers from 2019 International Conference on Education, Economics, Humanities and Social Sciences (ICEEHSS 2019)* (pp.581-585) Huhhot, China: Guangdong University of Technology. doi: 10.23977/iceehss.2019.118

Yıldırım, K. (2010). Raising the quality in qualitative research. *Elementary Education Online.* 9(1), 79-92.

Yıldırım, A., & Şimşek, H. (2013). *Sosyal bilimlerde nitel araştırma yöntemleri*.[The qualitative research methods in social sciences].(9th ed.). Ankara: Seçkin Yayıncılık.

Yin, R. K. (2011). *Qualitative research from start to finish.* New York, London: The Guilford Press.

YÖK Lisans Atlası. (n.d.). Retrieved from https://yokatlas.yok.gov.tr/lisans-anasayfa.php.

Zainuddin, Z. (2017). First-year college students' experiences in the EFL flipped classroom: A case study in Indonesia. *International Journal of Instruction, 10*(1), 133- 150. doi:10.12973/iji.2017.1019a

Zainuddin, Z., & Perera, C. J. (2019) Exploring students' competence, autonomy and relatedness in the flipped classroom pedagogical model. *Journal of Further and Higher Education, 43*(1), 115-126. doi: 10.1080/0309877X.2017.1356916

Zainuddin, Z., Habiburrahim, H., Muluk, S., & Keumala, C. M. (2019). How do students become self-directed learners in the EFL flipped-class pedagogy? A study in higher education. *Indonesian Journal of Applied Linguistics, 8*(3), 678-690. doi: 10.17509/ijal.v8i3.15270

Zainuddin, Z., Haruna, H., Li, X., Zhang, Y., Chu, S. K. W. (2019). A systematic review of flipped classroom empirical evidence from different fields: What are the gaps and future trends? *On the Horizon, 27*(2), 72-86. doi:10.1108/OTH-09-2018-0027

Zakareya, S., & Al-Qahtani, F. (2020). The effect of webfolios on Saudi EFL students' self-directed learning readiness. *International Education Studies, 13*(5), 150-159. doi: 10.5539/ies.v13n5p150

Zhang, L. (2015). Teaching model design of business English based on flipped classroom case study. In P. Chen, & S. Zhang (Eds.), *Proceedings of the 2015 International Conference on Education, Management and Computing Technology* (pp. 176- 181). Paris, France: Atlantis Press. doi: 10.2991/icemct-15.2015.37

Zhang, H., Du, X., Yuan, X., & Zhang, L. (2016). The Effectiveness of the Flipped Classroom Mode on the English Pronunciation Course. *Creative Education, 7*(9), 1340-1346. doi: 10.4236/ce.2016.79139

Zhang, H. W., Li, J., Jiao, L. P., Ma, W. L., & Guan, C. (2016). The Adjustment and Effects of Vocabulary Teaching Strategies in Flipped Classroom. *Creative Education, 7*(14), 1966-1973. doi:10.4236/ce.2016.714199

Zhang, Y., Chen, B.-L., Ge, J., Hung, C. Y. & Mei, L. (2019) When is the best time to use rubrics in flipped learning? A study on students' learning achievement, metacognitive awareness, and cognitive load. *Interactive Learning Environments, 27*(8), 1207-1221. doi: 10.1080/10494820.2018.1553187

Zhonggen, Y., & Guifang, W. (2016). Academic achievements and satisfaction of the clicker-aided flipped business English writing class. *Journal of Educational Technology & Society, 19*(2), 298-312. Retrieved from http://www.jstor.org/stable/jeductechsoci.19.2.298

Zou, D., & Xie, H. (2019). Flipping an English writing class with technology-enhanced just-in-time teaching and peer instruction. *Interactive Learning Environments, 27*(8), 1127-1142. doi: 10.1080/10494820.2018.1495654

Zuo, X. - Y. (2016). Motivation in a flipped classroom, a case study of teaching oral English in a vocational college in mainland China. Sino-US English Teaching, 13(6), 460-467. doi:10.17265/1539-8072/2016.06.004

APPENDICES

APPENDIX-1. The Certificate of Ethical Research Approval

ERZİNCAN ÜNİVERSİTESİ

T.C.
ERZİNCAN ÜNİVERSİTESİ REKTÖRLÜĞÜ
İnsan Araştırmaları Etik Kurul Başkanlığı

Sayı : 44495147-050.01.04-E.55646 11/12/2017
Konu : Etik Kurul Kararı
2017/09-01

Sayın Okutman Ogün İLTER
Yabancı Diller Yüksekokulu Öğretim Elemanı

Üniversitemiz İnsan Araştırmaları Etik Kurul Başkanlığının 30/11/2017 tarih ve 9 sayılı oturumunda alınan 09/01 sayılı kararı ekte gönderilmiştir.

Gereğini bilgilerinize rica ederim.

Prof. Dr. Paşa YALÇIN
Etik Kurul Başkanı

EKLER:
Ek-1: Kurul Kararı

Bu belge 5070 sayılı e-İmza Kanununa göre Paşa YALÇIN tarafından 11.12.2017 tarihinde e-imzalanmıştır.
Evrağınızı http://evrakdogrulama.erzincan.edu.tr linkinden FFB21E24XD kodu ile doğrulayabilirsiniz.

Adres : Erzincan Üniversitesi Rektörlüğü Genel Sekreterlik 24100/ERZİNCAN
Telefon : 0 (446) 226 66 66-11446**Ayrıntılı Bilgi İçin:** S.GÜNEŞ (Dâhili: 11446)
Belge Geçer : 0 (446) 226 26 60

EK-3

Kayıt Tarihi: 30/11/2017	Protokol No:09/01

T.C

ERZİNCAN ÜNİVERSİTESİ

İNSAN ARAŞTIRMALARI ETİK KURULU KARARI

ARAŞTIRMA BAŞLIĞI	Özel Amaçlı İngilizce İçin Dönüştürülmüş Sınıf Müfredatı Önerisi: Bir Eylem Araştırması
ARAŞTIRMANIN TÜRÜ	Doktora Tezi, Eylem Araştırması, Nitel Araştırma
ARAŞTIRMACILAR	Okt. Ogün İLTER Yrd. Doç. Dr. Savaş YEŞİLYURT
KARAR	Araştırmanın etik açıdan "uygun" olduğuna karar verildi.

ETİK KURUL BAŞKANI	TARİH	İMZA
Prof. Dr. Paşa YALÇIN	30/11/2017	

Bu belge 5070 sayılı e-İmza Kanununa göre Paşa YALÇIN tarafından 11.12.2017 tarihinde e-imzalanmıştır.
Evrağınızı http://evrakdogrulama.erzincan.edu.tr linkinden FFB21E24XD kodu ile doğrulayabilirsiniz.

(30.11.2017 Tarih ve 09 Sayılı İnsan Araştırmaları Etik Kurulu İmza Sirkülerdir)

Prof. Dr. Paşa YALÇIN
Başkan

Yrd. Doç. Dr. Ahmet NAR
Başkan Yrd.

Yrd. Doç. Dr. Sezap SÖKMEN
Başkan Yrd.

Doç. Dr. Haydar EFE
Üye

Doç. Dr. Müzeyyet KAĞAN
Üye

Yrd. Doç. Dr. Özkan BARAN
Üye

Yrd. Doç. Dr. Cuma MURAOĞLU
Üye

Bu belge 5070 sayılı e-İmza Kanununa göre Paşa YALÇIN tarafından 11.12.2017 tarihinde e-imzalanmıştır.
Evrağınızı http://evrakdogrulama.erciyes.edu.tr linkinden FFB21R24XD kodu ile doğrulayabilirsiniz.

APPENDIX-2. Informed Consent Form (Translated into English)

Title of Study: A Flipped Learning Syllabus for Teaching English for Specific Purposes: An Action Research Study

Researcher: Ogün İLTER, Instructor of English

School of Foreign Languages, Erzincan Binali Yıldırım University
Contact: e-mail: ogunilterr@gmail.com

Thesis' Supervisor: Savaş Yeşilyurt, PhD
Department of Tourism Guidance
Faculty of Tourism, Atatürk University
Contact: e-mail: savasy@atauni.edu.tr

The following information is provided to help you decide whether you would like to participate in the present study. This action research study aims to design a flipped English for academic pharmaceutical purposes syllabus for faculty of pharmacy, considering the feedback from faculty members, instructors of English and students who take the course via semi-structured and focus groups interviews, reflective journals of learners; field and observation notes of the researcher and the video/voice records of the interviews. Therefore, your participation in the present study is of crucial importance to contribute to the content of the syllabus. Your participation in this study is entirely voluntary, and you have the full right to refuse to participate or to withdraw at any time without being exposed to any penalty or enforcement. If you choose to become involved in this study, you will be asked semi-structured questions regarding your ideas on the flipped ESP syllabus designed for faculty of pharmacy. During the interview, you can refuse to answer any of the questions. There are no known risks and/or discomforts associated with the study. To ensure the confidentiality of the data you provide, you will be assigned pseudonyms in the dissertation. Your responses to the interview questions and the video and voice records of the interview will be kept secret in researcher's notes, and they will not be shared with any third parties for any intention other than research purposes. A copy of this form will also be given to you. Please do not hesitate to ask questions about the study before your participation or during the study. By signing this form, you acknowledge your participation and what is expected from you as a participant in the current study.

"I have read all the explanation above and recognize that my participation in this study is entirely voluntary and that I am free to withdraw at any time during the study without consequence. I realize that I may be also excluded from the study by the researcher with research purposes. I understand that any information resulting from this study will be strictly confidential. I have received a copy of this consent form for my records. I voluntarily agree to participate in this study without any enforcement."

Participant' Signature Date

Participant's Name

APPENDIX-3. The Questions of Semi-Structured Interviews with Faculty Members (Translated into English) (Needs Analysis Phase)

1- Did you take an EAPP course either at the undergraduate or graduate level? Did you find it efficient? How was the content of the course if you took any?

2- Do you have any expectations and/or demands from students to perform a task in English at your courses at the faculty of pharmacy? If you do, what do you expect from your students to be able to do by using English? For example:

-Do you ask your students to submit assignments in English?

-Do you suggest sources in English for your courses? etc.

3- What are the tasks that a pharmacist is able to do by using English in their career? (Please consider the different settings where students may work as a pharmacist, such as in a pharmacist's store, in research and development departments at a pharmaceutical company, in the ministry of health, etc.)

For example:

At a pharmacist store: Some certain actions, such as communicating with patients in English: suggesting medicines depending on symptoms; or describing how to take medicines, using doses, side-effects, frequencies, etc.

APPENDIX-4. The Questions of Students' Reflective Journals (Translated into English) (Implementation Phase)

1. Considering individual and group space learning activities of this unit:

    1.1. What were the weaknesses? What do you suggest to improve them?

    1.2. What were the strengths? In what sense did you find the tasks efficient?

2. Considering the content of this unit:

    2.1. What were the weaknesses? What do you suggest to improve them?

    2.2. What were the strengths? In what sense did you find the course content efficient?

APPENDIX-5. The Questions of Focus Group Interviews with Students (Translated into English) (Evaluation Phase)

1. What did not you like about the flipped learning strategy we had in our class this term? Could you give your reasons?

2. What did you like about the flipped learning strategy we had in our class this term? Could you give your reasons?

3. What are the pharmaceutical topics and/or tasks you did not like in the pharmaceutical content of the course? Could you give your reasons? What kind of topics and/or tasks do you suggest instead of those that you did not like in the pharmaceutical content? Could you give your reasons?

4. What are the pharmaceutical topics and/or tasks you liked in the pharmaceutical content of the course? Could you give your reasons?

APPENDIX-6. The Questions of Focus Group Interviews with Instructors of English (Translated into English) (Evaluation Phase)

1. While evaluating the 12-week flipped EAPP course content:

1.1. What did you like about;

1.1.1. the topics?

1.1.2. the tasks?

1.1.3. the techniques to teach skills and content?

1.2. What did not you like about;

1.2.1. the topics?

1.2.2. the tasks?

1.2.3. the techniques to teach skills and content?

2. If you were asked to design a 12-week EAPP syllabus for the faculty of pharmacy, relying on your experience, how would you design it?

2.1. Which language skills would you concentrate on? Please give your reasons.

2.2. Which topics and tasks would you include in your syllabus? Please give your reasons.

2.3. What kind of a teaching approach would you adopt to implement your syllabus? Please give your reasons.

APPENDIX-7. The Questions of the Focus Group Interview with Faculty Members (Translated into English) (Evaluation Phase)

1. While evaluating the 12-week flipped EAPP course content:

1.1. What did you like about;

1.1.1. the topics?

1.1.2. the tasks?

1.2. What did not you like about;

1.2.1. the topics?

1.2.2. the tasks?

2. What else do you suggest for the 12-week EAPP syllabus in terms of:

2.1. language skills?

2.2. topics and tasks?

APPENDIX-8. Learning Outcomes of the First Draft of the Flipped EAPP Syllabus

LO1: Learners will be able to give information on the most common diseases related to 12 body systems in written form in English.

1.1.Learners will be able to explain the functions of the organs in the 12 body systems briefly in English.

1.2.Learners will be able to identify the English equivalents of the words related to

- features of the most common diseases found in 12 body systems,
- symptoms of them,
- treatments for them,
- protection from them.

1.3.Learners will able to write a patient information pamphlet in English.

LO2: Learners will be able to inform patients on how to take medicine in English.

2.1. Learners will be able to understand the sections of a patient information leaflet in English.

2.1.1. Learners will be able to identify the English equivalents of terminology and phrases related to the sections of a patient information leaflet.

2.1.2. Learners will be able to identify the forms of medicine in English.

2.2. Learners will be able to give consultation to patients in dialogues around the most common medical conditions and patient complaints related to 12 body systems.

2.2.1. Learners will be able to participate in dialogues in English with patients who come to the pharmacy store with a prescription.

2.2.2. Learners will be able to participate in dialogues in English with patients who come to the pharmacy store with typical symptoms of a health problem to buy an OTC medicine.

LO3. Learners will be able to report on an experimental procedure in English.

3.1. Students will be able to use the English equivalents of typical laboratory equipment.

3.2. Students will be able to talk about the steps of an experimental procedure in English.

3.3. Students will be able to report the experimental section of a laboratory report in English.

LO4: Learners will be able to apply for a job in English.

4.1. Learners will be able to write a CV with a Cover letter in English.

APPENDIX-9. Learning Outcomes of the Revised Flipped EAPP Syllabus

LO1: Learners will be able to form flipped learning habits via some self-directed learning strategies.

1.1. Learners will be able to enter the LMS platform by gaining a learner account.
1.2. Learners will be able to interact with lecture videos by taking notes on graphic organizers.
1.3. Learners will be able to send questions to their teacher online.
1.4. Learners will be able to attend the online forum on the LMS platform.
1.5. (Optional) Learners will be able to work in different activity stations in class. (In case in-class flipping is preferred.)

LO2: Learners will be able to differentiate between the English equivalents of the most common medical conditions and patient complaints related to 12 body systems that a pharmacist generally encounters in a pharmacy store.

2.1. Learners will be able to identify the English equivalents of the most common medical conditions and patient complaints related to 12 body systems.
2.2. Learners will be able to interpret the patient-pharmacist dialogues around the most common medical conditions and patient complaints related to 12 body systems in English.

LO3: Learners will be able to inform patients on how to take medicine in English.

3.1. Learners will be able to recognize the sections of a patient information leaflet in English.

3.1.1. Learners will be able to identify the English equivalents of the terminology and phrases related to the sections of a patient information leaflet.

3.1.2. Learners will be able to identify the English equivalents of the forms of medicine.

3.2. Learners will be able to give consultation to patients in dialogues around the most common medical conditions and patient complaints related to 12 body systems in English.

3.2.1. Learners will be able to participate in dialogues in English with patients who come to the pharmacy store with a prescription.

3.2.2. Learners will be able to participate in dialogues in English with patients who come to the pharmacy store with typical symptoms of a health problem to buy an OTC medicine.

LO4. Learners will be able to engage in tasks of manufacturing pharmaceutical products in English.

4.1. Learners will be able to translate texts on manufacturing pharmaceutical products.

4.1.1. Learners will be able to identify the English equivalents of the basic pharmaceutical technology laboratory equipment.

4.2. Learners will be able to write about the directions for manufacturing pharmaceutical products in English.

4.3. Learners will be able to participate in dialogues in English about the directions of manufacturing pharmaceutical products.

LO5: Learners will be able to apply for a job in English.

5.1. Learners will be able to write a CV with a cover letter in English.

5.2. Learners will be able to attend a job interview in English.

CURRICULUM VITAE

Personal Information

Name Surname : Ogün İLTER

Place of Birth, Date of Birth : Ladik/ SAMSUN, 30.05.1985

Education

Primary Education : Tayyar Mehmet Paşa Primary School-1997

Secondary Education : Havza Anatolian High School- 2004

Bachelor's Degree : Ondokuz Mayıs University- 2008
Faculty of Education
Department of Foreign Languages Education
Division of English Language Teaching

Master's Degree : Atatürk University- 2013
Institute of Educational Sciences
Department of Foreign Languages Education
Division of English Language Teaching
Master Thesis Title: Turkish Scholars' Publishing Process in Social Sciences in English-Medium Journals: Motives, Challenges and Strategies

Professional Qualifications

Language(CEFR Standards) : English-Advanced Level; German-Beginner Level

Research Interests : Flipped Learning, ESP Course Design, In-Service Professional Development Strategies of English Language Teachers.

Employment History

2008- : Lecturer of English /Erzincan Binali Yıldırım University

Contact Information

Address : Erzincan Binali Yıldırım Universtiy
School of Foreign Languages
Department of Translation and Interpreting
Yalnızbağ Campus/ERZİNCAN

Email : ogunkarahan@erzincan.edu.tr; ogunilterr@gmail.com