

GAZİ UNIVERSITY
INSTITUTE OF EDUCATIONAL SCIENCES
ENGLISH LANGUAGE TEACHING DEPARTMENT

EXAMINING COMPETENCIES OF PROSPECTIVE ENGLISH
TEACHERS THROUGH THEIR PEDAGOGICAL CONTENT
KNOWLEDGE: A CASE STUDY

PhD THESIS

By
Kürşat CESUR

Ankara,
December, 2012

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Supervisor: Assist. Prof. Dr. Abdullah ERTAŞ

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Eğitim Bilimleri Enstitüsü Müdürlüğü'ne

JÜRİ ONAY SAYFASI

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İmza

Başkan: Prof. Dr. Abdulvahit ÇAKIR

.....

Üye (Tez Danışmanı): Yrd. Doç. Dr. Abdullah ERTAŞ

.....

Üye : Doç. Dr. Arif SARIÇOBAN

.....

Üye : Yrd. Doç. Dr. Nurgun AKAR

.....

Üye : Yrd. Doç. Dr. Hüseyin ÖZ

.....

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ABSTRACT

EXAMINING COMPETENCIES OF PROSPECTIVE ENGLISH TEACHERS THROUGH THEIR PEDAGOGICAL CONTENT KNOWLEDGE: A CASE STUDY

Cesur, Kürşat

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This dissertation aims to investigate the competencies of the prospective language teachers in the English Language Teaching Department of Canakkale Onsekiz Mart University through their pedagogical content knowledge. The mixed method sequential explanatory design was used to collect and analyze the data. Quantitative data obtained from 127 prospective teachers via the questionnaire were analyzed using descriptive and inferential statistics. The researcher made use of coding in order to analyze the qualitative data obtained from document analysis, observation procedures, and interviews of the three participants. Codes and subcodes were created from the transcriptions of the qualitative data collection instruments to conduct both within-case and cross-case analyses aiming to explain the quantitative results. Results reveal that prospective teachers of English believe they do not have required knowledge of the language they teach though they see themselves competent in other knowledge domains. Though they believed they would use communicative methods to language teaching, they preferred using grammar translation method while presenting the new vocabulary. What they believed they could do and what they actually did were also different considering their knowledge on planning lessons, knowledge of their learners, and knowledge on assessment. Last but not least, their knowledge domain was shaped not only by the teaching experience they had, but also by pre-service teacher education. Bearing these results in mind, some implications for teacher education and for further research were provided at the end of the study.

Key Words: EFL Teachers' Knowledge Base, Pedagogical Content Knowledge, Mixed Method Sequential Explanatory Design

ÖZET

İNGİLİZCE ÖĞRETMENİ ADAYLARININ YETERLİKLERİNİN PEDAGOJİK ALAN BİLGİSİ ARACILIĞI İLE İNCELENMESİ: DURUM ÇALIŞMASI

Cesur, Kürşat

Doktora, İngilizce Öğretmenliği Ana Bilim Dalı

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Bu doktora çalışması Çanakkale Onsekiz Mart Üniversitesi İngiliz Dili Eğitimi Anabilim dalındaki öğretmen adaylarının yeterliklerinin pedagojik alan bilgileri aracılığı ile incelenmesini amaçlamaktadır. Veri toplama ve analizi için karma aşamalı açıklayıcı araştırma deseni kullanılmıştır. 127 öğretmen adayından anket aracılığı ile toplanan nicel veriler betimleyici ve vardamli istatistik yöntemleri kullanılarak analiz edilmiştir. Araştırmacı doküman analizi, gözlem ve görüşme sonuçlarından elde edilen nitel verileri analiz etmek için ise kodlama yöntemini kullanmıştır. Nitel veri toplama araçlarının yazıya dökülmesinden sonra ortaya çıkan kodlar ve alt kodlar, nicel araştırma sonuçlarını daha ayrıntılı açıklayabilmek için durum-içi ve karşılaştırmalı durum incelemelerinde kullanılmıştır. Araştırma sonuçları öğretmen adaylarının kendilerini diğer bilgi alanlarında yeterli görmelerine karşın, öğrettikleri dilin bilgisine gerektiği kadar sahip olmadıkları düşüncesine hâkim olduklarını ortaya koymuştur. Öğretmen adayları dil öğretiminde iletişimsel yöntemleri kullanacaklarını düşünmelerine rağmen, yeni kelimelerin öğretiminde dilbilgisi-çeviri yöntemini tercih etmişlerdir. Dersi planlama, öğrenci ve değerlendirme bilgileri göz önüne alındığında, öğretmen adaylarının ne yapabileceklerine inandıkları ile gerçekte ne yaptıkları arasında farklılıklar gözlenmiştir. Bir diğer önemli araştırma sonucu ise, öğretmen adaylarının bilgi alanlarının sadece öğretim deneyimleriyle değil, hizmet öncesi öğretmen eğitimi ile de şekillendiğini ortaya çıkarmıştır. Çalışmanın sonunda, öğretmen eğitimi ve ileriye yönelik araştırmalar ile ilgili sonuç ve öneriler tartışılmıştır.

Anahtar Kelimeler: İngilizce Öğretmenlerinin Bilgi Temelleri, Pedagojik Alan Bilgisi, Karma Aşamalı Açıklayıcı Araştırma Deseni

TO MY WIFE...

... who helped me get through the storms that I have weathered.

Without you, I would not be in the place I am right now.

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LIST OF ABBREVIATIONS

ALM:	The Audio-Lingual Method
CLL:	Community Language Learning
CLT:	Communicative Language Teaching
COMU:	Çanakkale Onsekiz Mart University
DM:	Direct Method
EFL:	English as Foreign Language
ELT:	English Language Teaching
ELL:	English Language and Literature
EU:	European Union
GPA:	Grade Point Average
GTM:	Grammar Translation Method
KA:	Knowledge on Assessment
KE:	Knowledge of English
KL:	Knowledge of Learners
KPL:	Knowledge on Planning Lessons
KPDS:	Foreign Language Examination for Civil Servants
KTM:	Knowledge on Teaching Methods and Techniques
PCK:	Pedagogical Content Knowledge
PK:	Pedagogical Knowledge
PhD:	Philosophy of Doctorate
QUAN:	Quantitative
QUAL:	Qualitative
SMK:	Subject Matter Knowledge
T.E.:	Teaching Experience
TPR:	The Total Physical Response Method
ÜDS:	Interuniversity Board Foreign Language Examination
YÖK:	Council of Higher Education

CHAPTER I

INTRODUCTION

1.0 Introduction

The main components of teaching profession have been defined under three dimensions: general, subject matter (content), and pedagogical knowledge. When the studies carried out about the areas of knowledge that a teacher should have are examined, several categories are proposed by several researchers (Borg, 2003; Elbaz, 1981; Freeman & Johnson, 1998; Golombek, 1998; Meijer et al., 1999; Meijer et al., 2001; Shulman, 1987). However, in recent years, a new knowledge area called the ‘pedagogical content knowledge’, which is as significant as the others, has been introduced.

Although all the knowledge components are critical in teacher development, the study of PCK is relatively new in some disciplines. Being the pioneer of the term, *pedagogical content knowledge (PCK)*, Shulman (1987) proposed that this form of knowledge is crucial for effective teaching as it relates to the capability to represent and formulate content in a particular discipline in ways that are understandable to students.

Although PCK has been explored in a number of studies in disciplines such as mathematics and science (Cochran-Smith & Lytle, 1999; Grossman, 1990), teachers’ pedagogical content knowledge in teaching English is still an understudied area. This study attempts to fill the gap by examining the prospective English teachers’ competencies through PCK as understanding their PCK may help the universities prepare better English teachers with pedagogical and practical knowledge as well as their content knowledge.

1.1 Statement of the Problem

Recently, with the advent of technology, the need for international communication has increased to a great extent. Thus, teaching and learning foreign languages have become really important in most countries in the world. There have also been many innovations regarding foreign language education in Turkey. Students in Turkey used to learn English at preparatory classes being exposed to English for 24-30 hours in a week. However, most of the preparatory classes were removed from the Educational system. This influenced the needs of the learners to a great extent.

EFL teachers who serve in state schools should have command of a range of skills, competencies, and knowledge to meet those needs of the students. First and foremost, EFL teachers need to have extensive knowledge of the subject matter. That is to say, they should be equipped with a good command of English, have knowledge about language use, and the theoretical background of the field. Ideally, the English language teachers should have the linguistic knowledge as well.

Even though language mastery is an important qualification, it is not enough for an effective English language teacher. It is essential for a teacher of English to demonstrate pedagogical competence and have a wide range of skills such as lesson planning, materials development, classroom management, instructional organization, presentation of the subject matter, and assessment, which can be called on to meet the needs of the students.

According to Freeman and Richards (1996:1), we need to know more about language teachers in order to understand teaching well. Moreover, we need to understand more about prospective language teachers' perceptions of knowledge about language teaching in order to understand how effective the education they have in the ELT departments is. Examining their competencies through their PCK will

shed light onto the practices of the administrators, educational planners, and academicians.

1.2 Background of the Study

The PCK concerns how teachers relate their subject matter knowledge (what they know about what they teach) to their pedagogical knowledge (what they know about teaching), and how subject matter knowledge is related to the process of pedagogical reasoning (Shulman, 1987).

According to Shulman (1987:8), PCK “represents the blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organized, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction.” PCK for foreign language teacher education refers to what teachers know about teaching the target language to empower students to communicate in the target language.

There have been far fewer studies in English and social studies on pedagogical content knowledge than mathematics or science. One early study into pedagogical content knowledge in English studied the different approaches to teaching taken by two groups of new teachers, one made up of teachers who had undergone teacher training as well as university English, and the other made up of teachers who had only graduated in English without being trained to teach. The case was similar to that of ELT and ELL departments in Turkey. The first group had explicit instruction in how to teach English, while the second group had only content knowledge – at least until they gained teaching experience (Grossman, 1989). The biggest difference between the groups was in their ability to motivate students and to have them identify the texts. Grossman’s point is not that forms and content of literature are unimportant, but that teaching them is greatly helped by getting students to see the point, to relate it to their lives and to be motivated to write with a desire to communicate their experiences and ideas. This is what PCK requires.

According to Shulman (1986:9), pedagogical content knowledge includes the following:

The most regularly taught topics in one's subject area, the most useful forms of representation of those ideas, the most powerful analogies, illustrations, examples, explanations, and demonstrations - in a word, the ways of representing and formulating the subject that make it comprehensible to others... an understanding of what makes the learning of specific topics easy or difficult: the conceptions and preconceptions that students of different ages and backgrounds bring with them to the learning of those most frequently taught topics and lessons.

Grossman (1989, 1990) expands Shulman's definition and states that PCK includes four main components: (a) an overarching conception of what it means to teach a particular subject, (b) knowledge of students' understanding and potential misunderstandings of a subject area, (c) knowledge of curriculum and curricular materials, and (d) knowledge of instructional strategies and representations for teaching particular topics (as cited in Işıksal, 2006: 29). The first component is about what the teacher knows and believes about the nature of the subject and what is vital for students to learn. Namely, it is about their perceptions on teaching a particular point in the target language. Therefore, this is the basis for their perceptions on classroom objectives, appropriate instructional strategies, textbooks, curricular materials, evaluation of students. Grossman's second category is related to knowledge of learners; which includes students' abilities, and learning strategies, ages and developmental levels, attitudes, motivations, and prior conceptions of the subject they are learning. Knowledge and beliefs about how students learn in a particular content domain are included in this category. Grossman's third category is knowledge of curriculum and curricular materials. This component includes familiarity with the range of textbooks and other instructional materials that are available for teaching particular topics. This category also includes knowledge of how the topics and ideas in a subject are organized within a grade level. The last category is the teachers' knowledge of strategies and representations for teaching particular topics. This category is also extensively addressed in Shulman's definition of pedagogical content knowledge. The representations include the models,

examples, metaphors, simulations, demonstrations, and illustrations that teachers use to increase student understanding.

Similarly, Tamir (1988) confirms that pedagogical knowledge is comprised of four components, which are students, curriculum, evaluation, and instruction (that includes both teaching and management). Çakır (2008:15) also provides a comprehensive definition of pedagogical knowledge as acquiring “some skills including the process and practices involved in classroom management, lesson plan, and implementation. It also contains knowledge about teaching methods to be used and strategies for evaluating students’ understanding.”

In this research study, in the light of the literature, prospective English teachers’ competencies are examined through their pedagogical content knowledge. Namely, their knowledge on the content (target language), on planning lessons (curriculum and curricular materials), of learners (their characteristics), on teaching methods and techniques, and on language assessment are investigated in this study.

1.3 The Aim of the Study

The main purpose of this study is to investigate the prospective language teachers’ competencies through their PCK. As pedagogical content knowledge consists of the knowledge of the content, lesson planning, learners, teaching methods and techniques, and assessment, the study aims to determine teacher competencies regarding these issues. Moreover, the study aims to examine how English teaching occurs in the class, and how an effective teaching and learning environment occur by investigating the prospective language teachers’ teaching practices.

As the study aims to examine the prospective language teachers’ competencies through their PCK, it investigates the following main research questions:

- 1) What are the prospective English teachers' perceptions of their own level of teaching competency in terms of their pedagogical content knowledge?
- 2) To what extent do the prospective English teachers use their pedagogical content knowledge in their teaching practice?

In order to have a broad insight of the study, the following sub-questions are formulated:

Sub-questions

- 1.1. Is there any statistically significant difference in their competencies based on their genders?
- 1.2. Is there any significant difference in their competencies based on their Grade Point Average (GPA hereafter)?
- 1.3. Is there any significant difference in their competencies based on their teaching experience?
- 2.1. To what extent do they use their knowledge on the content (target language)?
- 2.2. To what extent do they use their knowledge on planning lessons (curriculum knowledge)?
- 2.3. To what extent do they use their knowledge of their learners?
- 2.4. To what extent do they use their knowledge on teaching methods and techniques?
- 2.5. To what extent do they use their knowledge on assessment?

1.4 Methodology

Setting and Participants

As Merriam (1998: 41) states, case studies give a chance of examining complex social units consisting of multiple variables in understanding the relevant phenomena. As examining the prospective English teachers' competencies through PCK is a complex phenomenon, case study was chosen as a research method. The

selected case for the study was the prospective English teachers at the English Language Teaching Department, at Çanakkale Onsekiz Mart University (COMU), Turkey.

In this study, purposeful sampling was done. Purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight, and, therefore, must select a sample from which the most can be learned (Merriam, 1998). Thus, the participants were chosen following random purposeful sampling among the ones who enrolled in the “Teaching Practice” course.

Instruments

The first part of the study was conducted to all prospective English teachers at COMU. A questionnaire was administered to find out about their perceptions of their own competencies. In the second part of the study, in which document analysis, observation and interviews were used, three participants contributed to the study when they were having their “Teaching Practice” courses at COMU.

Method

In order to seek answers to the research questions, ‘the mixed research method’ was used in the study in which quantitative and qualitative research techniques, methods, and approaches are combined (Johnson & Onwuegbuzie, 2004). In the mixed research method, the researcher conducted a questionnaire as the primary data collection tool but since the questionnaires are limited in the representation of the whole picture, the data collection process was supported with interviews, classroom observations and document analysis (lesson plans) which are qualitative data collection tools. According to Creswell (2003), “the mix of quantitative and qualitative data is the best approach to deal with the problem and answer the research questions, increasing the overall reliability of data gathered” (cited in Çakır, 2008: 70). The mixed research method is used to get benefit from the strengths and to minimize the weaknesses of both quantitative and qualitative research in a single study (Johnson & Onwuegbuzie, 2004, McMillan & Schumacher, 1993).

Data Collection and Analysis

The data collection and analysis procedures consisted of two phases. The first one was the quantitative phase, in which the prospective English teachers' perceptions of their own level of teaching competency were investigated. Here, a questionnaire was developed by the researcher by adapting the existing instruments, utilizing the literature review and taking expert opinions. After piloting, the results of the reliability analysis showed a high degree of internal consistency with the value .95 for the questionnaire. In the second part, which was the qualitative phase, the research questions were addressed for in-depth understanding of the prospective English teachers' competencies through their PCK. For this purpose, an interview, observation procedure and a lesson plan assessment form were prepared under the guidance of experts and with the support of the related literature. Validity of these instruments was achieved taking the expert opinions into consideration.

1.5 Significance of the Study

This study is significant as prospective English teachers' firsthand knowledge on teaching is a great source for curriculum planners and administrators to construct educational planning, and to review educational aims and objectives. In addition, teacher educators may focus on pre-service teachers' pedagogical content knowledge to form the ELT programs. Furthermore, determining the prospective teachers' competencies may be enlightening for the trainees as they will become real teachers of English a year later.

As research on PCK of the prospective English teachers is scarce in Turkey, it is important to develop a deeper understanding of the particular PCK components, and its relationship to teaching and learning. The courses taught in the ELT departments may need to be revised and developed in the light of the research findings in order to help the prospective English teachers gain pedagogical competence.

The results of this study may also give valuable information to all who deal with teacher training by determining the teacher competencies gained in ELT departments. The study also contributes deeply to determine the English teachers' competencies that an ELT department desires each student to gain. This is beneficial for determining program competencies, which is a significant requirement for the EU Bologna process. It is also important to find out how much the courses in the ELT departments contribute to students' professional development. The study is not only an assessment of the students, but also the ELT program proposed by the Council of Higher Education (YÖK). With the help of the suggestions given at the end of the study, there may be some necessary revisions or additions to the courses given.

Important suggestions are made to the pre-service English teachers for becoming good teachers with pedagogical content knowledge before starting their job. Therefore, this study may guide educators and administrators in preparing new curricula which will help the prospective English teachers gain both pedagogical and practical knowledge.

The more investigations are carried out about the pre-service English teachers, the better English teachers will graduate from the universities. Besides, research on competencies of pre-service English teachers is scarce in Turkey. It is hoped that insights gained from the study will yield suggestions not only for the providers of teacher training activities, and administrators, but also for other researchers, and for the teachers of English.

This study may also contribute to the English language teacher competencies determined by the Ministry of Education. There may be some necessary changes, and revisions to be made in the English teachers' competencies proposed by the Ministry of Education. Also, the study is hoped to improve the pre-service English teachers' awareness of their competencies in terms of both learning and teaching. Most of the ELT students graduate from universities without realizing their competencies and inadequacies. They actively teach soon after their graduation. By this study, they

may have the chance to see their level of PCK before they work as active teachers of English.

1.6 Limitations of the Study

This study aims to investigate the prospective language teachers' competencies through their PCK. The following limitations can be listed:

1. Only one case was chosen while collecting and analyzing the data. Therefore, the study findings are limited to the selected case which comprises of the prospective English teachers studying ELT at COMU in 2011-2012 Academic Year.
2. This study is not comparative as it is restricted to only one case.
3. As the number of the participants is limited, the findings of this study may not be applicable to interpret the patterns in other research settings.

1.7 Assumptions of the Study

The main assumptions of the study are as follows:

1. The researcher made use of purposeful sampling where the participants were selected from whom he can learn most, to whom he can most access, and with whom he can spend the most time. Thus, prospective teachers chosen for this research were all the researcher's students from the 'Teaching Experience' course. The researcher did not explain anything to the participant prospective teachers about the research study. He did not want them to change their teaching behaviors just because they participated in a research study. Therefore, three participants of the study are assumed to participate in the study just like the other student teachers having the Teaching Experience course without any fear of getting low marks in that course.

2. It is assumed that the prospective teachers participating in the study represent the total number of the students studying in ELT department in the selected year.
3. Filiz, one of the participants of the qualitative study, had teaching experience in addition to the “School Experience” and “Teaching Practice” courses as she gave private lessons to different students and taught English to a group of primary school students for the requirements of the course named ‘Community Service’. She is assumed to be more experienced than the other two participants as they had not had any teaching experience except for the one they had in the “School Experience” and “Teaching Practice” courses. In the study, she is regarded as ‘*experienced*’ because of the extra teaching experience she had.
4. The students having a GPA of 3.00 and above are assumed to be ‘*more successful*’ students. The ones having a GPA of between 2.00 and 2.99 are assumed to be ‘*less successful*’ ones.
5. The findings of the study will reflect the real facts about the prospective English teachers’ pedagogical content knowledge.
6. Finally, all participants of the study are assumed to have taken part willingly and to have given answers with complete frankness.

1.8 Summary

This chapter has introduced the research study. In order to understand how effective the education the prospective English teachers have in the ELT departments is, it is necessary to understand more about their perceptions of knowledge about language teaching. Thus, having stated this main problem, the researcher has presented some basic literature on pedagogical content knowledge and teacher competencies. Then the purposes of the study and the research questions have been introduced. Later on, the methodology, significance, limitations and the assumptions of the study have been explained in detail in different sections.

CHAPTER II

LITERATURE REVIEW

2.0 Introduction

The most important and basic elements of the education system are the students, curriculum and teacher. Without one of these elements, there would not be any education and schools (Sönmez, 2003). In a training program, there are many facilities, tools and equipment which are designed to meet the needs of the students. However, an effective teacher is really important for a successful training program. Namely, the teacher is the key element of the effective education program (Miller & Miller, 2002). It is a general fact that there have always been some expectations from teachers. To meet these expectations, teachers must be well-trained and have the competencies that will lead to students' success. This is also the case for English language teaching. To meet the expectations and needs of the students, teachers of English must be well-trained, and be armed with necessary competencies which will help them teach effectively. Thus, it is important for the teachers to become more knowledgeable about teaching. One cannot expect a successful education without teachers having the necessary competencies and knowledge.

In this part of the study, what teacher competencies are, the studies about them, the knowledge base of the teachers and particularly studies about pedagogical content knowledge will be presented in detail.

2.1 Generic Teacher Competencies

The studies about teacher training and teacher competencies discuss both similar and different qualities of teachers. These qualities are determined by the researchers or the educationalists studying on competencies that every teacher should possess. There has always been the need to define teacher competencies. Thus, there

are several definitions and explanations of teacher competencies (Demirel, 2008; Koç & Bamber, 1997; Moor, 1999). To achieve better education, the literature and the research studies about teacher competencies should be reviewed and the competencies of prospective teachers should be examined. Consequently, reviewing the literature on teacher competencies will be of great help as the study aims to examine the prospective language teachers' competencies through their PCK. This will help the educationalists design better programs aiming at training prospective teachers in having the necessary competencies.

Houston and Howsam (1972: 3) define competence 'as adequacy for a task or as possession of required knowledge, skills and abilities'. Thus, it can be said that a competent teacher is one who has the necessary knowledge and skills. According to Demirel (2003: 1), 'language teaching is an art in that it is a highly skilled activity which is learned by careful observation and patient practice'. In order to be successful in this difficult process, language teachers should possess competencies regarding students' needs, arranging the teaching-learning environment, evaluation and measurement.

When the studies about teacher competencies are reviewed, it can be seen that many experts deal with the issue from different perspectives. However, the competency areas which are highlighted in common are about pedagogical and professional knowledge, interpersonal communication skills, knowledge of the field (content knowledge), and general knowledge (Karacaoğlu, 2008b: 33).

'Teacher competencies' is quite an important issue at an international level. For example, in the United States of America, teachers not possessing the pre-determined competencies are not given certificates to teach. They cannot start the teaching profession without this certificate. According to the statistics, only one out of ten candidates can achieve to obtain this certificate (Karacaoğlu, 2008b: 35).

The competencies that teachers should possess are listed as follows in the report of the EU on teacher training (Bunchberger et al., 2000):

Competencies Regarding Teaching

- Teaching
- Curriculum development
- Management
- Cooperation with other teachers
- Giving consultancy to students
- Leading innovations
- Supporter of lifelong learning

Competencies Regarding Responsibilities

- Teachership
- Head of department
- School master

Competencies Regarding Following New Approaches

- Sex education
- Carrying out environmental studies
- Peace education
- Using information and communication technologies

As a different perspective, Moore (2001) categorizes the necessary teaching competencies as competencies needed before teaching, while teaching and after teaching.

Competencies needed before teaching

- Determining the lesson syllabus by taking the aims, objectives of the lesson and students' needs into consideration
- Determining the target outcomes of the lesson in accordance with the syllabus
- Preparing and applying warm-up and motivation activities before starting the lesson
- Choosing the best strategy which suits the students' background knowledge, needs and learning styles

- Planning the lesson in an organized way in order to teach it effectively

Competencies needed while teaching

- Creating a positive atmosphere for communication
- Providing a variety of activities to attract students' attention
- Using effective reinforcement in the class
- Using the 'questioning' technique in an appropriate way

Competencies needed after teaching

- Ending the lesson in an appropriate way

The Council of Higher Education in Turkey tries to improve three domains of the pre-service teachers (cited in Çakır, 2008). These domains are special subject matter domain, pedagogical domain and general cultural domain. In the light of these domains, several classifications of teacher competencies are put forward by different researchers in Turkey.

Koç and Bamber (1997: 2-3) list the competencies that the teachers should possess as (1) subject matter knowledge, and (2) managing the teaching-learning process (planning lessons, using appropriate methodology). Demirel (2008:355) adds some other competencies as (3) classroom management and communication with the students, (4) assessment and recordkeeping, (5) providing guidance, (6) personal and professional qualities. Each category of competencies has several performance indicators.

Analyzing the research in the literature helps us see different dimensions of teacher competencies. In his study, Karacaoğlu (2008) aimed to determine the teacher competencies Turkey needs in the European Union harmonization process. In his research, 37 experts were asked to sort out the teacher competencies required by Turkish National Education System in the EU harmonization process. At the end of his research, 137 competency items that a teacher should have were determined under four main competency areas which are competencies regarding (1) the

professional knowledge, (2) the field knowledge, (3) self improvement and (4) national and international values (Karacaoğlu, 2008: 90-93).

The first competency area he proposed is about professional knowledge. This knowledge area comprises of (A) ‘professional competencies regarding getting to know the student and enabling the improvement of students’ such as appreciating the student, acquaintance with developmental characteristics, being supportive, taking the concern and the needs of the students into consideration, respecting students’ personalities, listening to the student, guiding the student, helping students improve themselves, attaching importance to learning styles of students, and developing internal motivation in students; (B) ‘professional competencies regarding teaching-learning process’ such as planning the lesson, arranging the learning environments, using time efficiently, managing behavior and class, dealing with undesired behaviors in class, reflective and creative thinking, problem solving, using body language efficiently, being patient, making students active in learning process, giving comprehensible explanations and instructions, using his tone of speech effectively, being open to suggestions and benefiting from them when necessary, asking effectively, giving feedback; (C) ‘professional competencies regarding monitoring and evaluating learning and improvement’ such as determining measurement and evaluation methods and techniques, measuring students’ learning of the subject using different measurement techniques, interpreting data by analyzing them and ensuring feedback on students’ development and learning, reviewing teaching-learning process according to results, monitoring the students’ progress; (D) ‘professional competencies regarding school, family, colleagues and society relations’ such as knowing about the environment, benefiting from the opportunities of environment, knowing the family and being neutral in relations with the families, participation of the family and cooperation with the family, communicating positively and efficiently with the mother, father, students’ guardian, and other individuals inside or outside the school; (E) ‘professional competencies regarding the program and content’ such as information on aims and principles of Turkish National Education, information on and implementation skill for specific field teaching program, monitoring and evaluation of specific field teaching program, expressing objectives and objective

behaviors (attainments) clearly, using the environmental opportunities in making program succeed.

The second competency area is about the ‘field knowledge’ of the teachers which comprises of knowing basic concepts and generalizations (principles) in his field, synthesizing interdisciplinary knowledge and skills, following improvements in science and in his own field, participating in scientific studies carried out in his own field and searching the source of information and requesting proof.

Karacaoğlu (2008) lists some more competencies regarding the third area which is ‘improving oneself’ such as performing self evaluation (evaluating his own performance), following and contributing professional improvements, being open to changes and innovations, being open to cooperation and team work, researching, improving his own personal vision, utilizing self improvement opportunities, cooperating with experts when necessary, admitting his mistakes, giving chance to the ones who made mistakes, using technology for his professional and personal improvement, attending places that enable his professional improvement (attending professional organizations and taking responsibility), being sensitive to problems of his profession and contributing to resolution, and the like.

‘Competencies regarding national and international values’ are in the last area that Karacaoğlu (2008) proposes. Some of these competencies include being honest, loving his country and nation, being healthy physically and mentally, being equipped on general and basic subjects, using the mother tongue efficiently, liking nature and being environmentally conscious, having a developed sense of responsibility, knowing Turkish culture and embracing it, knowing features of the society, owning national values, embracing universal values, being informed about latest developments, loving the profession you perform, setting an example to his/her students and the society with his/her behaviors and personality, being at peace with himself or herself, evaluating issues, events and phenomena rationally, being open-minded, possessing some social and societal values, making students embrace these values, having a strong character and personality, being the one who applies the

skills of problem solving, and behaving in accordance with the ethical principles of the profession

The Ministry of National Education (2008) proposes both ‘Generic Teaching Profession Competencies’ and ‘Subject Matter Competencies’. ‘Generic Teaching Profession Competencies’ are prepared under the coordination of The General Directorate of Teacher Training, within the scope of Support to the Basic Education Programme. These competencies determine the knowledge, skills and attitudes for teachers that they should be equipped with in order to be effective teachers. Six basic competency areas are highlighted together with the subtitles and performance indicators showing whether teachers have the required competencies or not. The competency areas are listed as the following:

- Personal and Professional Values, Professional Development
- Identifying the Student
- Learning and Teaching Process
- Monitoring and Evaluating Learning and Improvement
- School, Family and Society Relations
- Knowledge of Curriculum and Content

Generic teaching profession competencies determined by the Ministry of National Education (2008) are limited to the pedagogical competencies. It can be seen that other competency areas regarding, national and international values and the like are not included.

However, Turkish Educational Association (2009: 10) provides some other competency areas such as subject matter knowledge, national and international values as general teacher competencies. These can be seen below:

- Having subject matter (content) knowledge in the teaching-learning process
- Planning and application of teaching
- Monitoring and evaluating the effectiveness of teaching and students’ improvement

- Managing the teaching process and students' behaviors
- Adapting the teaching process in according with the students' personal differences/characteristics
- Using 'information technology' effectively
- Communicating effectively in the teaching-learning atmosphere
- Planning and achieving personal and professional development
- Collaborating with colleagues, families and other people working in the school
- Behaving in a responsible and critical manner in accordance with ethical rules

When the generic teaching profession competencies suggested by both Ministry of National Education (2008) and the Turkish Educational Association (2009) are examined, it can be clearly seen that there are some competencies in common. Similarly, many researchers propose similar competencies either in the same name or in different names (e.g. Demirel, 1989; Demirel, 2008; Köksal, 2008; Kyriacou, 1991).

According to the Ministry of National Education (2008), the above-mentioned competencies for teachers are expected to be used in:

- Personal and professional development of teachers
- Identification of teacher training policies
- Selection of newly assigned teachers
- Preparation of pre-service teacher training
- Programmes of higher education institutions training teachers
- In-service training of teachers
- Evaluation of teacher performances and achievements

Thus, these competencies are of great importance while evaluating what prospective English language teachers can do just before they graduate. That is, determining their competencies will help the educationalists, researchers and the teacher educators gain more insight into the practices of English Language Teaching Departments. While achieving this; not only generic competencies, but also subject specific competencies

should be examined. In the following section, subject specific competencies of EFL teachers are presented in detail.

2.2 Competencies of Foreign Language Teachers

Besides ‘Generic Teaching Profession Competencies’, there has also been a need for determining ‘Subject Specific Competencies’ for the teachers who have different majors or are to teach different subjects /disciplines. The Ministry of National Education (2008: 60-73) also categorized the English language teachers’ subject specific competencies. Similar to the generic teaching profession competencies, subject specific competencies of English language teachers have five basic competency areas with subtitles and performance indicators for each competency. Different from the generic competencies, the performance indicators of the subject area competencies are formed in three levels; A1 (basic), A2 (medium) and A3 (advanced). The ministry aims to present development goals to the teachers or teacher candidates by the help of these levels. The basic competency areas of EFL teachers are listed as follows:

- Planning and Organizing the Teaching Process of English
 - Appropriate planning for English language teaching
 - Arranging appropriate atmosphere for learning English
 - Using appropriate materials and sources for English language teaching process
 - Using appropriate methods and techniques for the English language teaching process
 - Using technological sources for the English language teaching process
- Developing Language Skills
 - Helping students develop their effective language learning strategies
 - Enabling students to use English in a correct and comprehensible way
 - Developing students’ listening skills
 - Developing students’ speaking skills
 - Developing students’ reading skills

- Developing students' writing skills
- Carrying out activities for the students who need special Education
- Monitoring and Evaluating Language Development
 - Determining the aims of the evaluation and measurement practices regarding language teaching
 - Using appropriate evaluation and measurement tools and techniques
 - Commenting on the results of the evaluation and measurement and being able to give feedback
 - Reflecting the results of the evaluation and measurement on their teaching practice
- Collaborating with the School, Family and Society
 - Collaborating with students' families to develop their language skills
 - Collaborating with related institutions, foundations and individuals to make students aware of the importance of language learning
 - Making students understand the importance of national days and ceremonies, and making them actively participate in these events
 - Organizing and managing these national days and ceremonies
 - Collaborating with the society to make the school a center for culture and learning
 - Being able to act as a social leader
- Achieving Professional Development in the Field of English Language Teaching
 - Determining their professional competencies
 - Achieving their personal and professional development regarding English language teaching
 - Using research methods and techniques in their practices for their professional development
 - Reflecting their research and studies about their professional development to their teaching practices

There have been several research studies about EFL teachers' competencies most of which are also about teachers' knowledge base (Day, 1993; Demirel, 1989; Golombek, 1994; Golombek, 1998; Shulman, 1987). For example, Demirel (1989: 7) believes that EFL teachers should have subject-matter, pedagogical and cultural competencies. They should have the necessary knowledge about their fields and pedagogical knowledge helping the teachers teach that subject matter – English.

The teachers should not only have the knowledge of the target language, but also that of the students' language so that they can establish rapport, and maximize the effectiveness of their teaching practice by diagnosing the linguistic and communication problems of students. Thus, in addition to the knowledge of target language, knowledge of students' language is also important (Saville-Troike, 1976).

Harmer (1998: 1-3) summarizes the answers given to the question of “what makes a good teacher?” Some of his answers can be seen below:

- Teachers must love their job so that they can make their lessons interesting.
- Teachers should have lots of knowledge, not only of their subject.
- Teachers should be able to entertain students while teaching.
- Teachers should be able to correct people without offending them.
- Teachers should know the students names and help them.
- They should care more about their students' learning than they do about their own teaching.

Harmer emphasizes the pedagogical competencies of teachers rather than the linguistic aspects of language teaching competence. Thomas (1987: 36-38) draws attention to both linguistic and pedagogic aspects. To him, the language teachers should have both language competence and pedagogic competence. Firstly, a language teacher should master all four basic language skills - listening, speaking, reading and writing. Moreover, s/he must know functional, stylistic and informational components of the language. In addition to the language competence, language teacher is supposed to have pedagogic competence, which requires

knowledge of classroom management, teaching, preparation and assessment strategies.

Similarly, Davies and Pears (2000) categorizes the personal and professional qualities of foreign language teachers under five headings. Effective foreign language teachers

- know the language they teach very well. They not only know the grammatical rules very well, but also can speak the language fluently,
- use the target language all the time in their classes,
- spend the lesson hours on practicing the language rather than just teaching it,
- spend the lesson hours not on grammatical exercises but on the real life use of language. Namely, they try to do speaking practices and activities based on developing communication skills,
- adapt their teaching practices not only in terms of the curriculum, but they also take the students needs into consideration while developing their materials.

Saville-Troike (1976: 140-141) lists the expected competencies for a language teacher as knowledge of content and methodology, classroom management, lesson planning and organization, utilization of media aids and learning resources, assessment of student achievement and effectiveness of materials and teaching approaches.

Kyriacou (1991: 8-9) identifies essential teaching skills, which contribute to successful classroom practice as (1) planning and preparation (2) lesson presentation (3) lesson management (4) classroom climate (5) discipline (6) assessing pupils' progress and (7) reflection and evaluation.

Considering all the information presented so far, it can be seen that there have been various definitions of teacher competencies and that they have been categorized

under different headings. However, researchers somehow have an agreement on the acquisition of essential skills to teach effectively. Generally, researchers clearly acknowledge that teachers should display skills in planning, classroom management, instruction and assessment.

That a teacher should have characteristics such as subject matter competence, professional competence and cultural competence is not only the case for teachers of other subject areas, but also for English language teachers. As previously mentioned, most of the competency areas of foreign language teachers are closely related to teachers' knowledge base. Thus, foreign language teachers' knowledge base will be discussed in detail in the following sections.

2.3 EFL Teachers' Knowledge Base

'Knowledge base of teachers' [the term that Meier et al. (1999: 60) use] is the issue which has been recently investigated by the researchers. The knowledge base of teachers is a good source of information about how teachers teach their subjects. Each profession has its own knowledge base which makes it different from the others. Pre-service teachers are all taught some common courses while they are educated at the faculties of education. For example, both pre-service English teachers and Science teachers take 'Classroom Management', 'School Experience', 'Guidance', and 'Teaching Practice' courses. However, they are also taught some field specific courses which separate each field from the others as each has different knowledge bases specific to that particular field. To illustrate, we can say that while pre-service science teachers take the courses General Physics or General Chemistry, pre-service English teachers take Linguistics or Introduction to Literature because of the difference between the knowledge bases based on the needs of their future professions (Saraç-Süzer, 2007: 12). Thus, when talking about the teaching profession and the profession of English language teaching in particular, the nature of knowledge base should be questioned and discussed in order to determine the teacher competencies as well. What kind of a knowledge base should the prospective

English language teachers possess to become eligible for teaching? This has been discussed in detail in the following parts and questioned in this study in order to find out whether the prospective English teachers at Çanakkale Onsekiz Mart University are eligible enough for teaching or not.

In the last two decades, there have been some research studies to explore teacher knowledge in general education, second language education, and applied linguistics field (Borg, 2003; Elbaz, 1981; Freeman & Johnson, 1998; Golombek, 1998; Meijer et al., 1999; Meijer et al., 2001; Shulman, 1987). To some extent, these studies have helped the researchers understand and figure out the knowledge base of teachers. However, there is still a lack of research particularly in the fields of applied linguistics and second/foreign language education.

Shulman (1986) was the first scholar who started to discuss and question the nature of teachers' knowledge. He proposes a theoretical framework of teacher knowledge which is analytical and distinguishes three categories of knowledge: 1) subject matter (content) knowledge, 2) pedagogical content knowledge, and 3) curricular knowledge. While *content knowledge* refers to one's understanding of the subject matter, *pedagogical knowledge* refers to one's understanding of teaching and learning processes. Moreover, *pedagogical content knowledge (PCK)* refers to knowledge about the teaching and learning of a particular subject matter that takes into account the particular learning demands inherent in the subject matter. Later, more categories of knowledge are added to the model such as knowledge of learners and their characteristics, educational contexts, knowledge of educational ends, purposes and values (Shulman, 1987:8) and knowledge on assessment (Tamir, 1988).

While Grossman (1990:5) identified four main sub-categories of for teacher knowledge (general pedagogical knowledge, subject matter knowledge, pedagogical content knowledge, and knowledge of context), Nunan (2001) suggests two types of knowledge base which are "declarative knowledge" and "procedural knowledge". The former one is defined as what we know about language. For example, if we use -er in the comparative, we form the superlative form of the adjectives by adding -est

to the adjective. The teacher, knowing this, is supposed to have declarative knowledge. The latter is subdivided into ‘discipline specific’ and ‘general knowledge’. The skills that are specific to language teaching are all related to teachers’ ‘discipline specific procedural knowledge’. Teachers’ knowledge of how to introduce a new grammatical item such as comparatives or superlatives is related to their discipline specific procedural knowledge. However, the skills that all teachers should possess no matter what they teach are defined as teachers’ ‘general procedural knowledge’. To illustrate; how to manage classes, how to organize group work, how to deal with problems in the classes, and how to sustain motivation of students are all issues that all teachers should be knowledgeable about.

Day and Conklin (1992) claim that the knowledge base of second language teacher education consists of four types of knowledge. The first one is the *content knowledge* which is also known as the knowledge of the subject matter (what ESL/EFL teachers teach). English language and cultural aspects of the language are content knowledge for ESL/EFL teachers. Secondly, *pedagogic knowledge* is about knowledge of generic teaching strategies, beliefs and practices, regardless of the focus of the subject matter we teach. Knowledge of classroom management, how to sustain and keep motivation, and decision making can be given as examples of pedagogic knowledge. Another category of teacher knowledge is *pedagogic content knowledge* which is defined as the specialized knowledge of how to represent content knowledge in diverse ways that students can understand. The knowledge of how students come to understand the subject matter, what difficulties they are likely to encounter when learning it, what misconceptions interfere with learning, and how to overcome these problems are all included into this category of the knowledge base of teachers. For example, the knowledge of how to teach English grammar is regarded as the pedagogic content knowledge of ESL/EFL teachers. Finally, they propose another category of teachers’ knowledge which is *support knowledge*. This is the knowledge of the various disciplines that contribute to our approach to the teaching and learning of English; e.g., psycholinguistics, linguistics, second language acquisition, sociolinguistics, research methods and the like.

In the light of their research, Wilson et al. (1987: 118) describe professional knowledge base. In their description, professional knowledge base of teachers comprises of both pedagogy and subject knowledge. In addition to the pedagogical and subject matter knowledge, their model embodies pedagogical content knowledge, which includes developing an understanding towards teaching a particular topic as well as having the knowledge of principals and techniques. Following figure shows the professional knowledge base of the teachers.

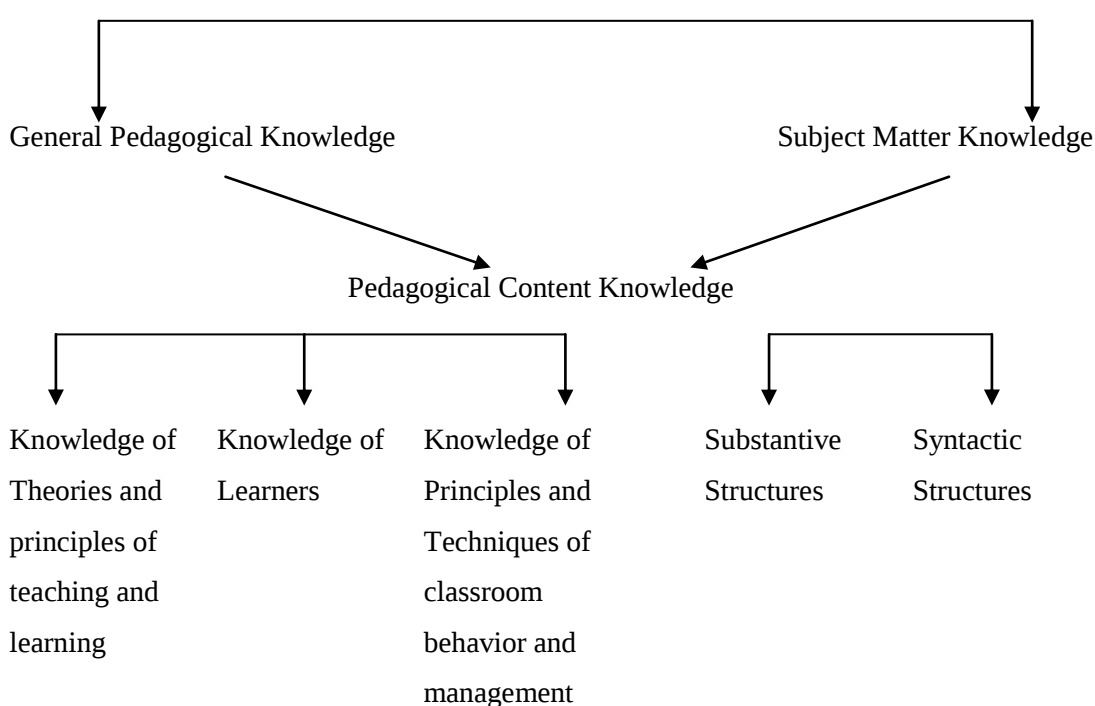


Figure 1: *Professional Knowledge Base* (adapted from Wilson et al., 1987)

Researchers have used different terms since they have begun to define the teachers' knowledge base. Teachers' 'knowledge base', (Shulman, 1987) 'practical knowledge', (Elbaz, 1981; 1983) and 'personal practical knowledge' (Clandinin & Connelly, 1987) are the terms that have been used in studies carried out in the field of language education, and applied linguistics (Freeman, 1991; Golombek, 1998; Johnston and Goettsch, 2000). Furthermore, Borg (2003: 81) deals with the term teachers' practical knowledge in a general framework and calls it 'teacher cognition'; that is, 'what teachers know, believe and think'. Similarly, Woods (1996: 282)

emphasizes that what teachers do and say is related to their beliefs, assumptions, and knowledge.

Although the categories of (language) teachers' knowledge base have been claimed to be different by different researchers, they are more or less the same. For instance, when Johnston and Goettsch (2000: 445) define the knowledge that language teachers have about the subject matter taught in their classrooms, they use the term 'content knowledge'. Golombek (1998: 451) refers to it as 'subject knowledge' while implying a definition similar to that of Johnston and Goettsch. She also refers to the same term when she uses 'knowledge of instruction' by referring to it as 'pedagogical knowledge'. Thus, it can be said that there is no clear straightforward distinction for the use of the terms which are most of the time indistinguishable (Ariogul, 2006: 17).

Despite the terminological differences that the researchers use, they agree that the teacher is required to be knowledgeable about pedagogy as well as the subject matter. Thus, teachers should build awareness of what they teach and of how they teach. Namely, they need to acquire skills that are specific to teaching specific subject matter. Geddis (1993: 675) makes it clear that

The outstanding teacher is not simply a 'teacher', but rather a 'history teacher', a 'chemistry teacher', or an 'English teacher'. While in some sense there are generic teaching skills, many of the pedagogical skills of the outstanding teacher are content-specific. Beginning teachers need to learn not just 'how to teach', but rather 'how to teach electricity', 'how to teach world history', ['how to teach grammatical rules of English'] or 'how to teach fractions'.

Pre-service teachers of English get educated on different aspects to get prepared for the teaching profession. They have some methodology courses in which they receive their pedagogical knowledge. They are also supposed to have content knowledge, which is English. An effective prospective English teacher is supposed to blend the two, bring content and pedagogy together, and make the learning more effective. They must have the combination of linguistic background, content, content pedagogical, and pedagogical knowledge (Synder, 1999; cited in Sarıçoban, 2001: 40). Teacher educators argue that subject matter knowledge is simply not enough to

be successful in the classroom (Darling-Hammond & Youngs, 2002), and pedagogy, as well as the subject matter area, is a necessary part of teacher education. Likewise, Black et al. (2004: 17) contend that

A high level of qualification in a subject is less important than a thorough understanding of its fundamental principles, an understanding of the kinds of difficulties that students might have, and the creativity to be able to think up questions that stimulate productive thinking. Furthermore, such pedagogical content knowledge is essential in interpreting [student] responses.

In the following sections the main components of knowledge base – subject matter (content), pedagogical and pedagogical content knowledge – are discussed in detail as the focus of this study is pedagogical content knowledge of prospective English language teachers. Pedagogical content knowledge is important because it focuses on ways of representing and formulating the subject to make it understandable to students as well as an understanding of what makes learning specific themes easy or difficult (Ellison, 2007). It is a sophisticated hybrid of pedagogical and content knowledge (Freeman, 2002). As in other content areas, neither pedagogical knowledge nor content knowledge alone is sufficient for effective foreign language teaching.

2.3.1 Subject Matter (Content) Knowledge

Although teaching would be impossible without this knowledge domain, content knowledge receives the least attention. Grossman (1990) defines subject matter knowledge as the understanding of the facts, concepts and terminology of a subject discipline. Moreover, this knowledge “refers to what teachers need to know about what they teach and constitutes knowledge that would not be shared by teachers of other subject areas” (Richards, 2011: 5). Thus, for an English teacher knowledge of English is the content knowledge that is unique to the teachers of English. Teachers having good command of English generally can “make better and more appropriate decisions about teaching and learning, and arrive at more

appropriate solutions to problems than a teacher without such knowledge” (Richards, 2011: 7).

In the opinion of Cox (2008), this knowledge area is independent of any pedagogical activities or how one might use methods or strategies to teach. The teachers should know and understand the subject that they teach. Although, as Andrews (2008: 293) notes that much current research is being carried out to determine the boundaries of what comprises subject-matter knowledge, there is now widespread agreement that the subject matter knowledge components are the ones proposed by Tsui & Nicholson (1999). They developed this knowledge area for English language teaching and sub-divided it into four distinct categories: phonology, lexis (morphology), grammar and discourse. These sub-components of subject matter knowledge form the basis of teachers’ knowledge.

Another issue that is to be discussed is how much of a language a teacher needs to know to be able to teach that language effectively. Richards (2011: 3) puts forward some competencies that a language teacher needs in order to teach effectively. To him, effective teachers of English can comprehend texts accurately, provide good language models, maintain use of the target language in the classroom, give explanations and instructions in the target language, provide examples of words and grammatical structures and give accurate explanations, use appropriate classroom language, give correct feedback on learner language, and provide input at an appropriate level of difficulty. The more the teachers know about language, the more confident they are in their teaching practices. Teachers’ level of language proficiency is closely related to their confidence. Teachers who perceive themselves to be weak in the target language have reduced confidence in their teaching ability (Seidlhofer, 1999; cited in Richards, 2011: 4). Thus, effective teachers are usually ones who are proficient in the language they teach.

Being part of pedagogical content knowledge, content knowledge is also examined under the heading of ‘knowledge of English’ in the following sections. As knowledge of English is a prerequisite for teaching English, it is always in the first

place to discuss. When teachers are knowledgeable about ‘what to teach first’, they must know ‘how to teach best’. Thus, what follows the content knowledge is the pedagogical knowledge of the teachers.

2.3.2 Pedagogical Knowledge

Pedagogical knowledge is defined as skills related to teaching and instruction, and skills related to classroom management (Grossman, 1990; Shulman, 1987). It is mainly about techniques or methods of teaching and strategies for evaluating student understanding (Mishra & Koehler, 2006). This knowledge domain focuses on a teacher’s knowledge of the general pedagogical activities and strategies for motivating students, communicating with students, presenting information to the students, classroom management, and so forth (Cox, 2008). Similarly, Saraç-Süzer (2007: 24) describes pedagogical knowledge as a rich knowledge base which includes “the knowledge of teaching and learning approaches, methods of implementation, teaching and learning strategies, techniques, testing, classroom management, material development, and all other major and minor areas related with the theoretical infrastructure of language teaching”.

In her study, Gatbonton (2000, cited in Mullock, 2006: 56) provides a summary list of teachers’ teaching thoughts for six domains of pedagogical knowledge. She believes that language teachers should have (1) knowledge of how to manage specific language items so students can learn it (Handling Language Items), (2) knowledge about the students and the factors that students bring with them to the class (Factoring in Student Contributions), (3) knowledge of the goals of teaching (Determining the Contents of Teaching), (4) knowledge about techniques and procedures: a sense of how the lesson should unfold (Facilitating the Instructional Flow), (5) knowledge about how to achieve appropriate classroom relationships (Building Rapport), and (6) knowledge about evaluating student task involvement and progress during the lesson (Monitoring Student Progress).

In the light of the literature reviewed, it can be expressed that the courses taken at the ELT departments form the prospective English teachers' subject matter (content) and pedagogical knowledge. However, pedagogical content knowledge is generally gained through teaching practices. It requires the knowledge of how to bring the content and pedagogy together.

In this respect, PCK, the categories of which are explained in detail in the following sections, simply refers not only to the knowledge of subject (English in our setting), but also how to teach the subject.

2.3.3 Pedagogical Content Knowledge

As described and defined in the previous sections, PCK "is commonly believed to be a transformation of at least two constituent knowledge domains: general pedagogical knowledge and subject matter knowledge" (Gess-Newsome, 1999: 5). Richards (2011: 6-7) emphasizes that teachers who have sufficient PCK should be able to

understand learners' needs, diagnose learners' learning problems, plan suitable instructional goals for lessons, select and design learning tasks, evaluate students' learning, design and adapt tests, evaluate and choose published materials, adapt commercial materials, make use of authentic materials, make appropriate use of technology, [and] evaluate their own lessons.

A teacher with good PCK teaches a subject matter with appropriate instruction strategies. Namely, they must have the knowledge of the subject matter, knowledge on planning lessons, knowledge of learners, knowledge on teaching methods and techniques, and knowledge on assessment all together. To get a better understanding of what PCK is, the categories of PCK are discussed in the following sections.

2.3.3.1 Knowledge of English

Effective teachers are generally thought to have good knowledge of the content area they teach (Minor et al., 2000; Reed & Bergemann, 1992; Weinstein,

1989). Namely, effective English language teachers are expected to have a good command of English. Similarly, Saville-Troike (1976: 138-142) believes that the necessary competencies for a language teacher are language proficiency, knowledge of linguistics, culture, and curriculum and instruction. According to Saville-Troike, a language teacher must demonstrate proficiency in language to control a standard variety of English in her teaching practice. Similarly, Lafayette (1993) suggests three components of language teachers' subject matter knowledge: (1) language proficiency, (2) civilization and culture, and (3) language analysis (knowledge about the language). Therefore, knowledge of linguistics is quite essential for a foreign language teacher. Without detailed knowledge of English, and the nature of language and language learning; the teacher cannot organize the curriculum, plan lessons, evaluate textbooks and teach his/her students effectively (Saville-Troike, 1976).

The basic requirement of teaching is '*language*' for language teachers. English teachers are expected to be competent language users. In his description, Garvie (1990: 25) states that competent language teachers must perform well while listening, speaking, reading and writing. Furthermore, they must know about language and have an awareness of both grammar and its related parameters.

For a language teacher, both accuracy and fluency in written and spoken English is vital. "... English teachers have to speak, read and write English fluently and accurately" (Ward, 1992: 58). Moreover, being an effective language teacher is almost impossible without the knowledge of linguistics. Language teachers should have enough knowledge about the structure and main features of the language, that is, linguistics (Halliday, 1982; Sinclair, 1982). Content knowledge is mostly about teacher's knowledge of the English language. In the opinion of Wright and Bolitho (1997), being both 'proficient users' and 'skilled analysts' of English language is a requirement for English teachers. This requirement is the content knowledge two aspects of which are explained by Ellis (2006) as "(a) the teacher's ability to speak and write English as a competent user and (b) the teacher's knowledge of English from an analytical perspective: its phonology, grammar, syntax, lexical properties, generic structures, pragmatic realizations and literacy conventions". The knowledge

of what to teach always comes before the knowledge of how to teach. Teachers must first know the subject matter they teach very well and then develop appropriate instructional strategies while teaching it.

2.3.3.2 Knowledge on Planning Lessons

This knowledge domain of the teacher is closely related to curriculum knowledge, which is part of the categories of knowledge base developed by Shulman (1987). As discussed before, knowledge of English is essential for teaching. However, it is not enough by itself. Effective teachers must be able to accommodate it into curriculum knowledge. Namely, they must “know the syllabi for a particular subject area..., the particular topic, the level at which it is to be taught, the resources, and materials to be used” (Reitano, 2004: 37). To illustrate, in order to teach new vocabulary items such as sports or a grammar item like present perfect tense, teachers must be familiar with the syllabus, course organization, learning experiences, general objectives and assessment.

Being familiar with the above-mentioned aspects, teachers are supposed to plan their lessons considering the following aspects.

1. While planning lessons, teachers “must consider the background of the students, the objectives of the lesson, the skills to be taught, the activities, the materials and texts, the time constraints, and the connections to previous and future lessons” (Jensen: 2001: 404).
2. Effective lesson plans should have coherence, variety and flexibility. A lesson having coherence is not just a sequence of discrete activities. Students have to understand the rationale for each activity. They learn best when there are transitions from one activity to the next. Also, there should be variety in terms of topics, skills, pace of the class, such as time spent on various activities. Finally, a good lesson is flexible. Whatever the lesson plan says, a good teacher should always be able to adapt or change the activity whenever he needs to (Jensen: 2001: 406-407).

3. A framework for a lesson plan should include the following parts: (1) setting objectives, (2) setting the knowledge structure, concepts and the subject matter, (3) determining the approaches and methods, (4) planning key questions, (5) planning the introduction and summary, (6) methods for arousing interest, (7) considering the timing for the different parts, (8) considering appropriate materials, (9) constructing a board plan, (10) writing worksheets and/or handouts, (11) designing the homework or follow-up activities, and (12) methods for evaluating learning outcomes (Pang, 1992: cited in Richards, 1998: 104).
4. A lesson plan should also take the variation of ability in the students into consideration. Namely, a lesson plan should be prepared considering the individual differences. Teachers should try to design techniques that will involve all students actively (Brown, 2001: 154).

Learners have various characteristics. Knowing about these characteristics and about their background knowledge helps teachers forecast possible questions to be asked by the students and provide possible answers for them. Teachers should make use of their knowledge of learners while planning their lessons. Thus, knowledge of learners that will be explained in the following section is as important as knowledge on planning lessons for teachers to teach effectively.

2.3.3.3 Knowledge of Learners

Students have always been different from one another in many ways. It is obvious that “teachers must be prepared to teach a diverse population of students” (Abd Rahman, Scaife, Yahya & Ab Jalil, 2010: 83). In order to effectively teach the subject matter to the students, teachers must have a knowledge base of their learners. Developing PCK requires not only an understanding of the subject matter, but also an understanding of children, their abilities and interests, and how they learn. Knowledge of learners is clearly related to the students and their characteristics.

To Shulman (1987), knowledge of learners consists of empirical and cognitive knowledge of learners. Empirical or social knowledge is basically the knowledge of what children of a particular age range are like, their social nature, how they behave in classrooms, their interests, and so on, while cognitive knowledge of learners has both theoretical and practical aspects. The former is about the theories of child development which informs the practice. The latter grows from regular contact with the learners. It is the knowledge of what they know, of what they can do, of what they are likely to be able to understand. Shulman's idea of adaptations, activities and representations to meet the needs of particular learners requires this knowledge domain. Teachers with knowledge of their learners can adapt course materials, prepare various activities, and arrange them according to their learners' different needs and characteristics.

No specific approach is right for everyone. Thus, it is very important for the teachers to know why they select a specific method or technique for each student group. Each learner has different learning styles from each other. Kolb (2002; cited in Gezmiş & Sarıçoban, 2006: 3) lists the learning styles as converging, diverging, accommodating, and assimilating. Convergent learners can find practical applications for concepts, ideas and theories, while divergent learners tend to be more of the "arts and humanities" type. Also, the accommodating learning style relies on intuition rather than logic. These learners use other people's analysis. The assimilating learning preference is for a logical approach. Ideas and concepts are more important than people. These people require good clear explanation rather than practical opportunity. Besides Kolb's classification, Felder and Soloman (n.d.) summarizes the learning styles as follows.

Table 1: *Learning Styles*

Learning Styles	
Active Learners:	Reflective Learners:
tend to retain and understand information best by doing something active with it.	prefer to think about it quietly first.

say “Let’s try it out and see how it works”.	say “Let’s think it through first”.
tend to like group work.	prefer working alone.
find it hard to take notes.	find it easy to take notes in a lecture.
Sensing Learners:	Intuitive Learners:
tend to like learning facts.	prefer discovering possibilities and relationships.
like solving methods by well established methods and dislike complications and surprises.	like innovation and dislike repetition.
tend to be patient with details and good at memorizing facts.	are good at grasping new concepts and are often more comfortable with mathematical formulations.
tend to be more practical and careful.	tend to work faster and more innovative.
do not like courses that have no apparent connection to the real world.	do not like courses that involve a lot of memorization.
Visual Learners	Verbal Learners
remember best what they see – pictures, diagrams, charts, films, and demonstrations.	get more out of words – written and spoken explanations.
Sequential Learners	Global Learners
tend to gain understanding in linear steps, with each step following logically from the previous one.	tend to learn in large jumps, absorbing material almost randomly without seeing connections.
tend to follow logical stepwise paths in finding solutions.	are able to solve complex problems quickly.

A variety of student characteristics can affect learning. Thus, knowledge of learners’ different characteristics and learning styles can help teachers make decisions about objectives, pacing, examples, and the like, help them explain student difficulties, and guide instructional adaptations (Teaching Principles, n.d.). This will

in turn help teachers motivate their students to learn and keep their motivation and interest alive which is an important part of their job.

All in all, teachers must understand their learners' diversity "in terms of their abilities and interests and how they respond to diverse situations". Also, teachers' understanding of their students' prior knowledge is quite important to let their students make "meaningful connections between their existing knowledge and new knowledge" (Cooper & McIntyre, 1994; cited in Reitano, 2004: 36). Moreover, teachers must know how to apply different teaching methods and how various types of classroom activities might be managed (Abd Rahman et al., 2010: 83).

2.3.3.4 Knowledge on Teaching Methods and Techniques

Language teachers are often forced to make decisions about their lessons. Sometimes, they are to make minor decisions about when to give a break, how much homework to give to the students, how often to give feedback to them, so and so forth. However, most of the time, they are forced to make strong decisions about the way they teach the language, about the approaches and methods they use in their classrooms.

So far, there have been some approaches and methods to English language teaching. Effective teachers of English should be able to choose the best method for their classes. There comes another question here, "Is there a best method?" The best method is only achievable if the teachers determine the teaching situation, learners' needs, teaching procedure and so on. Only then, they can create a best method (Eclectic Method). In order to do so, English teachers should be knowledgeable enough about the teaching methods with their key principles and techniques and about which of them they should use in their classrooms.

There have been many definitions of "approach and method". However, those definitions were not strictly determined. Many definitions were made by

different educators. Nearly five decades ago, Anthony (1963; cited in Brown, 2001: 14) claimed that approach was an umbrella term for the others (method and techniques). To him,

An **approach** was a set of assumptions dealing with the nature of language, learning and teaching. **Method** was described as an overall plan for systematic presentation of language based upon a selected approach. **Techniques** were the specific activities manifested in the classroom that were consistent with a method and therefore in harmony with an approach as well.

To Anthony, there is always an approach on which some other methods are based. Also, there are some methods which are practised by using various techniques. Brown (2001: 16) also defines the terms as in the following.

Approach: Theoretically well-informed positions and beliefs about the nature of language, the nature of language learning, and the applicability of both to pedagogical settings.

Method: A generalized set of classroom specifications for accomplishing linguistic objectives. ... They are almost always thought of as being broadly applicable to a variety of audiences in a variety of context.

Technique: Any of a wide variety of exercises, activities, or tasks used in the language classroom for realizing lesson objectives.

In the opinion of Richards and Rodgers (2001:20), “approach refers to theories about the nature of language and language learning that serves as the sources of practices and principles in language teaching”, so, approaches have emerged from theories of language and language learning. Richards and Rodgers (2001) classify those theories as

a) Theory of Language

- Structural view
- Functional view
- Interactional view

b) Theory of Language Learning

- Behavioristic view of language learning
- Cognitive view of language learning
- Social (Constructivist) view of language learning

There have been some methods in language teaching so far emerging from the views listed above. Teachers should be knowledgeable about these methods and the techniques based on each method while they are teaching in their classrooms. The methods and the techniques to be used in the classroom are discussed in the following (Brown, 2001; Celce-Murcia, 2001; Larsen-Freeman, 1986; Richards & Rodgers, 2001).

Grammar Translation Method (GTM):

The main aim of the method has been to enable students to be able to translate each language to the other. Form of the language has been the main focus. In this method, language is taught in the mother tongue with little use of the target language, vocabulary is taught in the form of lists of isolated words, grammar rules are explained in detail, little or no attention is given to pronunciation. Typical techniques associated with grammar translation method are (Larsen-Freeman, 1986: 13-14):

- 1) Translation of a Literary Passage: Students translate the passage from target language to native language.
- 2) Reading Comprehension Questions: Students answer questions in the target language based on their understanding of the reading passage.
- 3) Antonyms / Synonyms: Students find antonyms and synonyms for words or set of words in the reading passage.
- 4) Cognates: Students are taught to recognize cognates by learning the spelling or sound patterns that correspond between the languages.
- 5) Deductive Application of Rule: Students understand grammar rules and their exceptions, apply them to some different examples.
- 6) Fill-in-the blanks: Students fill in the blanks in the sentences with new vocabulary items or necessary items of grammatical features.

- 7) Memorization: Students are asked to memorize a list of target language vocabulary words and their native language equivalents, and grammatical rules and grammatical paradigms.
- 8) Use words in Sentences: Students make up sentences in which they use the new words to show that they understand the meaning and use of a new vocabulary item.
- 9) Composition: Students write about a topic using the target language.

Direct Method (DM):

Direct Method was a reaction to GTM. The goal of the instruction in this method was to be able to use language in order to communicate. Communication was a new term when this method evolved, so it became popular. As for its principles, some examples can be given as (a) no translation is allowed, (b) inductive teaching of grammar is essential, (c) only everyday vocabulary and sentences were taught, (d) new teaching points were taught through modeling and practice, (e) correct pronunciation and grammar were emphasized, (f) pictures, realia, examples, sample sentences are used to teach vocabulary, and so on.

Reading aloud, Question and answer exercise, self-correction, conversation practice, fill-in-the-blank exercise, dictation, map drawing (for listening comprehension practice), and paragraph writing are among the techniques used in this method.

The Audio-Lingual Method (ALM):

This method claims that language learning is a process of habit formation. No grammar rules are given to the students. Larsen-Freeman (1986: 42) highlights that “speech is more basic to language than written form in ALM”. In ALM, meaning is taught directly. L1 is prohibited because it may cause bad habit formations. Vocabulary is introduced through dialogues. As for grammar, explicit rules are not provided. Students induce the rules through examples and drills. Students acquire grammar by being exposed to patterns through mechanical drills.

Techniques used in this method are dialogue memorization, minimal pairs: (for teaching pronunciation), completing the dialogue, grammar games, and mechanical drills including repetition, chain, single- slot substitution (T gives one cue to be substituted), multiple-slot substitution drills (T gives more than one cue to be substituted).

The Silent Way:

With this method, language learning is no longer considered a product of habit formation, but rather of rule formation. The teacher is silent and teacher's silence gives the responsibility to the student. The teacher starts with what students already know, and builds from one structure to the next. There is a focus on the structures of the language although explicit grammar rules are never given. Sound-color charts, teacher's silence, peer correction, self-correction gestures, word chart, structured feedback are among the techniques used in this method.

Suggestopedia:

This method claims that students should eliminate the feelings that they cannot be successful and thus, psychological barriers should be removed. Teacher is the authority. Students must trust and respect that authority. Larsen-Freeman (1986: 84-86) provides descriptions of techniques associated with suggestopedia.

- 1) Classroom set up: In this technique, the teacher should focus on creating a physical environment in which students feel as relaxed and comfortable as possible. Teachers can accomplish this with the use of dim lights, soft music, cushioned armchairs, and posters on the walls.
- 2) Peripheral Learning: The teachers should hang posters, lists, charts, texts, paintings, and graphs on the walls of the classroom. Students are supposed to learn from these although their attentions are not directly called on these materials.

- 3) Positive Suggestion: The teacher may tell students they are going to be successful to create self-confidence directly or provide positive suggestion by music and comfortable physical conditions of the classroom indirectly.
- 4) Visualization: Students are asked to close their eyes and visualize a scene or an event in detail to make them relaxed. The teachers may make use of this technique just before students write a composition in order to activate their creativity.
- 5) Choose a New Identity: Students are asked to select a new identity, which will later be a good initiative for a writing activity.
- 6) Role Play: Students pretend to be someone else and perform a role using the target language.
- 7) Primary Activation: Students reread the dialogue in the target language aloud in sad, angry, and/or amorous ways.
- 8) Secondary Activation: Students engage in various activities such as singing, dancing, dramatizing, and playing games with which not the linguistic form but communication is important.

Community Language Learning (CLL):

This method suggests the teachers that they see each student as a “whole person”. It is completely humanistic. According to the method, it is vital for the teacher to build relationship with and among the students as students learn best when they feel secure. The teacher should remove the threatening factors in the classroom. The techniques associated with this method are as in the following.

- 1) Transcription: The teacher writes the L1 equivalent of the text in the target language on the board or a poster-sized paper in order to be able to refer later.
- 2) Reflection on Experience: Students tell about their feelings about language learning experience.
- 3) Reflective Listening: Students listen to their own voices speaking the target language on the tape or the teacher may read the transcript while students simply listen.

- 4) Human Computer: The teacher repeats the correct form as many times as the students need. The student's error is not corrected. The teacher only repeats the correct form so that the student can self-correct his/her error.
- 5) Small Group Tasks: Students can learn from each other and can get more practice with the target language by working in small groups. Also, students know each other better, which can lead to the development of a community among class members.

The Total Physical Response Method (TPR):

This language learning method is based on the coordination of speech and action. In the TPR, listening comprehension gains importance. It follows the same way of teaching language as children learn their mother tongue. Meaning in the target language can often be conveyed through actions. The imperative is a powerful linguistic device. Skilful use of imperatives by the teacher can be helpful for the acquisition of many vocabulary items and grammatical structures. Students can learn through observing actions as well as performing the actions themselves. Moreover, feeling of success is very important in this method. Some techniques used in this method are:

- 1) Using Commands to Direct Behaviors: This is the major teaching technique of the Total Physical Response Method. The teacher says the commands as he/she performs the action. Actions make meaning clear.
- 2) Role Reversal: In this technique, students command their teacher and classmates to perform actions.
- 3) Action sequence: The teacher may give three connected commands (e.g. "Point to the door, walk to the door, and touch the door"). As the students learn more and more the target language, the teacher can give a longer series of connected commands.

Communicative Language Teaching (CLT):

CLT is usually characterized as a broad 'approach' to teaching (communicative approach) rather than as a teaching 'method' with a clearly defined set of teaching techniques. Effective communication is aimed. Language is for

communication and being able to communicate requires communicative competence more than linguistic competence (Hymes, 1971: 45-49). The teacher should attach importance to fluency. Students are supposed to interact with their peers through cooperative group works.

In this method, teachers make use of visual aids, real objects, models, and context to teach vocabulary. Vocabulary is taught within the context. Using this approach, teachers help students be able to use the target language appropriately in a given context. As for grammar teaching, each linguistic form has a function. One function may be expressed with different forms. Communicative activities such as information gap, opinion gap, and the like are used to help students improve their communicative competence. In addition, pictures, other visual aids and realia are very important to support meaning.

To improve students' communicative competence, teachers can make use of following techniques (Larsen-Freeman, 1986: 135-138).

- 1) Authentic Materials: Students may not transfer what they learn in the classroom to the outside world. Thus, teachers should make use of materials from newspapers, magazines, videos from real English TV channels, menus, timetables, and so on to exposure students to natural language in a variety of situations.
- 2) Scrambled Sentences: Teachers give a passage in which the sentences are in a scrambled order. Then, they ask students to unscramble the sentences to restore them to their original order. This is necessary for cohesion and coherence.
- 3) Language Games: Games are used frequently in the Communicative Approach. They are used in order to provide valuable communicative practice of the target language.
- 4) Picture Strip Story: Students are given picture-card stories. A student shows the first picture of the story to the other students and asks them to predict what the second picture will look like. This activity provides three features of communication: information gap, choice and feedback.

- 5) Role Play: Having been discussed earlier as a technique of Suggestopedia, use of role plays is very important in CLT as they give students an opportunity to practise the target language in various social contexts and in various social roles. When the role plays are less structured, they provide *information gaps* because students cannot be sure what the others will say. Thus, they will give students more of a *choice*. Students also receive *feedback* on whether they have effectively communicated or not.

Eclectic Method:

There is no best method. Effective teachers should not stick to only one specific method. Instead, they should use methods which appeal to their students' interests and needs. Creating a new method of the combination of the others is of great help for our students. One method that works well with a certain group of students may not be suitable for the others. Furthermore, each method has its own strengths and weaknesses. That is why eclecticism became popular and effective. According to Gabrielatos (2002), there are several reasons for using the eclectic method. Firstly, it is safe as there are variety of ideas and procedures from different approaches. In addition, different learning and teaching contexts require different methodologies and there is a wide range of techniques to manage unexpected situations. Finally, learners' attention is best achieved by using different techniques from different teaching methods.

Teachers of English must have the knowledge of all these methods and techniques and apply this knowledge to their classroom practices as a part of their pedagogical content knowledge.

2.3.3.5 Knowledge on Assessment

“Teachers spend a great deal of their time in assessment or assessment-related activities” (Stiggins & Conklin, 1992; cited in Brookhart, 2009: 723). Thus, teachers need to be knowledgeable about classroom assessment. To Rudner and

Schafer (2002: i), “teachers today, perhaps more so than ever before, have a need to be knowledgeable consumers of test information, constructors of assessment instruments and protocols, and even teachers about testing”.

To test accurately, the teacher should firstly know what a test is and what it consists of. Many definitions of a test have been provided by several authors. However, Brown’s (2001: 384-385) definition of a test is well-founded. He defines the test as “a method of measuring a person’s ability or knowledge in a given domain”. Firstly, it is a “*method*” which consists of different techniques, procedures and items. Secondly, “*measuring*” is the aim of each test. Also, testing measures “*a person’s*” ability or knowledge. Thus, test takers’ characteristics are really important in testing. Furthermore, students’ “*ability*” is tested in a given “*domain*”.

There are some important points to be taken into consideration while constructing accurate and effective tests. In order to be called as “a good test”, a test should have some characteristics such as reliability, validity (content, construct, criterion-related and face validity), washback, discrimination, authenticity, interactiveness, and administration (practicality). The first two of the characteristics, reliability and validity are “essential measurement qualities” (Bachman & Palmer, 1996:19). However, others have the other components of a learning programme (Bachman & Palmer, 1996). Namely, while reliability and validity are mostly associated with measurement, the others have much to do with the other components of the language programme like the curriculum, school administration, teachers, students, coursebook, and so on. Therefore, teachers need to be knowledgeable about the characteristics of good tests before constructing good classroom assessment measures.

Marso and Pigge (1993) emphasize that some research studies investigating teachers’ knowledge on assessment show teachers need instruction in classroom assessment. They also recommend content in assessment courses for teachers to include seven standards that teachers should be skilled in. These are:

- choosing assessment methods appropriate for instructional decisions;

- developing assessment methods appropriate for instructional decisions;
- administering, scoring, and interpreting the results of both externally produced and teacher produced assessment methods.
- using assessment results when making decisions about individual and students, planning teaching, developing curriculum, and schools improvement;
- developing valid pupil grading procedures which use pupil assessments; communicating assessment results to students, parents, other lay audiences, and other educators; and
- recognizing unethical, illegal, and otherwise inappropriate assessment methods and uses of assessment information.

Brown (2001: 411-415) suggests some practical steps to test construction. To him, teachers need to know what they want to test. Thus, they need to construct test having clear and unambiguous objectives. From their objectives, the teachers should draw up test specifications which are simple and practical outlines of their tests. These specifications give teachers an indication of which topics they will cover, what test items they will make use of, how many items will be in each section and how much time is allocated for each. Before applying the test, the teachers should also know how to draft and revise their tests. Using different test items, teachers should be able to give appropriate feedback according to the results of the assessment process and work for washback. That is, they should be able to reflect the results of the assessment process to their future practices.

Another important point to be taken into consideration is that “whatever purpose a test or exam has, a major factor in its success or failure as a good measuring instrument will be determined by the item types that it contains” (Harmer, 2007: 381). When students’ knowledge is to be assessed, teachers should be able to make use of both traditional and alternative assessment tools. While multiple-choice tests, short-answer questions, true-false tests, matching items, completion items and essays are among the most widely used traditional assessment tools; portfolios,

projects, performance-based assessment, self- and peer-assessment, and checklists can be given as the examples of alternative assessment tools (Brown, 2001; Dikli, 2003).

Traditional Assessment Tools:

Multiple-choice questions:

Multiple-choice questions seem to be constructed very easily. However, they are among the most difficult and time-consuming types of assessment tools to construct (Heaton, 1988; Hughes, 1989; Madsen, 1983). Thus, teachers should take these basic principles while constructing their multiple-choice test items (Hughes, 1989).

1. A multiple-choice question should have only one correct answer.
2. The teacher should test one thing at a time.
3. Each option should be grammatically correct when placed in the stem.
4. Multiple-choice questions should be at an appropriate level to the proficiency level of the students.
5. They should be brief and as clear as possible.
6. Finally, these items should be ordered in terms of their difficulty level. Questions should be given from the easiest one to the most difficult one.

Short-Answer Questions:

“Short-answer test items which can be answered by a word, phrase, number or symbol are constructed by direct questions” (Gronlund, 1971: 150). In this technique, students are asked to write down specific answers in spaces provided on their exam papers. Short-answer questions “give students a structure for answering, but allow more freedom [than multiple-choice questions] in these answers” (Parsons & Fenwick, 1999: 5).

The answers to such direct questions cannot objectively be scored unless the tester takes these principles into consideration while constructing short-answer test items (Parsons & Fenwick, 1999):

- The teachers should avoid using an open-ended question if they want to determine students' knowledge of a particular area. They should ask questions that need to have one or two predetermined answers.
- The teachers should be very clear and specific in their wording.

Ambiguous questions may cause long answers. Thus, the grading becomes more difficult and more subjective.

True-False Questions:

“This group consists of any question in which the student is confronted with two possible answers” (Smith and Adams: 1972: 147). This technique can be used by presenting students with a graph, chart or a text. Students can be asked to rate the statements true or false based on their understanding the graph, chart or text.

In order to use this technique effectively, teachers should avoid using generalizations as they are not always 100 per cent true. They should use statements which are completely true or false. Furthermore, they should not use negative statements as these statements can be confusing for the students. Also, the statements should not be very long and should not contain two ideas (Parsons and Fenwick, 1999).

Matching Items:

In the opinion of Salkind (2006: 157) “matching items are multiple-choice questions that share the same alternatives”. Here are some guidelines for constructing effective matching items (Salkind, 2006: 160-162):

- In a matching item, there should be two columns, one containing premises and the second containing options or responses.
- All premises and all responses should be reasonable.
- Responses should be listed in different orders.
- A premise should contain more words than an option.
- The premises should be placed in some logical order, such as alphabetical to help all test takers respond efficiently.

- Teachers must be sure that all premises and responses appear on the same page and each premise has only one correct response.

Completion Items:

This technique is also called as ‘fill-in-the-blank’ or ‘gap filling’. Although this kind of test technique seems to be scored subjectively, “they are often regarded as belonging more to the objective category of test items” (Heaton, 1988: 124). Like short-answer test items, completion items are easy to construct. However, while constructing these items, testers should be careful. They should avoid ambiguous sentences that can be completed in several different ways. The teacher can provide set of words below the questions for students to choose and ask them to fill in the blanks with the words they have chosen. This changes completion items into matching ones. However, it can be a good solution for this ambiguity (Parsons & Fenwick, 1999).

Essays:

Of all definitions, Stalnaker’s (1951; cited in Reiner, Bothell, Sudweeks, & Wood, 2002, p 6) definition of essay questions is very well-founded.

A test item which requires a response composed by the examinee, usually in the form of one or more sentences, of a nature that no single response or pattern of responses can be listed as correct, and the accuracy and quality of which can be judged subjectively only by one skilled or informed in the subject.

Bearing Stalnaker’s definition in mind, an essay question requires subjective judgment. Thus, they are difficult and time consuming to grade.

Reiner et al. (2002: 22-32) provide ten tips to construct effective essay questions. To them, teachers should (1) clearly define the intended learning outcome to be assessed by the item, (2) avoid using essay questions for intended learning outcomes that are better assessed with other kinds of assessment, (3) clearly define and situate the task within a problem situation, (4) present a reasonable task to students, (5) give tasks which can be written as a statement or question, (6) specify the relative point value and the approximate time limit in clear directions, (7) state

the criteria for grading, (8) use several relatively short essay questions rather than one long one, (9) avoid the use of optional questions, and finally (10) improve the essay question through preview and review.

Alternative Assessment Tools:

Portfolios:

“A portfolio is a collection of work that shows efforts, progress, and accomplishment in one or more areas” (Salkind, 2006: 181). In order to assess students’ language level effectively through portfolios, teachers should specify to students what the purpose of the portfolio is, give clear directions to students on how to get started, show a sample portfolio which might help to stimulate thoughts on what to include, make sure their feedback speaks to the purpose they specified (Brown, 2001: 419).

Self- and Peer-assessments:

Though there have been some arguments on how a student can assess his or his friends performance effectively, self- or peer-assessment is another alternative way to assess language levels of the students. This way of testing can be used for oral production, listening comprehension, writing and reading. Checklists for grading their performance will help students assess their performance (Brown, 2001).

Projects:

A project can be an assessment task which is given to an individual student or a group of students on a topic related to the curriculum. The project results in a product that is assessed. The processes used during the project could also be assessed. The project should be primarily a learning experience, not solely an assessment task. A great deal of time and effort can be spent for an effective project assessment task. Therefore, teachers should allow some class time to work on the project. The complexity of the project will determine the time allotment required. Moreover, the criteria for evaluation should be determined before starting the project by the teacher and students working together (Overview of alternative assessment, 2010).

2.4 Research Studies on EFL Teachers' Pedagogical Content Knowledge

Research studies on EFL teachers' knowledge generally examine the sources of teacher knowledge, and the relationship between the teacher knowledge and classroom teaching practices. They usually investigate the development of teacher knowledge by analyzing the teaching practices. In the opinion of Borg (2003), without the analysis of teachers' teaching practices, a researcher limits the implications of the findings of his/her study in teacher knowledge research. In such studies, generally qualitative data collection methods are used. Even if the researchers make use of quantitative data collection methods, they support and explain its results with the help of the qualitative ones. Pajares (1992; cited in Zhang, 2008: 25) explains why qualitative data collection techniques are used so frequently by arguing that "beliefs cannot be directly observed or measured, but must be inferred from what people say, intend, and do".

Sources of EFL teachers' PCK

Studies indicate that teacher knowledge is influenced by teaching experiences and prior experiences as learners. For example, Ariogul (2006) examined EFL teachers' practical knowledge and the background sources shaping their knowledge and classroom instruction. Three teachers working in the same teaching context were selected by convenience sampling and data were collected through classroom observations, audio and videotaped lessons, stimulus-recall activities, formal and informal interviews with the teachers, thick field notes and curriculum documents. The results show that the teachers' practical knowledge was influenced by their prior experiences as language learners and their teaching experiences.

Nespor (1987: 302) found out that "a number of teachers suggested that critical episodes or experiences gained earlier in their teaching careers were important on their present practices". Similarly, Ulichny (1996) reports an ESL teacher who believed that her prior experience as an ESL teacher was as significant as her educational beliefs in her classroom practices. Also, Mok (1994) highlights in

his study that teachers' perceptions about teaching are shaped by their previous experience not only as a teacher but also as a learner.

Following Shulman's (1987) framework of teacher knowledge, Johnston and Goettsch (2000) investigated the knowledge base of four experienced ESL teachers. They collected data through classroom observations and interviews. Teachers' pedagogical content knowledge, content knowledge, and knowledge of learners were investigated. The results of their study showed that experienced teachers put more emphasis on using examples during explanations. Moreover, experienced teachers made use of their knowledge of learners to facilitate their explanations. They encouraged students to question and initiate discussions. The researchers also explored the sources of content knowledge. Findings reveal that two major sources of content knowledge were education and experience. Likewise, comparing experienced and novice EFL teachers, Akyel (1997) found that experienced teachers considered a more varied range of instructional options when responding to student cues, while novice teachers interpreted learners' initiations as obstacles and rather focused on maintaining the flow of instructional activities.

In another research study investigating the effect of teacher experience, Sundusiyah (2009) closely worked with a Chinese student to improve the students' pronunciation performance for several weeks. During her teaching practice, the researcher benefited from conducting a self-study improving her pronunciation teaching practice and her understanding of that practice. As a result of the tutorial practice, the researcher observed that her PCK improved. The researcher discussed this improvement in terms of five components of PCK: orientations of teaching, knowledge of curriculum, knowledge of student understanding, knowledge of assessment and knowledge of instructional strategies. Her study also provided useful suggestions on exploring how one's own practice could be used to improve teacher education courses and teacher education programs.

In Zhang's (2008: 227) study, two predominating sources of knowledge about vocabulary instruction were "previous EFL learning experience" (EFL undergraduate

education) and EFL teaching experiences according to teacher participants' perceptions. Though the teacher participants of his study perceived EFL teaching experience as an important source of their knowledge development, most of them did not seem to value the impact of the courses of their EFL teacher education on their EFL vocabulary teaching practices that much. They admitted the impact of only one or two courses of their EFL teacher education on their teaching practices. However, Banegas (2009: 44) investigated the perceptions a group of teachers had "as regards the program they completed, their impact in their professional life, and how they perceived programs could be improved" and found out that what was positive about initial language teacher education was content knowledge. Even though the teachers believed in how necessary to improve the PCK in the base, they claimed that "they cannot teach what they do not know". Namely, to know 'how to teach' without the knowledge of 'what to teach' can be useless in EFL settings.

The impact of the courses taken at the ELT departments was further investigated by Koçoğlu (2009: 2737) who found out that "the Computer-assistant language learning course was confirmed as being helpful in developing pre-service teachers' TPACK [Technological pedagogical content knowledge] and supporting them in practicing their TPACK. Not only was the impact of the course, but also that of previous learning experiences discussed in her study. That is, all pre-service teachers remembered how the use of technology was modeled by their instructors in class, thus, being more inspired to integrate technology in their teaching practices.

Finally, Richards (1991: 1) provides a more comprehensive list of the sources of PCK. He claims there are at least four sources available in language teacher education: expert opinion, task analysis, teacher-perceived needs, and current practice. He describes these sources of teacher knowledge as follows.

Expert opinion refers to the views of subject matter specialists and other experts as to what it is that prospective second language teachers need to know. Task analysis refers to deriving pedagogical content knowledge from analysis of the situations in which teachers work, the tasks they typically perform on the job, and the kinds of skills they need to perform those tasks. Teacher-perceived needs refers to teachers' expressions of

need for professional development. Current practice refers to what SLTE [Second Language Teacher Education] programs currently offer to teachers in training.

Besides investigating the sources of teacher knowledge, some research studies investigated the relationship between the teacher knowledge and classroom teaching practices. Examples of these studies are presented below.

The relationship between the teacher knowledge and classroom teaching practices

Most of the studies carried out to examine the relationship between foreign language teachers' pedagogical content knowledge and their teaching practice focus on either L2 teacher beliefs about grammar or teachers' knowledge of grammar. For example, Andrews (1994) examined 82 second language teacher educators' perspectives of prospective teachers' knowledge of grammar. He found that 50% of the teacher candidates did not have adequate levels of grammatical knowledge. In addition, Saraç-Süzer (2007a: v) carried out a research study using both qualitative and quantitative research techniques. The findings of her study "indicate when and why instructors prioritize grammar instruction, the reflections of recent methods, students' needs and administrative decisions on the teachers' pedagogical content knowledge about grammar teaching". The study findings display that participant teachers have invaluable knowledge on what their students need in order for the betterment of grammar instruction and learning. Moreover, they prefer functional teaching methods including student-centered and contextual teaching approaches (Saraç-Süzer, 2007b: 255). These findings were based on the data collected from the questionnaires and the interviews. Observing the actual teaching practices of teacher candidates will reflect their choice of preference better in terms of the methods they use while teaching grammar.

In another study investigating the relationship between teacher knowledge and teaching practices, Popko (2005: 401-402) found out that what was of importance to ESL teachers was not so much of knowledge about language, but the ways in which that knowledge could be used to inform their practice. He observed four female MA-TESL students all of whom had taken similar courses such as

Introduction to Linguistics, Grammatical Foundations, Fundamentals of Second Language Teaching, ESL Methods and Materials, Sociolinguistics and from one to three electives. Though these four teachers had received very similar preparation in their MA courses, heard the same or very similar lectures, read the same books, took and passed the same comprehension exam, they had four different ways of connecting theory to practice.

Developing PCK

In their study, Atay, Kaşlıoğlu and Kurt (2010) investigated the PCK development of Turkish prospective teachers through the process of an experiential task. Data were collected from 18 participants through focus group interviews and narratives, and analyzed by means of qualitative methods. At the end of the study, the researchers propose that providing prospective teachers of English with opportunities to apply the theoretical knowledge they gain in the methodology course contributes to the development of their PCK. The participant prospective teachers in their study expressed their concerns and difficulties about designing lessons and activities. Thus, they suggest teacher educators “establish environments to guide prospective teachers into active thinking and implementation in order to develop a satisfactory degree of competency” (Atay et al., 2010: 1424). They conclude that in order to increase the PCK of those who prepare future teachers, it is really important to understand the aspects of PCK, how they are acquired by prospective teachers and how they evolve. Namely, novice teachers need to develop the competency expert teachers have.

In another study aiming to develop teachers’ PCK, Jones and Moreland (2005: 204-205) started an explanatory research in 1998 in a local private school. They followed a whole-school approach in order to develop the teachers’ PCK. Significant changes can be seen in the way the school approaches teaching, learning and assessment as well as a number of other curriculum areas. Their assisting and sustaining change took three years of research. This timeframe was required to build the “strong supportive relationship between the researchers and teachers to plan to plan modifications, trial ideas and reflect on success”. In the end, by enhancing the

teachers' PCK, improvements were observed in their assessment for learning practices and subsequently in the students' learning.

No Significant Differences between genders

In the research studies investigating teachers' knowledge base, researchers also examined whether there were any significant differences in the teaching practices of language teachers in terms of their gender. Şahin (2006), using questionnaires and interviews as data collection instruments, aimed to evaluate foreign language teachers in public schools from the perspectives of education and field knowledge. 14,5 percent of the participants saw themselves inadequate in linguistics, that is, in the knowledge of language. However, the participants regarded themselves as proficient in learning teaching theories and teaching methods. There was no statistically significant difference between the male and female participants in terms of the teaching methods they preferred to use in their teaching practices. They stated that they used communicative approach dominantly.

Karaata (2011) also investigated assumptions and pedagogical knowledge of English teachers working in primary, secondary and higher education in Turkey to identify their current orientations towards practices in foreign language learning and teaching. 197 teachers participated in his study and he conducted two questionnaires: one on learning and the other on teaching. The findings of his study showed that gender and experience did not play a significant role for the way the teachers hold assumptions and pedagogical knowledge in language learning. Moreover, he found out that audio lingual method with repetition and drills was still highly respected by the teachers as the teachers believed that 'practice make perfect'.

All in all, many factors can be attributed to the development of EFL pre-service teachers' knowledge domain and their beliefs (Zheng, 2009: 79). Among these factors, language learning experiences, teacher education program, and teaching experience can be listed in top three as they were commonly investigated by different researchers in different research contexts.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter is about the methodology used in the study to examine the competencies of prospective English teachers through their pedagogical content knowledge. It involves a full account of research design and implementation. It describes the research questions, research method, research design and the research study. The research study is presented in detail with its instrumentation and piloting, setting and participants, validity and reliability issues, researcher's role and biases, procedures for data collection and analysis.

3.1 Research Questions

The following research questions are investigated in the study as it aims to examine the prospective language teachers' competencies through their PCK.

- 1) What are the prospective English teachers' perceptions of their own level of teaching competency in terms of their pedagogical content knowledge?
- 2) To what extent do the prospective English teachers use their pedagogical content knowledge in their teaching practice?

In order to have a broad insight of the study, the following sub-questions are to be answered.

Sub-questions

A) *Differences in their competencies*

- 1.1 Is there any significant difference in their competencies based on their genders?
- 1.2 Is there any significant difference in their competencies based on their GPA (Grade Point Average)?

1.3 Is there any significant difference in their competencies based on their teaching experience?

B) *Extent of their use of knowledge*

2.1 To what extent do they use their knowledge on the content (target language)?

2.2 To what extent do they use their knowledge on planning lessons?

2.3 To what extent do they use their knowledge of their learners?

2.4 To what extent do they use their knowledge on teaching methods and techniques?

2.5 To what extent do they use their knowledge on assessment?

As a research design, the researcher uses a ‘mixed methods sequential explanatory design’ which consists of both quantitative and qualitative analysis of the data. The answer to the first research question is sought using a questionnaire which is part of the quantitative phase of the study. According to the results of the first phase (quantitative), interview questions are to be developed and the second research question is to be answered using different qualitative data collection techniques in the second phase (qualitative) of the study which helps explain, or elaborate on the quantitative results obtained in the first phase (Ivankova, Creswell, and Stick, 2006). This research method and design will be discussed in detail in the following sections.

3.2 Research Method Used in the Study

Pedagogical Content Knowledge is a “highly complex construct that is not easily assessed ... as it is constituted by what a teacher knows, what a teacher does, and the reasons for teacher’s actions” (Baxter and Lederman, 1999: 158). Thus, most studies of Pedagogical Content Knowledge are case studies.

Yin (1994: 13) defines case study as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context when the boundaries between phenomenon and context are not clearly evident and in which multiple sources of evidence are used”. Merriam (1988: 21) provides another definition of a case study

as “an intensive, holistic description and analysis of a single instance, phenomenon, or social unit”. To Creswell (1998: 61), a case is a ‘bounded system’. In his opinion, this bounded system is studied over time through detailed data collection which involves multiple sources of information rich in context. A program, an event, an activity or individuals studied at a particular time and in a particular place can be a ‘case’ to be studied. Situating the case within its setting, which can be physical, social, and/or historical makes up the context of the case.

Stake (2000) emphasizes that there is always something to be described and interpreted in case studies. However, the purpose of a case study is not representing the world, but representing the case. “The most common type of case study involves the detailed description and analysis of an individual subject... It may be based on particular groups, organizations or events” (Duff, 1990; cited in Nunan, 1992: 76). Thus, prospective English teachers at the English Language Teaching Department of COMU in Turkey are the selected case of this study.

Case studies can both utilize qualitative field methods and employ quantitative data and statistical methods (Nunan, 1992: 75). In most studies which were carried out to examine the teachers’ (pre-service or in-service) PCK, a variety of techniques were used including interviews, questionnaires, document analysis, classroom observation and so on (Ariogul, 2006; Çakır, 2008, Işıksal, 2006; Saraç-Süzer, 2007). In such studies, researchers triangulate data from these multiple sources and infer a general profile of teachers’ PCK in the end. Thus, to find answers to the research questions of the study and to achieve a detailed description and analysis of the case, mixed method research has been employed as the research methodology of this case study.

3.3 Mixed Method Research

In social research, there are two approaches, which are quantitative and qualitative. To Becker (1986: 122), the researchers of both approaches believe that

their ideas and findings are really worth telling others. While the former relies heavily on numerical data and statistical analysis, the latter focuses on verbal data and subjective analysis. In addition to these approaches, Johnson and Onwuegbuzie (2004) define mixed method research as the type of research in which the researchers combine both quantitative and qualitative research techniques, methods, and approaches into a single study. Claiming that it is a third research paradigm, Onwuegbuzie and Leech (2004) regard mixed method research as the bridge between quantitative and qualitative research approaches. Creswell (2005) defines the concept of the ‘mixed method’ as the integration of both quantitative and qualitative data in a single study to have a better understanding of the research problem.

When the research questions of study cannot be answered sufficiently with a single method, techniques from both quantitative and qualitative traditions are involved in mixed method research. This research method is not used in the place of either quantitative or qualitative approaches. It makes use of the strengths and minimizes the weaknesses of both in a single study (Creswell, Clark, Gutman & Hanson, 2003; Johnson & Onwuegbuzie, 2004; McMillan & Schumacher, 1993; Teddlie & Tashakkori, 2003).

Johnson and Onwuegbuzie (2004: 21) recommend separate steps of the mixed method research process. Taking their suggestion into consideration, the researcher has followed the steps below in this research study:

- 1) determining the research questions,
- 2) determining whether a mixed design is appropriate,
- 3) selecting the mixed method or mixed-model research design,
- 4) collecting and analyzing the data, and
- 5) interpreting the data
- 6) drawing conclusions (if warranted) and writing the final report.

Bearing the strengths of the mixed method research in mind (Creswell 2003, 2005; Creswell, Goodchild, and Turner 1996; Green and Caracelli 1997; Johnson and Onwuegbuzie, 2004), the reasons why the ‘mixed method research’ is used and why the above-mentioned steps are carried out in this study can be listed as follows:

- 1) This method provides stronger data for a conclusion.
- 2) The results of the study can better be generalized.
- 3) It provides the strengths and minimizes the weaknesses of both quantitative and qualitative research methods.
- 4) It adds an understanding that may not be possible in a single method.
- 5) The research questions are answered in a broader and more complete way.
- 6) It provides data triangulation which overcomes the problems caused by the use of a single method.
- 7) Qualitative data can be used to add meaning to the numbers (quantitative data).

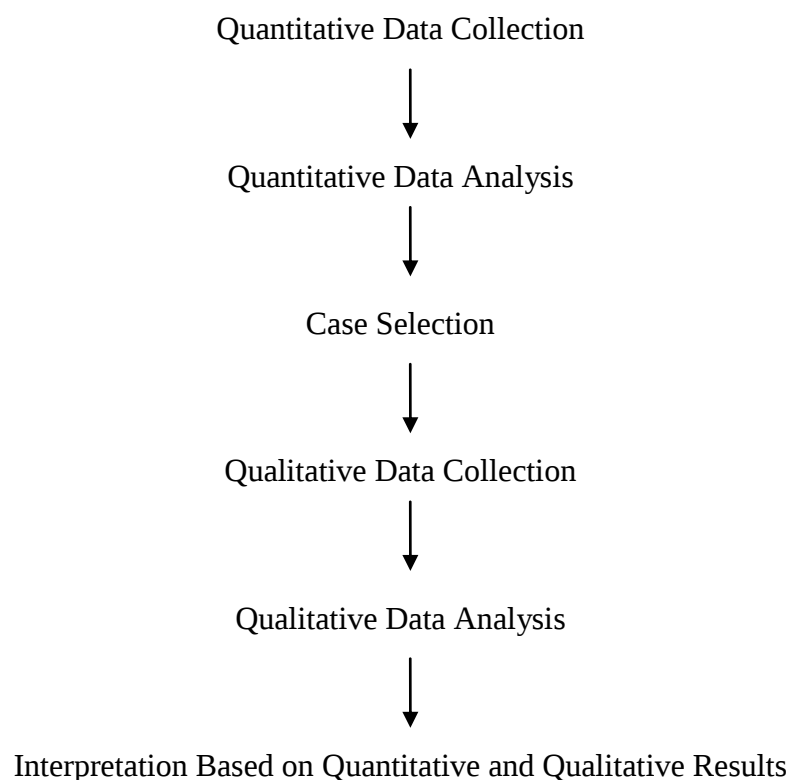
3.4 Research Design (Sequential Explanatory Design)

Many researchers (Creswell, 1998; Merriam, 1998; Stake, 2005; Yin, 2003) highlight the importance of having a research design as having a research design can provide a strong guidance in deciding which data to collect. About forty mixed-methods research designs are reported in the literature (Tashakkori and Teddlie, 2003); however, the mixed methods sequential explanatory design which is employed in this study can be considered highly popular among the researchers (Ivankova et al., 2006).

The mixed methods sequential explanatory design consists of two phases: quantitative followed by qualitative (Creswell et al., 2003). In this design quantitative data are collected and analyzed by the researcher. Then the qualitative data are collected and analyzed in sequence and help explain the quantitative results obtained in the first phase (Ivankova et al., 2006: 5). Namely, this design is mostly used in order to explain the quantitative results that need further explanation. Moreover, quantitative results are used to purposefully select best participants for the qualitative phase.

As seen in Figure 2 below, in the first step, the researcher designs and implements a quantitative phase that includes collecting and analyzing the quantitative data. Secondly, the researcher identifies specific quantitative results that need additional explanation and uses these results to form the participants of the case study for the qualitative phase. He develops the qualitative research questions, purposeful sampling procedures and the data collection procedures depending on the quantitative results. Next, he implements the qualitative phase by collecting and analyzing the qualitative data. Finally, the researcher interprets to what extent qualitative results explain the quantitative results and what is learned in the end as a result of the study's purpose (Creswell, 2011: 83).

Figure 2: *Sequential Explanatory Design* (Modified from Creswell, 2011)



Morse (1991) claims that exploration of the quantitative results in more detail using the qualitative results is one of the advantages of this design. Despite the advantages of mixed methods research mentioned in the previous section, researchers

who choose to conduct this design have to take some methodological issues into consideration (Ivankova et al., 2006). While choosing the research design for a research study, what is important is ‘to focus on research aim and to choose the design most appropriate to answer it’ (Kroll and Neri, 2009: 37). In order to choose the most appropriate design, researchers must answer the following questions during the planning stage of mixed methods research (Creswell, 2003; Creswell, Fetters & Ivankova, 2004).

- In what *sequence* will the qualitative and the quantitative data collection be implemented?
- What relative *priority* will be given to the qualitative and quantitative data collection and analysis?
- At what stage of the research study will the qualitative and quantitative data be *integrated*?

3.4.1 Implementation Sequence

Researchers can collect data either sequentially or concurrently. While one data collection method follows after the other in sequential studies, the qualitative and the quantitative data are collected at the same time in concurrent studies. Kroll and Neri (2009: 37-38) argue that the implementation sequence of the methods is determined by “the nature of the research question and the rationale for collecting each dataset. In the sequential explanatory design, a researcher first collects and analyzes the quantitative data. Qualitative data collected in the second phase are related to the outcomes from the first, quantitative phase (Ivankova et al., 2006).

In this study, quantitative data were collected using a questionnaire at first as the researcher wanted to examine the competencies of the prospective English teachers through their pedagogical content knowledge and to purposefully select participants for the second phase of the study. Later, the researcher collected and analyzed the qualitative data to explain the results of the first phase. Therefore, quantitative data and the statistical results provided a general understanding about the

pedagogical content knowledge of the prospective English teachers in accordance with certain variables (gender, grade point average, teaching experience) while the qualitative data and its analysis were used for a deeper understanding of why certain items were statistically significant or non-significant.

3.4.2 Priority

Whether one of the methods (qualitative or quantitative) will have greater emphasis than the other in a study is known as *priority* in mixed methods research. Namely, “priority refers to the relative weight assigned to the qualitative and quantitative research components” (Kroll, Neri & Miller, 2005; cited in Andrew & Halcomb, 2009: 38). In explanatory research, priority is mostly assigned to the quantitative component. A researcher may give the priority to the qualitative data collection and analysis, as well (Morgan, 1998). Researchers may decide to assign priority whether to the quantitative or to the qualitative method, either at the study design stage or later during the data collection and analysis procedure.

In this study, the priority was assigned to the quantitative data collection and analysis because the purpose of the study is to find out prospective English teachers’ perceptions on their competencies regarding their pedagogical content knowledge. Thus, the quantitative phase of the study focused on the description of their pedagogical content knowledge in terms of selected variables (gender, GPA, and experience). In this part of the study, data collection was limited to a questionnaire (a survey study), constructed by the researcher in the light of the literature, and the data analysis employed limited statistical techniques such as descriptive, frequency analysis, and Mann Whitney U test. In the qualitative part of the study, on the other hand, it was aimed to explore and interpret the statistical findings obtained in the quantitative part. In order to add meaning to the quantitative findings, different data sources such as interviews, lesson plan assessment forms, and observations were used by the researcher.

3.4.3 Integration

Integration refers to the ‘mixing’ of qualitative and quantitative components of research. “True mixed methods designs include a purposeful integration of qualitative and quantitative methods” (Andrew and Halcomb, 2009: 39). In mixed methods research studies, integration may occur at various stages. It usually happens during data collection, analysis and/or interpretation phases. In sequential explanatory design, it may also occur while selecting the participants for the qualitative follow-up analysis based on the quantitative results from the first phase (Creswell et al. 2003). Another mixing point can be “the development of the qualitative data collection protocols, to investigate those results in more depth through collecting and analyzing the qualitative data in the second phase of the study” (Ivankova et al., 2006).

Firstly, the researcher connected the quantitative and qualitative phases while selecting the participants of the case. Based on the demographic information of the participants, the researcher selected the participants of the case study for follow-up analysis based on the quantitative results from the first phase. Moreover, the researcher connected the phases while developing the interview questions and designing the observation schedule for the qualitative data collection based on the results of analysis in the first phase. Giving the priority or weight to the quantitative phase, the researcher also integrated the results of the quantitative and qualitative phases during the interpretation of the outcomes of the whole study.

The priority given to a method and the implementation sequence followed in this study can be symbolized as “QUANT → qual” which can also be seen in Table 2 below.

Table 2: Mixed Method Design Matrix

* “qual” stands for qualitative, “quan” stands for quantitative, “+” stands for concurrent, “→” stands for sequential, capital letters denote high priority or weight, and lower case letters denote lower priority or weight.
(Cited in Johnson and Onwuegbuzie, 2004: 22).

		IMPLEMENTATION SEQUENCE	
		Concurrent	Sequential
PRIORITY	Equal Status	QUAL + QUANT	QUANT → QUAL QUAL → QUANT
	Dominant Status	QUAL + quant QUANT + qual	QUAL → quant Qual → QUANT QUANT → qual* quant → QUAL

All in all, this research study followed sequential explanatory design, which was characterized by an initial quantitative phase followed by a qualitative data collection phase. The two methods were integrated during the interpretation phase. Findings from the qualitative phase were used to explain the results from the quantitative phase. The researcher employed the questionnaire as the primary data collection tool. However, the study was also complemented by document analysis (lesson plans), observations, and interviews which were the qualitative data collection tools. The quantitative method was used to gather information from a large sample of prospective teachers (n: 127 out of 132 prospective teachers of COMU), while qualitative methods were used as they let the researcher understand the results of the quantitative phase in more detail.

3.5 Research Study

This part of the dissertation presents the instrumentation and piloting, setting and participants, validity and reliability issues, researcher's role and biases, data collection and analysis procedures of the research study in detail.

3.5.1 Instrumentation and Piloting

Both quantitative and qualitative data collection instruments were employed in the study. Data were collected through questionnaires, interviews, observations and documents. In the quantitative phase, research questions focused on prospective English teachers' perceptions on their pedagogical and subject matter competencies.

To answer these research questions, the researcher developed a new questionnaire which was adapted from existing instruments reviewed in the literature. After constructing the questionnaire, the researcher conducted a pilot study for the reliability and the validity of the questionnaire. In the qualitative phase, research questions were addressed for in-depth understanding of prospective English teachers' perceptions on their competencies. To this purpose interviews, observation schedules and lesson plan assessment forms were prepared by the researcher, which were based on the related literature and expert opinions. The content of that qualitative data to be collected can be described as “direct quotations from people about their experiences, opinions, feelings, and knowledge” obtained through interviews; “detailed descriptions of people’s activities, behaviors, actions” recorded in observations; and “excerpts, quotations, or entire passages” extracted from various types of documents (Patton, 1990; cited in Saraç-Süzer, 2007: 54). Below, more information is given about the development of these instruments.

3.5.1.1 Questionnaire

In order to ‘reach a wider population’ (Brannen & Halcomb, 2009: 69), questionnaires are used as an inexpensive way of collecting data. Questionnaires allow a researcher to collect data from a large group of people with minimum cost (Johnson & Christensen, 2004). By administering a questionnaire to a group of people, a researcher can collect a great deal of information and processing the data can also be fast and effective especially by using some modern computer software like SPSS (Dörnyei, 2003: 9). In this study, nearly all the prospective English teachers at Çanakkale Onsekiz Mart University were aimed to be included in the study by using a questionnaire.

The items of the questionnaire were constructed after reviewing the literature. Previously developed instruments assessing pedagogical content knowledge of teachers were examined by the researcher (Can, 2005; Çakır, 2008; Güven, 2005; Köyalan, 2004; Lin, 2005; Ministry of National Education, 2008; Özdemir, 2007;

Strong & Hogan, 1994; Şahin, 2006). At first, the questionnaire consisted of 68 items to be answered by the prospective English teachers. Before applying the questionnaire for the piloting, the ideas of three experts on 'English Language Teaching' and one expert on 'Measurement and Evaluation' were consulted. In the light of their ideas, some of the items were changed and some others were omitted. Also, some corrections were made in the questionnaires by the experts (See Appendix 1 for the Questionnaire).

The instruction part of the questionnaire is shortened in a meaningful way taking the experts' suggestions into consideration. In the first part, the item regarding the prospective teachers' experience is clarified giving examples such as one to one private lesson, group courses, and the like. Furthermore, the students were asked to write their teaching experience except for the one they had in 'School Experience' and/or 'Teaching Practice' courses. As they all had teaching experience in these courses, specifying these courses as their teaching experience would not help the researcher determine whether there are any significant differences between the experienced and inexperienced prospective teachers.

In the light of the experts' suggestions, slight changes were made in the items of the second part. Instead of using negative statements, all the items were arranged in a way that they are all positive both in structure and in meaning (Items 8 and 11). Some items were omitted as they were thought to be the repetitions of some other items. For example, as items 29 and 30 were the repetition of item 14, they were omitted. Moreover, items 33 and 34 in the initial form of the questionnaire were clarified and explained briefly as in items 30 and 31 in the final form of the questionnaire.

Considering the experts' opinions, the researcher separated the items related to the testing techniques in Part 3 in using different Likert-type scales (5=Always; 1=Never). Instead of naming the techniques as traditional or alternative ways of testing, the researcher presented them all in the third part of the questionnaire omitting Cloze Tests, Ordering Tasks, Error Correction, Rubrics and Teacher

Observation as students find them difficult to understand and the experts believe that the others would be enough to examine their knowledge on language assessment.

3.5.1.1.1 Description of the Questionnaire

Before implementing the pilot and the main study, the final form of the questionnaire was constructed consulting the experts' opinions. In order to answer the research questions, the questionnaire consists of an introduction and three parts. The purpose of the research is explained in the introduction section. Before the first part of the questionnaire, the researcher promises the participants that the information gathered from the questionnaires will be kept confidential so that the samples will not feel obliged to write their names on the questionnaires.

Following the introduction part, personal information about the samples is asked in the first part. Prospective teachers' gender, grade point average and teaching experience are asked in this part.

The second part of the questionnaire aims to find out prospective English teachers' perceptions on their competencies regarding their PCK. The second part of the questionnaire consists of several items each of which determines the participants' perceptions of different domains of their PCK (See Appendix 1 for the Questionnaire). Their knowledge of English, on planning lessons, of the learners, on teaching methods and techniques, and on assessment are questioned in this part. Here, the prospective teachers are to express their ideas by putting a cross (X) for the most appropriate choice ranging from '1=Strongly Disagree' to '5=Strongly Agree'.

The researcher added the third part in which he aims to determine how often the participants can use different means of assessment using Likert-type scales ranging from '1=Never' to '5=Always' as this will help the researcher figure out a great deal about participants' knowledge on assessment.

The items of each knowledge domain were constructed in the light of the literature. The items and related item domains can be seen in the following table.

Table 3: *The Distribution of the Items in the Second Part of the Questionnaire*

Knowledge of English	Items 1-13
Knowledge on Planning Lessons	Items 14-20
Knowledge of the Students	Items 21-31
Knowledge on Teaching Methods and Techniques	Items 32-42
Knowledge on Assessment	Items 43-60

Having described all parts of the questionnaires, the researcher aims to explain how the piloting stage of the questionnaire has been carried out in detail in the following section.

3.5.1.1.2 Piloting the Questionnaire

Having constructed all parts of the questionnaires, the researcher conducted the pilot study with 112 prospective teachers of English. The pilot study was conducted at Çanakkale Onsekiz Mart University in April, 2011. Having been checked by the experts, the questionnaire was piloted to nearly all the students of the ELT department (112 out of 122).

During the piloting process, the researcher handed out the questionnaire. The researcher also attached a piece of paper titled ‘Piloting the Questionnaire’ to the questionnaire (Bell, 1993). Prospective teachers’ ideas were asked with the help of this paper consisting of eight open-ended questions (See Appendix 2 for ‘Piloting the Questionnaire’). The participants were asked to comment on any issue without hesitation on this piece of paper attached to the end of the questionnaire.

Analyzing “Piloting the Questionnaire”, the researcher found that most of the students ($f=101$) believe that “The instructions and the layout of the questionnaire were clear”. There were no ambiguous or unclear questions/sentences in their

opinion. In addition, they believe that “the questionnaire is a well-prepared one for the aim of the study”. However, a few students asked for clarification for some items, sentences and words. Here are some quotations from their review of the questionnaire.

Student 3: “If it were shorter, it would be better”.

Student 11: “The questionnaire was a long one. Some of the items can be omitted”.

Student 12: “You can omit some of the questions”.

Student 47: “I saw some similar questions. I was a bit bored”.

Student 48, 70, 73, 88: “It was clear, but it was a bit long”.

Bearing these comments in mind, the researcher made necessary changes in the questionnaire and omitted some of the items consulting the experts’ opinions and the reliability analysis.

Four students asked for clarification of the term “eclectic” (Students 22, 34, 44, 49). The researcher clarified the term in the questionnaire.

Student 26: “They were clear, but only the question about teaching experience should be made clearer.”

Taking the suggestion above into consideration, the researcher exemplified the question to make it clearer.

Student 56: “Items 23, 24, and 25 were too long and some verbs were unnecessary”.

It was also the experts’ suggestion to shorten the above-mentioned items. Thus, the researcher shortened items 23 and 24, and omitted item 25 as it was the repetition of the items examining the prospective teachers’ knowledge on assessment.

The experts, all the participants involved, and the materials used in piloting made it possible for the researcher to make the necessary changes on the questionnaire in order to collect data without any problems in the main study. Their answers to the open-ended questions helped the researcher to construct the ultimate version of the questionnaire for the main study. Before conducting the main study, the researcher analyzed *the internal consistency* of the items of the second part of the

questionnaire as this part aims to investigate the prospective teachers' competencies through their pedagogical content knowledge. Table 4 presents the internal consistency reliability of the items of this part.

Table 4: *Internal Consistency Reliability (Cronbach Alpha Coefficient) for the Second Part of the Questionnaire in Piloting.*

Questionnaire	Alpha Reliability	N		
		Valid	Excluded	Total
Second Part	.95	104	8	112

48 items given in the second part of the questionnaire are shown to have a high degree of internal consistency with the value .95 for the questionnaire. This value is acceptable according to Büyüköztürk (2006) who recommends levels of .70 or greater for scales like these. All in all, students', instructors' and some experts' ideas and comments let the researcher revise some of the items and make the necessary changes for the main study.

3.5.1.2 Interview

Interviewing has been widely used as a means of data collection. The interviewers aim to take the interviewees' ideas by means of the questions they prepared beforehand.

Nunan (1992: 149) classifies interviews in terms of their degree of formality ranging from an unstructured to structured one. To him, an unstructured interview is guided by the responses of the interviewees rather than the questions of the researchers. There is little or no control by the researchers. Thus, the direction of the interview is relatively unpredictable. However, the structured interview is totally predetermined by the researchers. "A structured interview can take the form of a questionnaire or checklist that is completed by the interviewer rather than by the respondent" (Bell, 1993: 93). Although it can save time at the analysis stage as it is easier to quantify the results of a structured interview, the problem about it is that the

interviewers decide what questions to ask and they may not be asking the important questions.

In a semi-structured interview, the interviewers have a general idea of the content and the outcome of the interview. Neither do they have a checklist to be completed by themselves, nor they have questions guided by the interviewees. Most interviews carried out while collecting data will come somewhere between the completely structured and the completely unstructured point. Using semi-structured interviews allows all topics which are considered important to be covered while it eliminates some of the problems of completely structured interviews. Bell (1993: 94) asserts that the “guided or focused interview fulfills these requirements. No questionnaire or checklist is used, but a framework is established by selecting topics around which the interview is guided”. The researchers ask certain questions within this framework and the interviewees are given freedom to talk about the topic and give their views in their own time.

The type of interview one chooses depends on the nature of research, degree of control that the interviewers want to have and what exactly they wish to find out (Bell, 1993; Nunan, 1992). To find out prospective teachers perceptions of their pedagogical content knowledge, a guided/focused semi-structured interview was used as its analysis was greatly simplified by the framework that had been established beforehand.

3.5.1.2.1 Description of the Interview Questions

In this research study, the researcher prepared a guided/focused interview consisting of some predetermined questions formed in the light of the previous studies regarding teachers’ pedagogical content knowledge (Akkaya, 2009; Coady, 2010; Çakır, 2008; Dönmez, 2009; Işıksal, 2006; Lin, 2005; Yüksel, 2008). The initial form of the interview consisted of 18 main questions and 18 sub-questions. At first, the questions were grouped under six different headings: general questions,

knowledge of English, knowledge on planning lessons, knowledge of learners, knowledge on teaching methods and techniques, knowledge on assessment. While reviewing the literature, the researcher wrote down all the questions about the issue before piloting them for the main study.

In the first part of the interview questions, the researcher asked the interviewees general questions. Firstly, whether the prospective teachers of English have any teaching experience or not is asked. Moreover, the skills that effective English language teachers should have, the necessary skills or knowledge that the teacher training program gives, and the characteristics of a good EFL teacher are among the issues directed to the interviewees in this part of the interview.

The prospective teachers' subject matter knowledge is questioned in the second part of the interview. That is, their perceptions on the knowledge of English are investigated. With the help of these questions, the researcher wants to learn how the lessons they took in the ELT department affected their content knowledge (knowledge of English) as an EFL teacher, whether they could describe their first day at the ELT program and compare it with where they are right now, and what it means to know English.

In the third part, the prospective teachers' knowledge on planning lessons is questioned by means of four questions. These questions aim to find out what important points they take into consideration while preparing their lesson plans. Furthermore, they aim to investigate whether the prospective teachers can prepare lesson plans effectively considering their students' language levels, learning styles, needs and interests, and to what extent they change their lesson plans based on their students' needs and levels. Finally, the researcher seeks for an answer to the question of how they prepare their students to get ready for a lesson that they are going to present.

The fourth part of the interview includes questions regarding prospective teachers' knowledge on their students. What they can do to get to know their

students, how they can motivate their students and how they can keep their motivation alive are among the questions aiming to understand prospective teachers' perceptions of their knowledge on their students. Furthermore, the researcher tries to find out whether prospective teachers know what makes English difficult for their students to learn or not and what they can do to overcome these difficulties.

Finally, in the last two parts, their knowledge on teaching methods and techniques, and knowledge on language assessment is investigated. The researcher questions what methods and techniques they can use to improve their students' listening, reading, writing and speaking skills, and knowledge of vocabulary, grammar and pronunciation. Moreover, he asks which test techniques they use to assess their students' language performance. In the last part, the researcher also aims to investigate the way the prospective teachers reflect the results of the assessment process to their future practices and the way they give feedback to their students.

Having been prepared in the light of the literature, the interview questions were then checked by the experts for initial piloting. In their opinion, the interview was too long both to be conducted and analyzed. Some similar items were underlined and they were omitted. Later, the researcher piloted the interview after doing the necessary corrections suggested by the experts.

3.5.1.2.2 Piloting the Interview

Bearing the research objectives in mind, the researcher prepared the interview schedule for the study. However, due to the desire to eliminate the potential problems in the use of the interview, Nunan's (1992: 151) warning that "it is very important that the interview questions are piloted with a small sample of subjects before being used" was taken into consideration. Thus, the interview schedule was piloted to check reliability and validity of the questions. Three prospective teachers were interviewed for the pilot study in May, 2011. They voluntarily accepted to participate in the pilot study.

While conducting the interview and during the analysis of the interview, the researcher realized that there were too many questions and the interview questions were too long. As the interview was not carried out in the interviewees' mother tongue, some interview questions were not understood by them as the questions were complex and needed clarifying. Besides piloting the interview with three prospective teachers, experts and colleagues' opinions were obtained to achieve the trustworthiness of the interview schedule (Creswell, 2003). The interview schedule was reviewed and reformed in the light of experts and colleagues' suggestions. The researcher eliminated all the questions that were ambiguous or confusing to the experts and the interviewees.

Experts criticized that some of the items were too general and wanted the researcher to clarify such questions. In addition, when their answers to the questions were analyzed, it was obvious that there were similar answers to different interview questions. Thus, the researcher identified the similar answers to the different questions and omitted the unnecessary interview questions as the interview schedule would take too much time. Taking experts suggestions into consideration, the researcher also revised the interview questions in a way that he could get more data which he could not obtain just from the observation schedule. Finally, the researcher had 12 main questions to use in the interview for the main study after piloting the interview questions (See the final form of the Interview Questions, Appendix 3).

3.5.1.3 Document Analysis

In most research studies, the analysis of documents is required in order to develop an understanding of the setting or group studied (Marshall & Rossman, 1999). There can be some non-written forms of documents such as films, videos, slides, and so on. However, the most common kinds of document in educational research are written as printed sources.

According to Bell (1993: 70), the time one has in order to carry out a research study will inevitably determine the amount of documentary material he/she can study. Most of the time, it is not possible to analyze everything. Thus, a researcher must decide what to select. As Bell suggests, a researcher's 'perception of what is valuable will grow as the project develops' (p. 70). Bearing the time constraints in mind, the researcher tried not to include too many documents to analyze and decided to analyze the selected prospective teachers' lesson plans as they would provide rich data regarding their pedagogical content knowledge (Yıldırım & Şimşek, 2005).

Throughout the study, selected prospective teachers were asked to prepare a lesson which is preferably on the same topic in order to compare and contrast the level of their pedagogical content knowledge. They prepared various activities to teach the previously determined topic to the seventh grade students at two different primary schools. They also prepared detailed lesson plans for their activities. Their activities and their lesson plans were analyzed in order to determine to what extent the prospective teachers use their pedagogical content knowledge in their teaching practices.

Prospective teachers' lesson plans were assessed and analyzed using a "Lesson Plan Assessment Form" developed by the researcher in the light of the related literature (Aydoğdu, 2007; Can, 2005; Canbazoglu, 2008; Yüksel, 2008). The Lesson Plan Assessment form was piloted in order to assess one prospective teacher's lesson plan on vocabulary teaching. Necessary adjustments and changes were made so that the researcher could analyze the lesson plans together with other researchers easily. Furthermore, the researcher made some corrections taking the experts' suggestions into consideration. Finally, the order of the items in the assessment form was rearranged by the experts during the piloting stage (See Appendix 4 for the Lesson Plan Assessment Form).

Having constructed the final form of the Lesson Plan Assessment Form, the researcher analyzed the prospective teachers' lesson plans together with an expert and an instructor who is also a PhD student in the ELT department. A consensus was

reached during the analysis of the documents among the researcher, the expert and the instructor.

3.5.1.4 Observation

Observation is another data collection method in qualitative research studies. In order to gather first hand data in its natural environment, observation as a data collection method is crucial to be used. Qualitative inquiry is considered to be an appropriate tool for doing research on classroom teaching as it helps to get a more comprehensive understanding of the complicated teaching process which involves people, actions and contexts (Peshkin, 1993). Among various qualitative research methods, observation allows researchers to know more about the ways people act in, interpret and understand the complex world around them (Wilkinson & Brimingham, 2003). Namely, the method of classroom observation can provide important insights into classroom practices. Hence, while doing research on teaching practices, classroom observation is not only appropriate, but also valuable.

In this study, the observation method is used in order to explain the results of the quantitative data. Thus, an observation procedure and schedule was prepared by focusing on the results of the quantitative data and the observation studies checklist proposed by Bell (1993: 119-120).

As the results of the quantitative data indicate some significant differences among different variables, observation method was chosen to explain these results. By using this method, the researcher aimed to find answers to the following questions.

1. To what extent does the prospective teacher apply his/her knowledge of phonology (sound system) to his/her teaching practice (Item 1)?
2. How does the prospective teacher explain the terms and concepts that his/her students have difficulty in understanding (Items 22, 23, 24)?

3. What methods and techniques does he/she make use of to improve students' vocabulary knowledge while teaching (Item 37)?
4. To what extent can he/she make use of the eclectic method and combine the techniques of many other methods and approaches (Item 42)?
5. How does the prospective teacher evaluate and assess their students' comprehension after teaching?

To find answers to the above mentioned questions and to record data more effectively, the researcher designed an observation procedure taking some important points into consideration (Dirr, n.d). The researcher recorded prospective teachers' teaching practices every week in order to become part of the research setting between March and May 2012. Before piloting, the researcher attended their teaching practices many times so that they could get used to his presence. By means of such prolonged engagement, the participants started to "act as if the researcher were not present..." (Carspecken, 1996: 88). Then he piloted the observation schedule twice. After piloting the observation procedure, the researcher realized that the place where he was recording the teaching practice was not appropriate as he was sitting right behind the naughtiest students of the class. Thus, he changed the place where he recorded the classroom activities.

In the main study, after getting permission from three prospective teachers, note taking and video camera recording were used to record classroom activities and their behaviors during the lesson. Each prospective teacher was supposed to teach for two lesson hours, which means each classroom observation session lasted 80 minutes. The researcher tried not to disturb the normal classroom activities during the observation. He, then, transcribed and wrote from the notes and the video recordings (See Appendix 5 for the Observation Procedure).

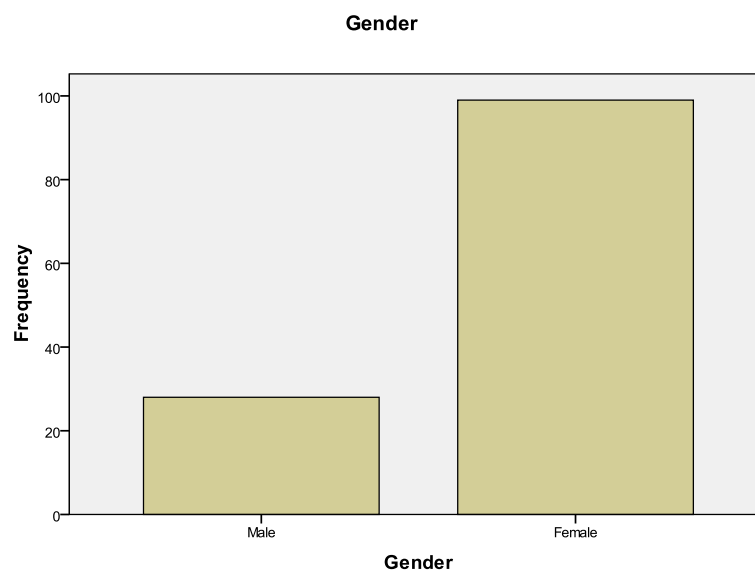
3.5.2 Setting and Participants

The main study was conducted at Canakkale Onsekiz Mart University. Nearly all the students in the ELT department were involved in the study. The main study was carried out in March-May, 2012. At that time, there were 134 prospective teachers and nearly 94% of them participated in the study (n=127). As this study aims to examine competencies of prospective English teachers through their pedagogical content knowledge, target population of the study consists of 134 prospective English teachers. 127 of them participated in the quantitative phase of the main study. The following tables display the number of the participants according to their Genders, Grade Point Average, and Teaching Experiences.

There are 28 males and 99 females involved in the study. As it can be seen in the table below, the number of females is much higher than that of males.

Table 5: *Gender Distribution of the Participants*

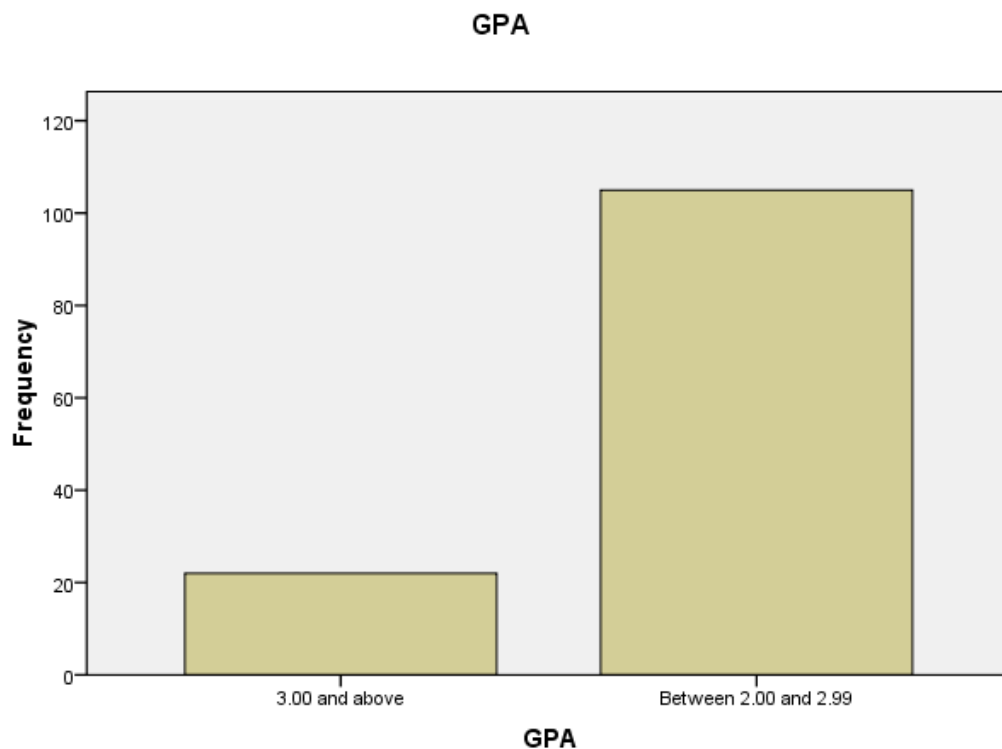
Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	28	22,0	22,0	22,0
Female	99	78,0	78,0	100,0
Total	127	100,0	100,0	



As for their grade point average, there were 22 prospective teachers who got 3.00 and above. 82,7 percent of the students got below 3.00.

Table 6: *Prospective Teachers' Grade Point Average*

GPA	Frequency	Percent	Valid Percent	Cumulative Percent
3.00 and above	22	17,3	17,3	17,3
Between 2.00 and 2.99	105	82,7	82,7	100,0
Total	127	100,0	100,0	

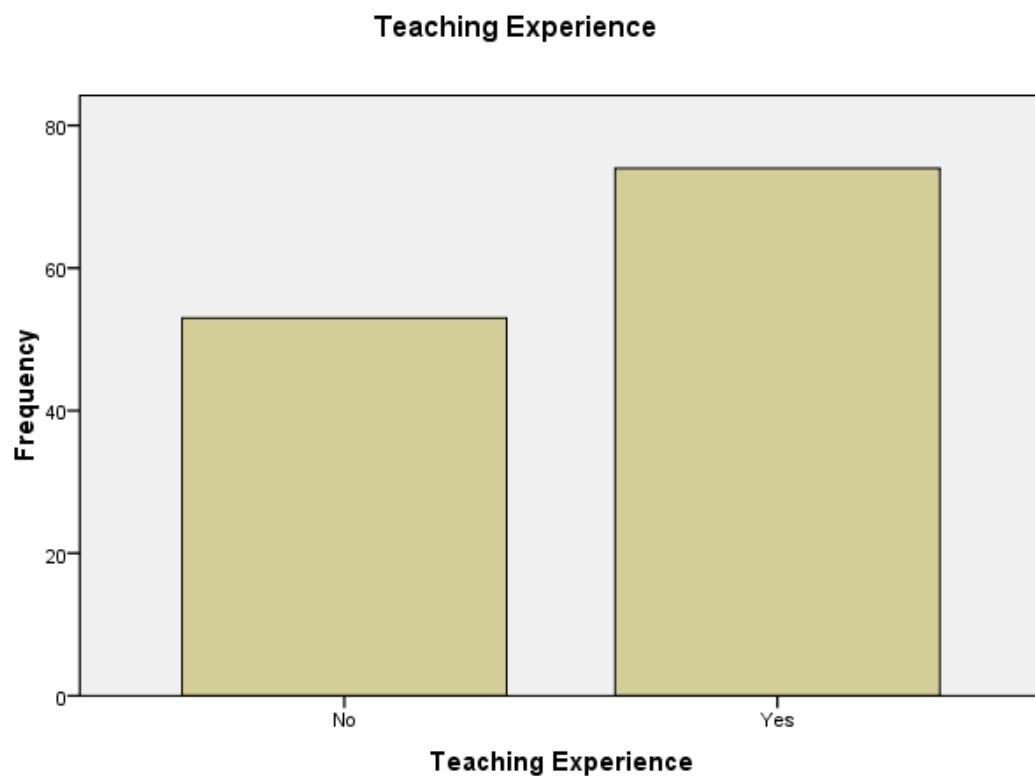


As it can be seen in the table below, 58,3 percent of the prospective teachers had teaching experience excluding the 'School Experience' and 'Teaching Practice' courses. The experience they had in these courses was not regarded as valid. It made no difference among the prospective teachers as they all had such courses in their last years. Other kinds of teaching experiences specified by the prospective teachers were one to one private courses, group courses (groups of 4-6 students), and community service courses at which some of them taught to the second or third grades. Most of

the participants having teaching experience expressed that they had one to one private courses.

Table 7: *Teaching Experience of the Prospective Teachers*

Experience	Frequency	Percent	Valid Percent	Cumulative Percent
No	53	41,7	41,7	41,7
Yes	74	58,3	58,3	100,0
Total	127	100,0	100,0	



As for the qualitative study, the researcher chose three prospective teachers to explain the quantitative results that needed further explanation. The researcher made use of the quantitative results to select the best participants; thus, purposeful sampling was used for the qualitative phase of the study. Purposeful sampling was based on the assumption that the investigator wanted to discover, understand, and gain insight, and therefore, had to select a sample from which the most could be learned (Merriam, 1998). The researcher used purposeful sampling where the

participants were selected from whom he could learn most, to whom he could most easily access, and with whom he could spend the longest time. Therefore, the researcher selected the participants among his students taking the ‘School Experience’ course. In purposeful sampling, the important thing is to determine the selection criteria (Merriam, 1998). The main question is why the researcher selects certain participants while not selecting the others. To achieve representativeness and comparability, there are six types of purposeful sampling procedures: typical case sampling, extreme or deviant case sampling, intensity sampling, maximum variation sampling, homogenous sampling, and reputational sampling (Teddlie & Yu, 2007: 81). In this study, the participants differed in terms of their gender, teaching experience, their GPA, and the grade (the class) they are teaching to (see Table 8). The researcher identified participants from different groups bearing their characteristics in mind. He made use of Maximum Variation Sampling (see Table 9) to select one participant per group (Creswell, 2005).

Table 8: *Participants to Be Selected for the Qualitative Phase of the Study*

	Gender	Teaching Experience	GPA	Grade Taught
Bahar	Female	YES	2,77	Sixth
Mustafa G.	Male	YES	2,94	Sixth
Mehtap	Female	YES	2,97	Sixth
Ayşe	Female	NO	2,68	Sixth
Bade	Female	NO	2,51	Sixth
Özlem	Female	YES	2,90	Sixth
Ömer	Male	NO	2,60	Sixth
Nesli	Female	NO	2,98	Sixth
Levent	Male	NO	2,87	Seventh
Emrah	Male	NO	3,10	Seventh
Filiz	Female	YES	3,01	Seventh
Halil	Male	NO	2,82	Seventh
Sevda	Female	NO	2,86	Seventh

In his definition of Pedagogical Content Knowledge, Shulman (1986: 9) proposes that PCK “includes an understanding of what makes the learning of specific topics easy or difficult...”. While examining prospective teachers’ PCK, it is quite

important to observe them while they are teaching one specific topic in common. Hence, the researcher had to select participants teaching to either the sixth grades or the seventh grades. As it can be seen in table 8 above, there were not any students whose GPA is above 3,00 among the students teaching to the 6th grades. In order to achieve representativeness and comparability, the researcher selected participants among the ones teaching to the seventh grades. As the quantitative results indicate statistically significant difference among the genders only in the use of performance based assessment technique, the researcher did not consider this variable (gender) while selecting the participants of the qualitative phase. He, thus, selected **Filiz**, who had teaching experience and was more successful (whose GPA was above 3,00), **Halil**, who did not have any teaching experience and was less successful (whose GPA was below 3,00), and **Emrah**, who was more successful, but with no teaching experience (see Table 9 for the Maximum Variation Sampling).

Table 9: *Participants Selected for the Qualitative Phase of the Study Using the Maximum Variation Sampling*

	Filiz	Emrah	Halil
Gender	Female	Male	Male
Teaching Experience	YES	NO	NO
GPA	3,01	3,10	2,82
Grades	Seventh	Seventh	Seventh

All three prospective teachers agreed to participate in the qualitative phase of the study. While selecting these participants, the researcher aimed to explain the quantitative results of the study in more detail. In order to explain the significant differences between the experienced and inexperienced prospective teachers, the researcher compared and contrasted Filiz and Emrah's teaching practices as they both had GPA above 3.00. He analyzed Emrah and Halil's teaching practices to see the differences due to the participants' GPA as they were both inexperienced. Finally, to find out the effect of being both experienced and more successful student, the researcher analyzed the teaching practice of Filiz, who was both experienced and more successful, and that of Halil, who was both inexperienced and less successful.

Table 10: *Cross-case analysis of the Qualitative Phase of the Study*

While analyzing the difference in terms of...,	Try to find the difference between...
Gender →	No significant difference found
Teaching Experience	Filiz and Emrah
GPA	Emrah and Halil
Teaching Experience and GPA	Filiz and Halil

Table 10 summarizes how the researcher analyzed the participants with regard to the different variables during the cross-case analysis of the qualitative study.

3.5.3 Researcher's Roles and Biases

In qualitative research, researchers are the primary instrument for gathering and analyzing data (Merriam, 1998). As qualitative research is open ended and less structured than quantitative research, researchers are the major factor and they find whatever they want to find (Johnson, 1997). Johnson stated that the key strategy to understand research bias is reflexivity where researchers actively engage in critical self-reflection on their potential bias that can affect the research process and research results. Researchers monitor and try to control their biases by means of reflexivity (Johnson, 1997). Thus, in this study, the researcher's role was extremely important in increasing the trustworthiness of the research study.

The researcher was not only involved in the research process as a researcher but also was the supervisor of the Teaching Practice course and the observer of the research context the whole time. He knew the participants of the study since he was their instructor for Community Service, School Experience and Teaching Practice courses. Knowing the participants was a great advantage for the researcher as all the participants helped the researcher voluntarily and willingly whenever he asked them to do things for his research study.

The researcher did not inform the participants about the research study. He just got their permission to observe and record their teaching practice and requested them to answer his interview questions frankly. Except for the researcher, none of their professors saw the data and the answers they provided did not affect any grade, which eliminated the bias. During the data collection process, no communication or any other problems were detected between the researcher and the participants. Almost all prospective teachers were voluntary to give answers to questions that the researcher constructed. The researcher tried his best to be a good listener and observer in every step of the study.

In order not to make them feel under too much pressure, researcher took some precautions. Firstly, the participants chosen for the qualitative phase were told that there were no correct answers to the interview questions and they would not be graded considering their answers to the questions. The participants were interviewed when they felt comfortable in terms of context, place and timing so that their answers would not be in a rush. During the interviews, the researcher asked the participants to clarify their responses. He asked the participants whether he understood their point clearly or not. If not, he asked them to correct his misinterpretations as the verbatim transcription of the interviews or the observation schedule provided database for further analysis.

In addition, a colleague, who was also a doctoral student, was recruited for data analysis in order to have consensus on the findings and reduce the researcher bias. The doctoral student was the second coder of the study. He was trained about the data analysis framework of the study. He and the researcher analyzed the interview transcripts together to concur on the themes. During the data coding, both coders tried to identify the patterns and themes to increase the quality of the research study. Comparison of the researcher's codes with those of the second coder also gave evidence for inter reliability.

3.5.4 Validity, Reliability and Trustworthiness

Patton (2002) states that validity and reliability are two important concepts that every researcher should take into consideration while designing a study, analyzing results, and judging the quality of the study. Not only for a quantitative study but also for a qualitative research, the major concerns are the accuracy of the findings and the correct interpretation of the data (Creswell, 1998). These issues are all related with the quality of research. As this research study consisted of two phases, which were quantitative and qualitative, validity and reliability issues were established in both phases considering different principles.

In a quantitative study, validity represents how well an instrument ‘measures what it has been designed to measure’ (Dörnyei, 2003: 110). The validity of the questionnaire was achieved taking the experts’ opinions into consideration. Having constructed the questionnaire in the light of the literature, the researcher consulted the experts’ opinion to validate the data collection instrument. Moreover, in the opinion of Dörnyei (2003: 110), reliability refers to the extent ‘to which scores on the instrument are free from errors of measurement’. He points out that “even in cases where there are no resources and opportunities for elaborate validation exercises, we should strive for a questionnaire that has appropriate and well-documented reliability in at least one aspect: *internal consistency*”. Therefore, the researcher analyzed the *internal consistency* of the items of the second part of the questionnaire. The following table indicates the internal consistency reliability of the items of this part and 48 items given in the second part of the questionnaire are shown to have a high degree of internal consistency with the value .94 for the questionnaire.

Table 11: *Internal Consistency Reliability (Cronbach Alpha Coefficient) for the Second Part of the Questionnaire*

Questionnaire	Alpha Reliability	n		
		Valid	Excluded	Total
Second Part	.94	116	11	127

In qualitative research, some researchers perceived reliability and validity issues differently. For example, Glesne and Peshkin (1992) allege that the question of reliability in the results is not the concern of qualitative research. Thus, many qualitative researchers have preferred to use different terminology instead of using the terms validity and reliability (Golafshani, 2003; Shenton, 2004). The review of literature showed that although reliability and validity in quantitative research were treated separately, they were not apart in qualitative research and different researchers used different terminologies (Creswell & Miller, 2000; Lincoln & Guba, 1985; Seale, 1999; Patton, 2002; Winter, 2000) to refer to the terms ‘validity’ and ‘reliability’. Thus, instead of using the term validity and reliability, the term ‘trustworthiness’ was used in this research study and certain criteria for judging the quality of the research study as regards trustworthiness are described below.

Ensuring trustworthiness in qualitative research projects is important in judging the quality of study (Lincoln & Guba, 1985; Seale, 1999). To ensure trustworthiness Creswell and Miller (2000: 126) suggest a list of nine different procedures which is “not exhaustive but includes those procedures commonly used and cited in qualitative literature”. Those procedures are triangulation, disconfirming evidence, researcher reflexivity, member checking, prolonged engagement in the field, collaboration, the audit trial, thick and rich description, and peer debriefing. Some of them are discussed below as the researcher has tried to increase the trustworthiness of the study considering these validation procedures.

Triangulation

Triangulation, which requires gathering multiple sources of data, is one of the strengths of case studies (Yin, 2003). There are four different types of triangulation cited in the qualitative research literature: triangulation (1) across data sources, (2) of theories, (3) of methods, and (4) among different investigators (Creswell, 2007; Creswell & Miller 2000). Triangulation in a study provides collaborating evidence collected through multiple methods. This ensures the validity as multiple sources of data provides multiple measures of the same phenomenon (Creswell & Miller, 2000).

In this research study, the researcher made use of data, investigator and method triangulation. There were two different cases as a data source (all prospective English teachers for the quantitative phase and the selected sample for the qualitative phase) and one more coder helped the researcher during the analysis of the data. Furthermore, different methods for data collection were used such as questionnaires, documents, observations and interviews. The second coder was trained for the assessment procedures of each instrument. Having specific procedures for coding and analyzing data also increased the transferability of the findings. Having explained the data analysis procedures to the second coder, the researcher and the coder analyzed the instruments separately by following the data analysis procedure. Later, they came together and discussed whether there were any inconsistencies or not and reached full-consensus.

Researcher reflexivity

Researchers acknowledge and describe their beliefs and biases about the study in this validity procedure. “This is the process whereby researchers report on personal beliefs, values and biases that may shape their inquiry” (Creswell & Miller, 2000: 127). According to Creswell & Miller (2000: 127), this process is important for the researchers as acknowledging and describing their beliefs and biases early in the research process ‘allow readers to understand their positions, and then to bracket or suspend those researcher biases as the study proceeds’. The researcher’s role and biases in this study were explicitly stated in the previous section.

Prolonged engagement

Another validity procedure for the researcher is to stay at the research setting for a prolonged period of time. Carspecken (1996: 88) claims that with prolonged engagement, a great deal of time is spent at the research setting and the participants of the study get used to the researcher’s existence in the research setting and they would most probably ‘act as if the researcher were not present...’. Through several classroom observations that the researcher conducted in each prospective teacher’s

class, he achieved to develop that familiar existence and develop a strong bond with the participants. Furthermore, as discussed in the previous section, the researcher also established a good rapport with the participants.

Collaboration

“Collaboration means that the participants are involved in the study as co-researchers or in less formal arrangements” (Creswell & Miller, 2000: 128). The participants of this study assisted the researcher during the data analysis process and were involved in writing the narrative account of their observation results.

Member checking

With member checking, the validity procedure shifts from the researcher to the participants in the study. Lincoln and Guba (1985: 314) claim that member checking is the most crucial technique for establishing credibility. By means of member checking, the researcher provided the participants with the final version of their individual case studies (answers to the interview questions, narratives of the observation studies, and the like) to ‘clarify and confirm’ (Breen et al., 2001: 482) his understandings. If there were any conflicts in the understandings of the researcher, he noted them and sometimes gave the instrument back to the participants so as to have it rewritten.

Thick and rich description

Another procedure for establishing trustworthiness in a study is to describe the setting, the participants and the themes of a qualitative study in rich detail. The researcher clearly explained all the stages of the research design and findings in detail so that the readers will be able to understand whether the research study is trustworthy and they will be able to make decisions about the applicability of the findings to other settings or similar contexts (Creswell & Miller, 2000; Merriam, 1998).

Peer debriefing

“A peer review or debriefing is the review of the data and research process by someone who is familiar with the research or the phenomenon being explored... This procedure is best used over time during the process of an entire study” (Creswell & Miller, 2000: 129). In this study, the researcher had a chance to get feedback from an instructor who is also a PhD student, qualified in both qualitative research and PCK. As Carspecken (1996) suggests, the peer reviewer provided support for this research study on three occasions. The reviewer examined the methodology of the study, checked the transcription of the interviews and checked the coding in order to detect possible biases in what the researcher observed or in how he described it.

3.5.5 Data Collection

Data in this study were collected from multiple sources: a) questionnaires, b) videotaped class observations, c) interviews, and d) documents (lesson plans of the prospective teachers). The study started with a survey with which all the prospective teachers' perceptions of their own PCK were investigated at Çanakkale Onsekiz Mart University. Later, in the second phase, it focused on observations, interviews and documents to collect detailed views of the prospective teachers. The researcher made use of these qualitative methods as they let him understand the results of the quantitative phase in more detail.

Quantitative data were collected from nearly all the students (n=127 out of 134) of ELT department at Çanakkale Onsekiz Mart University in 2011-2012 Academic Year. Data collection for the quantitative phase of the study nearly took two weeks. Written permission to carry out the study was asked and obtained from the head of the Foreign Languages Education department (See Appendix 6 for the written permission of the research study). With the written permission, the questionnaire was conducted during the lesson hours when most of the prospective teachers were available.

After quantitative data were collected, three prospective teachers were chosen to explain the quantitative results that need further explanation in the qualitative phase of the study. The researcher selected the participants among his students taking the ‘School Experience’ course. To explain the statistically significant differences found in the quantitative phase, the prospective teachers’ lesson plans were examined. Later, their teaching practice was observed and videotaped for further investigation in the last week of the spring term. Also, interviews were carried out to deeply understand what prospective teachers know about teaching and what they intended to do while they were teaching. The timeline of the data collection procedures is shown in the following table.

Table 12: *Timeline of the Data Collection Procedures*

METHOD	INSTRUMENTS	PARTICIPANTS	DATA ANALYSIS	DATE
Quantitative	Questionnaire	Nearly all prospective teachers of English at COMU	Descriptive statistics such as frequencies, means, etc. and Mann-Whitney U-test	March 26 -April 6, 2012
Qualitative	Document analysis (Lesson Plans)	Three prospective English teachers	Qualitative data analysis techniques	April 16 - 27, 2012
Qualitative	Observations	Three prospective English teachers	Qualitative data analysis techniques	May 7 - 9, 2012
Qualitative	Interviews	Three prospective English teachers	Qualitative data analysis techniques	May 14 - 16, 2012

3.5.6 Data Analysis

The quantitative data obtained from the questionnaire were analyzed by the use of descriptive and inferential statistics. Prospective English teachers’ perceptions of their own level of teaching competency in terms of their pedagogical content

knowledge were analyzed through presenting the means, percentages and frequencies obtained for each item through the SPSS program. The highest and lowest mean values and the frequencies of the answers given to the items of the questionnaire were discussed. In order to explore the differences between two independent participant groups (depending on their genders, GPA, and teaching experience), non-parametric Mann-Whitney U test was conducted on the Likert scale data which was collected through the questionnaire.

Parametric tests make certain assumptions about the data. There is the assumption that the data is drawn from a normal distribution. Unlike its parametric counterpart, the t test for 2 samples, Mann-Whitney U Test makes no assumptions at all about the population from which the data is drawn. When distributions of variables do not show a normal distribution, using the t-test to tell if there is a significant difference between samples is not appropriate. The Mann-Whitney U-test can be used in such cases (Büyüköztürk, 2006: 145).

In order to determine whether a data set is well-modeled by a normal distribution or not, normality test is used. To find out whether there is a normal distribution in either of the populations; Kolmogorov-Smirnov (K-S) Test was used. As the Sig. value of the Kolmogorov-Smirnov (K-S) Test was below 0.05 ($p < .05$) for each item, it can be concluded that the data significantly deviate from a normal distribution. Thus, using a non-parametric test rather than its parametric counterpart will be much more accurate.

Whether the medians on a test variable differ significantly between two groups is evaluated by the Mann-Whitney U test. To conduct the Mann-Whitney U test, each case must have scores on two variables, the grouping variable and the test variable. The grouping variable divides cases into two groups or categories (males / females, successful / unsuccessful, experienced / inexperienced), and the test variable assesses individuals on a variable with at least an ordinal scale (Intermediate Statistics: 1).

The qualitative data obtained from three prospective teachers of English were analyzed in order to explain the initial quantitative findings. Qualitative data analysis was done by using Miles and Huberman's (1994) view which include three concurrent components: data reduction, data display, and conclusion drawing/verification. Data reduction refers to the process of selecting, focusing, simplifying, and transforming data in the field notes, transcripts, and the like. Data display includes ways to present data in an organized way using tables, charts, networks, so and so forth. Finally, in conclusion drawing and verification, researchers draw meanings from the data in the light of patterns, explanations noted in the process of data collection, data reduction, data display and after.

While analyzing the qualitative data, both within-case and cross-case analyses (Merriam, 1998) were conducted. This enabled the researcher to group common responses from different perspectives and focus on the parallelism and differences between the participants (Patton, 1990; cited in Şallı-Çopur, 2008: 73). The data collected through interviews, observations and document analysis were dependent on a content analysis and descriptive analysis.

First of all, the interviews were transcribed as soon as they were done. Then, the participants' responses were categorized for the ease of data management. Then, coding was used in order to label the data. The researcher made use of coding stages proposed by Strauss and Corbin (1998). Codes and subcodes were created from the transcriptions of the interviews by the researcher depending on the research questions (open coding – a procedure for developing categories of information). These codes and subcodes were then grouped into a number of categories and themes for each prospective teacher in the study (axial coding – a procedure for interconnecting the categories). Later, the researcher selected the core (or main) category, and then systematically related it to the other categories (selective coding). Finally, he wrote a preliminary analysis for each prospective teacher, which helped him in his case and cross-case analysis (See Appendix 7 for The Explanation and Sample of Coding System).

As there were multiple data sources in this study, the data were complex and not easily comprehensible. Hence, all the qualitative data collected through interviews, observations and document analysis were analyzed in terms of the stages proposed by Strauss and Corbin (1998). By using these stages, explanation and in-depth understanding of the quantitative results were provided.

3.6 Visual Model

As Ivankova et al. (2006: 14-15) propose, mixed methods research includes two or more stages and is difficult to understand unless the researchers represent its procedures used in the study graphically. A visual model of the mixed methods procedures for this study is presented in this section in order to help researchers visualize the sequence of the data collection, the connecting and mixing points of the two methods (quantitative and qualitative) and the priority of either method. Besides, it helps a researcher understand where, how and, when to make adjustments in the research study.

Based on “ten rules for drawing visual models for mixed-methods designs” (Ivankova et al., 2006: 15), the researcher created a graphical representation of the mixed-methods sequential explanatory design procedures used for this study (See Figure 3).

The model shows the sequence of the research activities in this study and displays the priority of the quantitative phase by capitalizing the term QUANTITATIVE, summarizes all the data collection and analysis procedures, and provides the list of products or outcomes from each stage of the study. It also demonstrates the places in the research process where the integration or mixing of the results of both quantitative and qualitative phases occurs.

Figure 3: *Visual Model for Mixed-Methods Sequential Explanatory Design Procedures* (adapted from Ivankova et al., 2006: 16)

Phase	Procedure	Product
QUANTITATIVE Data Collection	• Questionnaire applied to 127 prospective teachers of English	• Numeric data
↓		
QUANTITATIVE Data Analysis	• Reliability analysis • Descriptive statistics • Inferential statistics (Mann-Whitney U Test) • SPSS quan. software v.17	• Cronbach's Alpha • Frequencies, mean values • Value of U
↓		
Connecting Quantitative and Qualitative Phases	• Purposefully selecting three participants based on maximal variation principle • Developing interview questions and observation procedure	• Participants (n=3) • Interview guide and observation procedure
↓		
Qualitative Data Collection	• Documents (lesson plans) • Observation • Individual face-to-face interviews with 3 participants	• Text data (interview transcripts, documents) • Audio-visual data (video records)
↓		
Qualitative Data Analysis	• Coding and thematic analysis • Within-case and cross-case theme development • Cross-thematic analysis	• Codes and themes • Similar and different themes and categories
↓		
Integration of the Quantitative and Qualitative Results	• Interpretation and explanation of the quantitative and qualitative results	• Conclusion • Discussion • Implications • Future research

As it can clearly be seen in the figure above, the study began with the collection and analysis of quantitative data. Then, the researcher planned the subsequent qualitative phase by developing the interview questions and the observation protocol with the help of the quantitative findings. The quantitative findings also provided criteria for identifying the three prospective teachers selected for the second, qualitative phase. Later, qualitative data were collected by means of documents, observation, and interviews. The analysis of the qualitative findings was

used to explain and interpret findings of the quantitative phase (Creswell et al., 2003). That is to say, the results from the qualitative phase extended and helped explain the initial quantitative findings. The quantitative and qualitative results were integrated in the discussion and implications part (Tashakkori & Teddlie, 2003).

3.7 Summary

This chapter has presented the methodology followed in the study. Firstly, the research method and the research design have been explained in detail. Then, a detailed description of the research study has been provided. Later, how the data collection instruments were constructed and piloted have been described. Eventually, setting and participants, researcher's roles and biases, validity and reliability issues, procedures for data collection and analysis have been highlighted and a visual model for mixed-methods sequential explanatory design has been presented in this chapter.

CHAPTER FOUR

RESULTS OF THE DATA ANALYSIS

4.0 Introduction

This chapter presents the results of the research study. First, the quantitative results together with descriptive and inferential statistics are displayed. Later, the data obtained from the observation procedures, document analysis and interviews are shown. Finally, both within-case and cross-case analysis of the participants are done to explain the quantitative results of the study.

4.1 Quantitative Results

The aim of the questionnaire was to examine the prospective English teachers' perceptions of their competencies regarding their PCK. Thus, the questionnaire consisted of several items each of which determines the participants' perceptions of different domains of their PCK: their knowledge of English, knowledge on planning lessons, the learners, teaching methods and techniques, and assessment. The results obtained from the questionnaire were analyzed through descriptive and inferential statistics in parallel with the research questions and presented in the following sections.

4.1.1 Descriptive Statistics

In the light of the literature, the items of each knowledge domain were constructed and grouped. Prospective teachers' perceptions on their knowledge of English were investigated through the items 1-13. Their knowledge on planning lessons were questioned in the items 14-20. Items from 21 to 31 were written to see the participants' knowledge of their students. Moreover, their knowledge on teaching

methods and techniques were questioned in the items 32-42. Finally, their knowledge on assessment was asked in the final 18 items (Items 43-60).

In order to find answer to the first research question (RQ1) below, descriptive statistics was applied and each knowledge domain of the participants was investigated separately under different headings as in the following sections. A Likert type five-point scale was used based on the answers “Strongly Disagree”, “Disagree”, “Neutral”, “Agree” and “Strongly Agree”, which were represented as 1, 2, 3, 4 and 5 respectively in order to collect the data for SPSS analysis. While interpreting the responses according to the mean values, the items whose mean values are above 3.5 were considered as a positive perception, the ones between 2.50 and 3.49 as neutral and the ones below 2.49 were considered to show a negative perception.

RQ1 What are the prospective English teachers’ perceptions of their own level of teaching competency in terms of their PCK?

The overall mean score of all the items in the questionnaire was found to be 4.09, which shows that the prospective teachers agreed that they have the required competencies in general. When the items are analyzed one by one, none of the items’ mean values points a degree of disagreement (below 2.5). Thus, the three lowest and three highest mean scores for each section are presented, while all mean values are provided in tables below. The items having the highest and/or lowest frequencies are also presented in detail in the following parts.

4.1.1.1 Knowledge of English

Total mean of the prospective teachers’ perceptions of their knowledge of English ($\bar{X}_{\text{total mean 1}} = 3.96$) shows that they believe they are knowledgeable about the language they are going to teach in general. However, prospective teachers’ knowledge of English seems to be the only knowledge domain whose mean value is below 4.00. When the first three highest mean values are examined, it can be clearly seen that the prospective teachers agree that they can apply their understanding of

semantics (word/sentence meaning) to assist their students in using a wide range of vocabulary in English ($\bar{X}_{\text{item 4}} = 4.30$). Moreover, they can apply their knowledge of pragmatics (the effect of context on language) to help students communicate effectively ($\bar{X}_{\text{item 5}} = 4.20$). Though they are not that much sure that they have a wide knowledge of vocabulary ($\bar{X}_{\text{item 12}} = 3.63$) with the second lowest mean score, they believe that they can help their learners use a wide range of vocabulary and communicate effectively with the help of their knowledge of semantics and pragmatics. The third highest mean value ($\bar{X}_{\text{item 13}} = 4.18$) indicates that the prospective teachers know the English grammar very well. While they believe that they know the English grammar very well, they are not that much sure about their knowledge of vocabulary ($\bar{X}_{\text{item 12}} = 3.63$) and pronunciation of the English words, stress and intonation patterns correctly ($\bar{X}_{\text{item 11}} = 3.66$). Finally, the tenth item with the lowest mean value ($\bar{X}_{\text{item 10}} = 3.48$) indicates that the prospective teachers neither agree nor disagree that they can write all types of essays, letters, and the like to communicate without having any difficulties.

Table 13: *Prospective Teachers' Perceptions of their Knowledge of English*

Prospective Teachers' Perceptions of their Knowledge of English	N	Mean	SD
1. I can apply my knowledge of phonology (the sound system) to help students develop oral, reading and writing skills in English.	127	4,1102	,68113
2. I can apply my knowledge of morphology (the structure of words) to assist students' development of oral and literacy skills in English.	127	4,0866	,69034
3. I can apply my knowledge of syntax (phrase and sentence structure) to assist students in developing written and spoken English.	127	4,1024	,76464
4. I can apply my understanding of semantics (word/sentence meaning) to assist students in using a wide range of vocabulary in English.	127	4,2992	,68214
5. I can apply my knowledge of pragmatics (the effect of context on language) to help students communicate effectively.	126	4,1984	,72685
6. I have a good command of English.	127	4,0315	,73395
7. I can use the English language to communicate clearly and effectively while speaking.	127	3,9134	,79705
8. It is easy for me to understand conferences, radio and television talks in English.	127	3,8976	,79517
9. I can read and understand popular novels and story books in English with no use or only little use of a dictionary.	127	3,8740	,81642
10. I can write all types of essays, letters, etc. to communicate without having any difficulties.	126	3,4762	,90963
11. I'm good at pronouncing the English words, stress and intonation patterns correctly.	127	3,6614	,94466
12. I have a wide knowledge of vocabulary.	127	3,6299	,79486
13. I know the English grammar very well.	127	4,1811	,76030
Total Mean of the items above:		3.9586	

The researcher also analyzed the frequencies of the answers given to the questionnaire items. The most striking items with the highest frequencies were to be discussed for further analysis. While analyzing the frequencies of the answers given to the items, the researcher recoded the ‘Disagree’ and ‘Strongly agree’ variables into ‘Disagree’ variable and ‘Agree’ and ‘Strongly Agree’ variables into ‘Agree’ variable for the ease of the data management.

The highest frequency was seen in the fourth item (n=118). Nearly 93 percent of the participants agreed that they could apply their understanding of semantics (word/sentence meaning) to assist students in using a wide range of vocabulary in English.

Table 14: *Item 4 with the Highest Frequency regarding the Participants’ Knowledge of English*

Item 4	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	2	1,6	1,6	1,6
Neutral	7	5,5	5,5	7,1
Agree	118	92,9	92,9	100,0
Total	127	100,0	100,0	

4.1.1.2 Knowledge on Planning Lessons

Prospective teachers agree that they have good command of knowledge on planning lessons ($\bar{X}_{\text{total mean } 2} = 4.43$). They strongly agree that they can write clear instructions for different parts of the lesson plan ($\bar{X}_{\text{item } 19} = 4.55$) and can make use of various activities ($\bar{X}_{\text{item } 20} = 4.55$) considering their students’ language levels, learning styles, interests and needs ($\bar{X}_{\text{item } 14} = 4.52$). The participants seem to agree with all the items in this part of the questionnaire as the mean values of the items are not below 4.00.

Table 15: *Prospective Teachers' Perceptions of their Knowledge on Planning Lessons*

Prospective Teachers' Perceptions of their Knowledge on Planning Lessons	N	Mean	SD
14. I can plan my lessons considering my students' language levels, learning styles, interests and needs.	127	4,5197	,64057
15. I can write aims and behavioral objectives of the lesson clearly.	127	4,1732	,76733
16. I can prepare lesson plans that will help me reach my aims.	127	4,3701	,68780
17. I can decide on the ways of how to make students ready for the lesson in the warm-up session.	127	4,4252	,69602
18. I can relate the lesson with the previous and following lessons.	127	4,4252	,66092
19. I can write clear instructions for different parts of the lesson plan.	127	4,5512	,66319
20. I can make use of various activities.	126	4,5476	,62747
Total Mean of the items above:		4,4303	

Interestingly, only one out of 127 participants do not agree that he/she can decide on the ways of how to make students ready for the lesson in the warm-up session ($n_{\text{item 17}}=1$) and plan his/her lessons considering his/her students' language levels, learning styles, interests and needs ($n_{\text{item 14}}=1$). He/she believes that he/she cannot relate the lesson with the previous and following lessons ($n_{\text{item 18}}=1$) and make use of various activities ($n_{\text{item 20}}=1$). 96.1 percent of the participants ($n=122$) agree that they can plan their lessons considering their students' language levels, learning styles, interests and needs and write clear instructions for different parts of the lesson plan (See Appendix 8 for the Frequency Table of the Items).

4.1.1.3 Knowledge of Learners

With the highest mean value among the items of the questionnaire, item 21 shows that prospective teachers can use appropriate sources and materials ($\bar{X}_{\text{item 21}}=4.57$) with their knowledge of learners and their learners' different characteristics ($\bar{X}_{\text{total mean 3}}=4.27$). Nearly 98 percent of the participants ($n=124$) believe they can make use of appropriate sources and materials for their learners. Items 26 and 30 with the second and third highest mean value respectively for this part of the questionnaire indicate that prospective teachers can motivate their students to learn and they are aware of their students' learning styles ($\bar{X}=4.48$).

Table 16: *Prospective Teachers' Perceptions of their Knowledge of Learners*

Prospective Teachers' Perceptions of their Knowledge of Learners	N	Mean	SD
21. I can use appropriate sources and materials for my students.	127	4,5748	,63645
22. I can forecast possible questions to be asked and provide their possible answers.	127	3,9921	,71820
23. I can explain the terms and concepts my students have difficulty in understanding.	127	4,2205	,71173
24. I can explain what should be done to clarify the terms and concepts my students have difficulty in understanding.	126	4,1905	,67781
25. I can make use of the target language considering my students' levels.	127	4,3465	,72788
26. I can motivate my students to learn.	126	4,4841	,74548
27. I can keep their motivation and interest alive.	127	4,3543	,77180
28. I can deal with almost any learning problems of the students.	127	3,7953	,89388
29. I have an understanding of how students develop and learn.	126	4,1746	,69374
30. I'm aware of the learning styles (visual, verbal, aural, logical, etc.) of my students.	126	4,4762	,75593
31. I know the learning strategies (using background knowledge, making predictions, summarizing, cooperating, etc.) of my students.	127	4,3543	,77180
Total Mean of the items above:		4,2693	

When the mean values below 4.00 are examined, it can be concluded that prospective teachers are not that much sure about dealing with almost any learning problems of their students ($\bar{X}_{\text{item 28}} = 3.78$), and forecasting possible questions to be asked and providing their possible answers ($\bar{X}_{\text{item 22}} = 3.99$),

4.1.1.4 Knowledge on Teaching Methods and Techniques

This part of the questionnaire aims to find out whether prospective teachers believe that they can use appropriate methods and techniques in their teaching process or not. As the total mean value of the items ($\bar{X}_{\text{total mean 4}} = 4.19$) shows and as it can clearly be seen in the table below, prospective teachers believe that they are knowledgeable about the methods and techniques to be used in their actual teaching practice. The participants agree that they best make use of appropriate methods and techniques when they teach vocabulary to their students ($\bar{X}_{\text{item 37}} = 4.54$). Another item the mean value of which is above 4.5 presents that prospective teachers can use appropriate methods and techniques while teaching grammar as well ($\bar{X}_{\text{item 38}} =$

4.52). The results also show that the prospective teachers can make use of an eclectic method ($\bar{X}_{\text{item } 42} = 4.35$) or communicative approach ($\bar{X}_{\text{item } 41} = 4.28$) better than they do traditional teaching methods ($\bar{X}_{\text{item } 40} = 3.64$).

Table 17: *Prospective Teachers' Perceptions of their Knowledge on Teaching Methods and Techniques*

Prospective Teachers' Perceptions of their Knowledge on Teaching Methods and Techniques		N	Mean	SD
32. I can make use of appropriate methods and techniques in the teaching process.		122	4,2213	,68650
I can make use of appropriate methods and techniques to improve students'	33. reading skills.	127	4,3228	,77544
	34. writing skills.	127	4,0394	,85821
	35. listening skills.	127	4,1496	,76717
	36. speaking skills.	127	4,0709	,77849
	37. vocabulary knowledge.	127	4,5354	,71041
	38. knowledge of grammar.	127	4,5197	,74376
	39. pronunciation.	126	4,0159	,86703
40. I can make use of traditional teaching methods (Grammar Translation, Direct Method, etc.).		127	3,6378	1,10316
41. I can make use of communicative approach in English language teaching to improve my students' communication skills.		127	4,2756	,67468
42. I can make use of an eclectic method (combining the techniques of many other methods and approaches).		127	4,3465	,75989
Total Mean of the items above:			4,1941	

With the highest frequency, 95.3 percent of the participants agree that they can make use of appropriate methods and techniques to improve students' vocabulary knowledge ($n_{\text{item } 37} = 121$). Only two of the participants do not agree that they can make use of appropriate methods and techniques while teaching vocabulary and grammar ($n_{\text{item } 32,37,38} = 2$). Moreover, except for the two participants, prospective teachers believe that they can make use of communicative approach or an eclectic method. In contrast, 41.7 percent of the participants ($n_{\text{item } 40} = 53$) either disagree with or feel neutral about the fact that they can make use of traditional teaching methods such as grammar translation and direct method (See Appendix 8 for the Frequency Table of the Items).

4.1.1.5 Knowledge on Assessment

The highest mean value related to the prospective teachers' knowledge on assessment shows that they believe they can reflect the results of the classroom assessment process to their future practices ($\bar{X}_{\text{item 48}} = 4.34$). Similarly, the item with the second highest mean value indicates that they can give appropriate feedback according to the results of the measurement process ($\bar{X}_{\text{item 47}} = 4.25$). Only two of the participants do not agree that they can reflect the results of the classroom assessment process to their future practices and give appropriate feedback according to the results of the measurement process.

Table 18: *Prospective Teachers' Perceptions of their Knowledge on Assessment*

Prospective Teachers' Perceptions of their Knowledge on Assessment	N	Mean	SD
43. I can determine the aims of assessment practices.	127	3,9843	,77648
44. I'm well informed about the uses of a wide variety of assessment strategies.	127	3,7244	,90569
45. I can choose the methods of assessment which is appropriate for my students.	126	4,0000	,83905
46. I can integrate all language skills while assessing the students' success.	127	4,0787	,83196
47. I can give appropriate feedback according to the results of the measurement process.	127	4,2520	,70112
48. I can reflect the results of the classroom assessment process to my future practices.	127	4,3386	,65732
Total Mean of the items above:		4,0630	

It can be inferred from the results that the participant teachers agree they can reflect the results of the assessment to their future practices and give appropriate feedback though they are not that much sure about being knowledgeable about the uses of wide variety of assessment strategies ($\bar{X}_{\text{item 44}} = 3.72$). Item 44 with the lowest mean value suggests that 35 percent of the participants ($n_{\text{item 44}} = 44$) either disagree with or feel neutral about the fact that they know how to use different test techniques. The third part of the questionnaire also verifies these findings. Neither the traditional nor the alternative assessment tools' total mean is above 4.00 as it can be seen in the table below. When the mean values of the items from 49 to 60 are investigated, prospective teachers believe they can use performance based assessment strategies most frequently ($\bar{X}_{\text{item 57}} = 4.17$), whereas they do not prefer

using essay test that much frequently ($\bar{X}_{\text{item } 54} = 3.30$). True-false questions, checklists for students' behaviors, short answer and multiple-choice questions are among the test techniques which can be used less frequently than the other ones.

Table 19: *Prospective Teachers' Perceptions of their Knowledge on Different Test Techniques*

Prospective Teachers' Perceptions of their Knowledge on Different Test Techniques	N	Mean	SD
49. Multiple-Choice Questions	127	3,7244	1,05166
50. Short-Answer Questions	127	3,6457	,96385
51. True-False Questions	127	3,6063	,97718
52. Matching	127	4,0394	,91201
53. Completion	127	3,8583	1,01359
54. Essay Tests	127	3,2992	1,10061
Total Mean of the Traditional Assessment Tools:		3,6955	
55. Portfolios	127	3,7402	1,16981
56. Projects	127	4,0630	1,00592
57. Performance-based Assessment	127	4,1732	,95198
58. Self-assessment Questionnaires	127	3,7638	,93822
59. Checklists for Students' Behaviors	127	3,6299	1,05261
60. Videos of Role Plays	126	4,0079	1,02369
Total Mean of the Alternative Assessment Tools:		3,8963	

4.1.2 Inferential Statistics

In this part of the study, non-parametric Mann-Whitney U test was conducted to explore the differences between the responses of two independent participant groups. Mean differences in prospective teachers' perceptions of PCK based on their genders, GPA and teaching experience were analyzed. The answers to the sub-questions of the first research question were given under different headings.

Sub-questions

1.1 Is there any significant difference in their competencies based on their genders?

1.2 Is there any significant difference in their competencies based on their GPA (Grade Point Average)?

1.3 Is there any significant difference in their competencies based on their teaching experience?

4.1.2.1 Mean Differences in Prospective Teachers' Perceptions of PCK Based on their Genders

In order to identify whether there are any significant differences in prospective teachers' perceptions of their competencies based on their genders, Mann-Whitney U Test was used by the researcher. When the first forty-eight items were analyzed, it can be seen that there is no statistically significant difference between the male and female participants (See Appendix 9 for Mann-Whitney U test results based on participants' gender). However, it can be inferred from the results that females ($\bar{X} = 68.53$) make use of performance-based assessment more frequently than males ($\bar{X} = 48.00$) do when the relevant item in third part of the questionnaire was analyzed [$U_{\text{item 57}} = 938.000$, $p < .05$].

Table 20: Mann-Whitney U Test Presenting the Difference in Item 57 in Terms of Participants' Genders

Item 57	Gender	N	Mean Rank	Sum of Ranks	U	p
Performance-based Assessment	Male	28	48,00	1344,00	938.000	.005
	Female	99	68,53	6784,00		

4.1.2.2 Mean Differences in Prospective Teachers' Perceptions of PCK Based on their GPA

While collecting the data, the researcher divided the prospective teachers into two groups: ones having GPA above 3.00 and below 2.99. The researcher aimed to find out whether there are any significant differences or not in participants' perceptions of their PCK in terms of their academic success.

The results indicate that there are significant differences in the mean rank values of the two groups in terms of only three out of 48 items (See Appendix 10 for Mann-Whitney U test results based on participants' GPA). Prospective teachers with 3.00 and higher GPA can apply their knowledge of phonology (the sound system) to help students develop oral, reading and writing skills in English ($\bar{X} = 76.41$) better than the ones ($\bar{X} = 61.40$) with GPA between 2.00 and 2.99 [$U_{\text{item 1}} = 882.000$, $p < .05$].

Table 21: Mann-Whitney U Test Presenting the Difference in Item 1 in Terms of Participants' GPA

Item 1	GPA	N	Mean Rank	Sum of Ranks	U	p
I can apply my knowledge of phonology (the sound system) to help students develop oral, reading and writing skills in English.	3.00 and Above	22	76,41	1681,00	882.000	.047
	Between 2.00 and 2.99	105	61,40	6447,00		

Moreover, according to their perceptions, prospective teachers with 3.00 and higher GPA can make use of appropriate methods and techniques to improve students' vocabulary knowledge ($\bar{X} = 79.18$) better than the ones ($\bar{X} = 60.82$) with GPA between 2.00 and 2.99 [$U_{\text{item 37}} = 821.000$, $p < .05$]. The difference can be seen in the following table clearly. More successful learners believe that they are more successful in choosing the appropriate method and technique while teaching vocabulary.

Table 22: Mann-Whitney U Test Presenting the Difference in Item 37 in Terms of Participants' GPA

Item 37	GPA	N	Mean Rank	Sum of Ranks	U	p
I can make use of appropriate methods and techniques to improve students' vocabulary knowledge.	3.00 and Above	22	79,18	1742,00	821.000	.013
	Between 2.00 and 2.99	105	60,82	6386,00		

Finally, prospective teachers with 3.00 and higher GPA believe that they can make use of an eclectic method (combining the techniques of many other methods and approaches) ($\bar{X} = 78.16$) better than the ones ($\bar{X} = 61.03$) with GPA between

2.00 and 2.99 [$U_{\text{item 42}} = 843.500$, $p < .05$]. As in item 37, item 42 similarly shows significant difference. Choosing appropriate methods and techniques to be used, more successful learners tend to combine the techniques of different methods and approaches better than the other group of students.

Table 23: Mann-Whitney U Test Presenting the Difference in Item 42 in Terms of Participants' GPA

Item 42	GPA	N	Mean Rank	Sum of Ranks	U	p
I can make use of an eclectic method (combining the techniques of many other methods and approaches).	3.00 and Above	22	78,16	1719,50	843.500	.029
	Between 2.00 and 2.99	105	61,03	6408,50		

When the test techniques that two groups of students make use of are considered, essay tests, portfolios, performance based assessment, self-assessment and checklists are among the ones that more successful students prefer to use more than the ones whose GPA is below 3.00. Statistically significant differences were found in the use of these test techniques. This means that students whose GPA is above 3.00 tend to use subjective test techniques more frequently than the ones whose GPA is below 3.00.

Table 24: Mann-Whitney U Test Presenting the Difference in the Use of Test Techniques in Terms of Participants' GPA

Test Techniques	GPA	N	Mean Rank	Sum of Ranks	U	P
Essay Tests	3.00 and Above	22	77,91	1714,00	849,000	.043
	Between 2.00 and 2.99	105	61,09	6414,00		
Portfolios	3.00 and Above	22	84,80	1865,50	697,500	.002
	Between 2.00 and 2.99	105	59,64	6262,50		
Performance Based Assessment	3.00 and Above	22	83,43	1835,50	727,500	.003
	Between 2.00 and 2.99	105	59,93	6292,50		
Self-assessment	3.00 and Above	22	78,27	1722,00	841,000	.035
	Between 2.00 and 2.99	105	61,01	6406,00		
Checklists	3.00 and Above	22	79,41	1747,00	816,000	.024
	Between 2.00 and 2.99	105	60,77	6381,00		

As it can be seen in the table above, portfolios and performance based assessment are used much more frequently by more successful students than by less successful students.

Though there is not any statistically significant difference, the results show that less successful students believe they will make use of matching ($\bar{X} = 64.90$) and multiple choice ($\bar{X} = 64.63$) test techniques more frequently than the students with a GPA of 3.00 and above (See Appendix 10 for Mann-Whitney U test results based on participants' GPA). This means that less successful students tend to make use of traditional and objective test techniques more frequently than the other group do, while ones that are more successful prefer alternative and subjective test techniques more than less successful ones do.

All in all, the statistically significant differences found in the data analysis suggest that prospective teachers with 3.00 and higher GPA have better knowledge of phonology than the ones with GPA between 2.00 and 2.99. They can make use of appropriate methods and techniques to improve students' vocabulary knowledge and combine these techniques in their actual teaching practices better than the less successful students can. Also, more successful students tend to prefer alternative and subjective test techniques such as essay tests, portfolios, performance based assessment, self-assessment and checklists more frequently while less successful students tend to make use of traditional and objective test techniques more frequently.

4.1.2.3 Mean Differences in Prospective Teachers' Perceptions of PCK Based on their Teaching Experience

As discussed before, 74 out of 127 participants (58,3 percent of the prospective teachers) had teaching experience except for the 'School Experience' and 'Teaching Practice' courses. The researcher regarded the experience they had in these courses as invalid as it makes no difference among the prospective teachers,

who all had such courses in their last years. Prospective teachers with experience listed one to one private courses, group courses and community service course at which some of them taught to the second or third grades as their teaching experience.

In this part, the researcher aimed to find out whether there are any significant differences or not in participants' perceptions of their PCK in terms of their teaching experience. Significant differences were found in the mean rank values of the two groups in items 22, 23 and 24 (See Appendix 11 for the results of all items).

Table 25: Mann-Whitney U Test Presenting the Difference in Items 22, 23, 24 in Terms of Participants' Teaching Experience (T.E.)

Items	T.E.	N	Mean Rank	Sum of Ranks	U	p
22. I can forecast possible questions to be asked and provide their possible answers.	NO	53	72,72	3854,00	1499,000	.011
	YES	74	57,76	4274,00		
23. I can explain the terms and concepts my students have difficulty in understanding.	NO	53	72,15	3824,00	1529,000	.019
	YES	74	58,16	4304,00		
24. I can explain what should be done to clarify the terms and concepts my students have difficulty in understanding.	NO	53	72,01	3816,50	1483,500	.013
	YES	73	57,32	4184,50		

Among 48 items in the questionnaire, prospective teachers without experience ($\bar{X} = 72.72$) interestingly believe that they can forecast possible questions to be asked and provide their possible answers more than experienced ones ($\bar{X} = 57.76$) can [$U_{\text{item 22}} = 1499.000$, $p < .05$]. Similarly, as it can be seen in the table above, prospective teachers without experience think they are better than the experienced ones in explaining the terms and concepts their students have difficulty in understanding [$U_{\text{item 23}} = 1529.000$, $p < .05$] and in explaining what should be done to clarify these terms and concepts [$U_{\text{item 24}} = 1483.000$, $p < .05$]. Namely, the results show that forecasting possible questions to be asked by the students, explaining the terms and concepts that students do not understand, and knowing what to do to clarify these terms and concepts can be thought easy to do just with theoretical knowledge. However, it seems that experienced prospective teachers know how difficult these things are as the mean rank of their answers to these items is lower

than that of the inexperienced ones. When the frequencies of each group's responses were analyzed through crosstabs, the results show that 48 prospective teachers out of 53 inexperienced ones (nearly 90 percent) agreed with the statements in items 22, 23 and 24. This also verifies the results found in Mann-Whitney U test.

As for the test techniques that each group of students make use of, the results indicate that experienced prospective teachers tend to use multiple-choice [$U=1545.000$, $p<.05$] and matching [$U_{\text{item } 22}=1363.000$, $p<.05$] questions more frequently than the inexperienced ones do.

Table 26: Mann-Whitney U Test Presenting the Difference in the Use of Test Techniques in Terms of Participants' Teaching Experience

Test Techniques	Teaching Experience	N	Mean Rank	Sum of Ranks	U	p
Multiple-choice	NO	53	56,15	2976,00	1545,000	.034
	YES	74	69,62	5152,00		
Matching	NO	53	52,72	2794,00	1363,000	.002
	YES	74	72,08	5334,00		

Prospective teachers whose GPA is below 3.00 and experienced ones believe that they will make use of matching and multiple choice more frequently than the other groups of students.

4.1.3 Summary and Implications for the Qualitative Phase

In this part of the study, the findings of the statistical analysis regarding the first research question are given in detail. The researcher aimed to examine the prospective English teachers' perceptions of their competencies regarding their PCK in this quantitative phase. Hence, he analyzed the participants' perceptions of different domains of their PCK: their knowledge of English, planning lessons, the students, teaching methods and techniques, and assessment through descriptive and inferential statistics in parallel with the research questions. Moreover, he drew some implications for the qualitative phase.

The results of the quantitative phase show that the prospective teachers agreed they have the required competencies in general. In the following table, it can also be seen that prospective teachers believe that have knowledge on planning lessons more than other knowledge domains. However, their knowledge of English seems to be the only knowledge domain whose mean value is below 4.00.

Table 27: *Total Mean of the Prospective Teachers' Perceptions of Their Each Knowledge Domain*

Knowledge Domains	N	Total Mean
Knowledge of English	127	3.96
Knowledge on Planning Lessons	127	4.43
Knowledge of Learners	127	4.27
Knowledge on Teaching Methods and Techniques	127	4.19
Knowledge on Assessment	127	4.06

Descriptive statistics regarding their knowledge of English suggest that the prospective teachers agree they can apply their understanding of semantics (word/sentence meaning) to assist their students in using a wide range of vocabulary in English. Similarly, participants agree that they best make use of appropriate methods and techniques when they teach vocabulary to their students. Namely, the participants believe that they can help their learners use wide range of vocabulary through appropriate methods and techniques. However, they are not that much sure about their knowledge of vocabulary and pronunciation of the English words, stress and intonation patterns correctly. In order to explain these results and get qualitative data on prospective teachers' subject matter knowledge, the third, fourth, fifth, and sixth questions were asked in the interview (See the Interview Questions, Appendix 3).

Mann-Whitney U test results based on participants' GPA show that prospective teachers with 3.00 and higher GPA can apply their knowledge of phonology (the sound system) to help students develop oral, reading and writing

skills in English better than the ones with GPA between 2.00 and 2.99 can. Moreover, according to their perceptions, they also believe that they are more successful in choosing the appropriate method and technique while teaching vocabulary. Finally, prospective teachers with 3.00 and higher GPA believe that they can make use of an eclectic method (combining the techniques of many other methods and approaches) better than the ones with GPA between 2.00 and 2.99 can. Choosing appropriate methods and techniques to be used, more successful learners tend to combine the techniques of different methods and approaches better than the others do. To explain these results in detail the researcher observed the prospective teachers' teaching practice and tried to find the answers to the first, third and fourth questions in the observation procedure (See the Observation Procedure, Appendix 5).

Prospective teachers' actual teaching practices were observed while they were teaching vocabulary as they believed that they best make use of appropriate methods and techniques when they teach vocabulary to their students. Therefore, a reading passage was chosen from the course book with the help of two experts from ELT department. The passage named "Miracles of Medicine" (See Appendix 12) involved some vocabulary items that the prospective teachers were supposed to teach. In addition, to what extent they make use of an eclectic method and their knowledge of pronunciation were observed while they were teaching the vocabulary in this reading passage.

As for their knowledge on planning lessons, prospective teachers strongly agree that they can write clear instructions for different parts of the lesson plan and make use of various activities considering their students' language levels, learning styles, interests and needs. To explain this, lesson plan assessment form was developed by the researcher and the prospective teachers' lesson plans were analyzed. Thus, the researcher made use of document analysis as the second data collection technique. In addition, the seventh and eight interview questions were asked to get further information about their knowledge on planning lessons.

When the highest mean value among the items of the questionnaire is analyzed, it can be seen that prospective teachers can use appropriate sources and materials with their knowledge of learners and their learners' different characteristics. Nearly 98 percent of the participants (n=124) believe they can make use of appropriate sources and materials for their learners. To see whether their perceptions are true or not, the prospective teachers were aimed both to be observed and interviewed.

Another important result of the analysis of the quantitative data is that prospective teachers are not that much sure about dealing with almost any learning problems of their students, and forecasting possible questions to be asked and providing their possible answers. Interestingly, prospective teachers without experience believe that they can forecast possible questions to be asked and provide their possible answers better than experienced ones can. Likewise, prospective teachers without experience think they are better than the experienced ones in explaining the terms and concepts their students have difficulty in understanding and in explaining what should be done to clarify these terms and concepts. The researcher tried to explain this result by asking the selected prospective teachers the ninth interview question of the qualitative study (See the Interview Questions, Appendix 3). Moreover, the answer to the second question of the observation procedure helped the researcher explain these quantitative results in more detail.

Total mean value of the items regarding the prospective teachers' knowledge on teaching methods and techniques shows that they believe they are knowledgeable about the methods and techniques to be used in their actual teaching practice. The results also show that the prospective teachers can make use of an eclectic method or communicative approach better than they do traditional teaching methods. Only two of the participants do not agree that they can make use of appropriate methods and techniques while teaching vocabulary and grammar. By asking the tenth question in the interview, the researcher aimed to find out what other methods and techniques they could make use of to teach the same lesson more effectively.

The highest mean value related to the prospective teachers' knowledge on assessment shows that they believe they can reflect the results of the classroom assessment process to their future practices. Similarly, the item with the second highest mean indicates that they can give appropriate feedback according to the results of the measurement process. The eight, tenth and twelfth interview questions were formed to verify whether they could really reflect the results of the classroom assessment process to their future practices or not.

Another important result of the quantitative phase suggests that participants are not that much sure about being knowledgeable about the uses of wide variety of assessment strategies. In order to verify and explain this result, the researcher asked eleventh and twelfth interview questions to the participants of the qualitative phase. With the help of these questions, the researcher aimed to find out what test techniques they made use of while evaluating their students' comprehension and what other test techniques they would use if they had a second chance to teach the same topic. Also, the fifth question in the observation procedure helped the researcher find out how prospective teachers evaluated and assessed their students' comprehension after teaching.

The findings also reveal that there is no statistically significant difference between the male and female participants regarding their perceptions of their competencies. However, females make use of performance-based assessment more frequently than males do. When their GPA is considered, the students whose GPA is above 3.00 prefer to use essay tests, portfolios, performance based assessment, self-assessment and checklists more than the ones whose GPA is below 3.00 do. Namely, students who are more successful tend to use subjective test techniques more frequently than less successful ones do, while less successful students tend to make use of traditional and objective test techniques like matching and multiple-choice more frequently than the other group do. As for teaching experience of the participants, the results reveal that experienced prospective teachers tend to use multiple-choice and matching questions more frequently than the inexperienced ones do. To explain these statistically significant differences, the researcher made use of

interview questions and observation procedure to find whether there are also any significant differences in qualitative phrase or not.

4.2 Qualitative Results

In order to explain the results of the quantitative data, the researcher made use of interviews (See Appendix 13 for Sample Interview), document analysis (See Appendix 14 for Sample Lesson Plan) and observation. As discussed before, the researcher made use of coding stages proposed by Strauss and Corbin (1998). Codes and subcodes were created from the transcriptions of the interviews by the researcher depending on the research questions. These codes and subcodes were then grouped into a number of categories and themes for each prospective teacher in the study. With the help of coding, the researcher aimed to reduce the data into smaller groups so that they were more manageable. Later, the researcher selected the core (or main) category, and then systematically related it to the other categories. Finally, he wrote a preliminary analysis for each prospective teacher, which helped him in his case and cross-case analysis. All the qualitative data collected through interviews, observations and document analysis were analyzed bearing the second research question in mind. This research question helped the researcher find out to what extent the prospective English teachers used their pedagogical content knowledge in their teaching practice. Sub-questions and their related codes used while analyzing the data can be seen in the following table.

Table 28: *Sub-questions and Predefined Codes*

Sub-questions	CODES
To what extent do they use their knowledge of English ?	KE
To what extent do they use their knowledge on lesson planning ?	KPL
To what extent do they use their knowledge of their learners ?	KL
To what extent do they use their knowledge on teaching methods and techniques ?	KTM
To what extent do they use their knowledge on assessment ?	KA

“Predefined codes are categories and themes that you expect to see based on your prior knowledge” (Tips for analyzing qualitative data: 4). The researcher developed predefined set of codes. By using these codes, some other subcodes were created from the data. Explanation and in-depth understanding of the quantitative results were provided. As the results of the quantitative data indicate some significant differences among different variables, the researcher made use of the observation method to explain these results. In addition to the second research question given above, he aimed to find answers to the following questions as well.

1. To what extent does the prospective teacher apply his/her knowledge of phonology to his/her teaching practice?
2. How does the prospective teacher explain the terms and concepts that his/her students have difficulty in understanding?
3. What methods and techniques does he / she make use of to improve students' vocabulary knowledge while teaching?
4. To what extent can he/she make use of the eclectic method and combine the techniques of many other methods and approaches?
5. How does the prospective teacher evaluate and assess their students' comprehension after teaching?

As Onwuegbuzie and Leech (2004: 774) argue that “a significant finding in qualitative research is one that has meaning or representation”. Thus, in the following sections of the study, the researcher searched for the findings that have meaning or representation in order to explain the quantitative results in more detail.

4.2.1 Emrah's Case

Emrah is one of the three participants of the qualitative study. His GPA is 3.10 which means he is regarded as more successful student as it is above 3.00. However, he did not have any teaching experience except for the one he had at the “School Experience” and “Teaching Practice” courses.

As general characteristics of effective English teachers, he believes that English teachers “should have good personality, patience and imagination. They must also have a good sense of humor” (Interview 1, Question 3, 14 May 2012). Generally speaking, Emrah was a well-prepared teacher who controlled the flow of the lesson. The observation results reveal that the silence and the orderliness in his class was not the result of his authoritarian manners. They were because of his well-prepared and organized teaching practice.

In the following parts, the results of the interview and the observation procedure are presented by categorizing it into five main titles. The researcher, classroom teacher and four other prospective teachers observed Emrah. Thus, the researcher made use of five other observation procedure sheets which helped him realize some important points that he missed during his observation.

4.2.1.1 Emrah’s Knowledge of English

While analyzing the subject matter knowledge of the first prospective teacher, four themes emerged; ‘*importance attached to literature*’, ‘*English for communication*’, ‘*importance attached to pedagogical knowledge rather than the subject matter knowledge*’, and ‘*grammar and pronunciation mistakes of the prospective teacher*’.

Importance attached to literature

Being asked what skills and knowledge an effective teacher of English should have, Emrah responded, “first of all, English teacher should love literature and have a great knowledge about the language” (Interview 1, Question 3, 14 May 2012). In his actual teaching practice, the classroom observation also indicated that he made use of teaching techniques related to literature such as creating effective short stories and dialogues including the new vocabulary items to be learned.

English for communication

While describing his first day at the ELT program and comparing it with where he is now, Emrah believes that he improved his communication skills to a great extent. He says (Interview 1, Question 4, 14 May 2012):

Exactly, I can say that I was very shy and I only knew ‘exam English’. I had a good English knowledge, but not for communication. But [However,] here at the ELT through the 4 years, I have learned [to] use my English as well. I have learned to be relax [relaxed] in front of the people while [during] the presentations.

Considering his response, it can be said that the ELT program had positive effect on his subject matter knowledge helping him to be more competent in using English. Though he thinks that he improved his communication skills, he still utters inaccurate sentences in which he made some grammatical errors. Those errors that are underlined can be seen above and the correct forms are provided in brackets by the researcher.

Importance attached to pedagogical knowledge rather than the subject matter knowledge

When Emrah was asked the fourth interview question, he said “Actually, except for knowing English, I have learned to teach. This was the best award I got here [at the ELT program]”. Similarly, in the fifth question, he said

I think it is not enough for an English teacher to know English. It is important how he or she teaches it. Of course, they must have a good English knowledge. They must know grammar, pronunciation or any other rules of English Language. However, all these matters will not be useful if they don’t know how they will teach it.

As it is clear from his response, he believes that knowledge of English is a tool for teaching it effectively. He attaches more importance to how to teach English as he thinks knowledge of English will be useless unless one has pedagogical knowledge.

Grammar and pronunciation mistakes of the prospective teacher

As some examples of grammatical errors that Emrah did can be seen above, he also made some grammatical and pronunciation mistakes while he was teaching vocabulary to his students. When the researcher and a second analyzer analyzed the notes taken during the observation procedure and the interview, the following

grammar and pronunciation mistakes were listed. Not only the notes taken, but also the video records of the observation procedure, the interview and his teaching materials were analyzed to find the prospective teacher's mistakes.

From the mistakes Emrah made, it can be seen that he has some problems with even the most basic grammar rules such as singular and plural nouns, countable and uncountable nouns, simple present third person singular –s. Moreover, he made some mistakes regarding these grammatical issues: active-passive voice, adjectives and adverbs, use of nouns instead of verbs, gerunds and infinitives, use of prepositions, word order in questions, use of conjunctions and use of collocations. Though there were not many, he also made a few pronunciation mistakes which were also presented in the table below.

Table 29: *Grammar and Pronunciation Mistakes Emrah Made*

Number	Grammar or Pronunciation Mistake	Correct Form of the Mistake	The mistake was done during
1	I need two group	I need two groups	Observation procedure
2	There are some informations	There are some information	Observation procedure
3	English teacher should have a great knowledge	English teacher should have great knowledge	Interview Question 3, 4, 5
4	If student forget	If students forget / a student forgets	Interview Question 7
5	Be careful about to the words which write in bold	Be careful about the words which are written in bold	Observation procedure
6	I have learned to be relax	I have learned to be relaxed	Interview Question 4
7	Good prepared	Well prepared	Interview Question 8
8	... while presentations	... during presentations	Interview Question 4
9	I realized that first of all have them read the passage and guess...	I realized that first of all having them read the passage and guessing...	Interview Question 8
10	Skimming, scanning, guess the meaning	Skimming, scanning, guessing the meaning	Interview Question 10
11	I used a puzzle activity for have them...	I used a puzzle activity to have/for having them...	Interview Question 11

12	What do you think what can be its meaning?	What do you think its meaning can be?	Observation procedure
13	How the man beats the cancer?	How does the man beat the cancer?	Worksheet for the reading passage (presentation)
14	What you mean?	What do you mean?	Worksheet for the dialogue (Activity 2)
15	Chemotherapy /keməʊterapi/	/ˌkiː.məʊˈθer.ə.pi/	Observation procedure
16	Bad /bed/	Bad /bæd/	Observation procedure
17	Exam anxiety /enkʃəti /	anxiety /æŋˈzaɪ.ə.ti/	Observation procedure
18	Students cannot inference	Students cannot infer	Lesson Plan
19	Problem by matching	Problem with matching	Lesson Plan
20	Projector is break down	Projector is broken down	Lesson plan
21	 As the words are a bit difficult for their levels.	... as the words are a bit difficult for their levels.	Lesson Plan
22	To have students familiar with the meanings...	To make students familiar with the meanings...	Lesson Plan

4.2.1.2 Emrah's Knowledge on Planning Lessons

Emrah's lesson plan was analyzed by three researchers using Lesson Plan Assessment Form. As mentioned before, the researcher (R) of this study analyzed the prospective teacher's lesson plan together with an expert (E) and an instructor (I) who is also a PhD student in ELT department. They all agreed on their responses and their comments which were provided in a separate column.

Table 30: *The results of Emrah's Lesson Plan Assessment*

Poor = 1		Fair = 2		Satisfactory = 3		Good = 4	Excellent = 5
	Prospective teacher can ...	R	E	I	$\bar{X}$	COMMENTS	
1	explain the aims and the objectives of the lesson clearly.	5	5	5	5.00	R: Emrah explained the cognitive, socio-affective and psychomotor aims of the lesson clearly in his lesson plan.	
2	decide on appropriate teaching methods, techniques and strategies for the performance objectives of the lesson.	4	4	4	4.00	E: During the presentation, use of pictures was effective. However, he should have specified to which category of parts of speech each word belongs.	

3	forecast possible questions to be asked by the students and provide possible answers for them.	5	4	5	4.66	R: Students mostly asked questions about pronunciation as he had expected. Thus, he provided possible answers for most of the questions though he had some pronunciation mistakes himself.
4	define the terms and concepts that students may have difficulty to understand during the lesson.	5	4	5	4.66	R: Not only did Emrah define the terms, but also he provided effective examples including the new words to be learned.
5	pinpoint what should be done to clarify these terms and concepts.	5	4	5	4.66	R: He determined what he could do to clarify the terms at the very beginning of the lesson plan under the headings of anticipated problems and solutions.
6	design a set of activities/techniques helping the teacher achieve the aims and the objectives of the lesson.	4	4	5	4.33	R: The activities were a bit above the students' levels.
7	decide on the ways to make students ready for the lesson in the warm-up period.	4	4	4	4.00	E: He planned a good game for the warm-up session. However, animals starting with 'E' are so limited. Also, students may not have much idea about the fruits which have core.
8	clearly explain how the activities should be done in the practice session.	5	5	5	5.00	R: He gave clear instructions.
9	determine the appropriate teaching materials to be used during the lesson.	4	5	5	4.66	R, E, I: He made use of technology and some other materials effectively.
10	decide on what is to be taught first according to the course content and students' levels.	4	4	4	4.00	R: The word 'treatment' is given in an example for another word (radiation) without teaching it first.
11	write clear instructions for different parts of the lesson plan.	5	5	5	5.00	R, E, I: The instructions given before the activities were clear; however, they were a bit above the students' levels. Thus, Emrah made use of Turkish almost after all instructions he gave.
12	explain the ways to evaluate whether the students have learned or not.	5	5	5	5.00	R: He made use of a puzzle activity, a dialogue, a game and summarizing to evaluate what students learned.
13	make use of the limited time effectively.	3	4	3	3.33	R, E: In his lesson plan, Emrah planned to finish the first lesson after doing the first activity; however, the first lesson ended while he was presenting the new words. While he was teaching the word 'innovation', the bell rang. Time allocated to the first lesson did not match with the actual teaching practice. In the second lesson, he did whatever he planned to do though he did not have time to give homework to the students.

As for the skills and knowledge effective teachers should have, Emrah believes that “they must make a good organization” (Interview 1, Question 3, 14 May 2012). He did his best to organize the classroom activities. Therefore, he claims that his lesson plan was well-prepared for vocabulary teaching (Interview 1, Question 8, 14 May 2012).

While preparing his lesson plan, Emrah was careful about teaching the new words in a task, story, or linking them with daily pictures. He also made use of dialogues with which students found chance to use the words in a context (Interview 1, Question 7, 14 May 2012). However, he believes that asking students to guess the meanings of the target words did not work well (Interview 1, Question 8, 14 May 2012).

In my opinion, my lesson design was good prepared for vocabulary teaching, but through the presentation, I realized that first of all have them read the passage then guess the target words given in the passage according to the passage did not work well. Because the passage also was abstract [and] above their proficiency levels, for that reason students did not understand it ... And when I said to them ‘guess the meaning’ they just looked. If I gave the target words in the little story that I started the lesson with, students would learn them and easily integrate them in the passage which we read. As a result of this, understanding the passage and also words would be easier.

All in all, Emrah clearly explained the aims and objectives of the lesson and how the activities should be done in the practice session, and the ways to evaluate whether the students had learned or not. He also could write clear instructions for different parts of the lesson plan. The analyzers of his lesson plan found that he explained the things effectively, but his time allotment for the first lesson hour of his actual classroom practice does not match to that of the one presented in his lesson plan. Moreover, he presented a board work in his lesson plan with the help of which he managed to use the board effectively in his teaching practice.

4.2.1.3 Emrah's Knowledge of Learners

Knowledge of English is not itself enough to develop PCK. Teachers should also understand their students' characteristics, difficulties, abilities and interests in order to plan and implement classroom activities, and assess students' understanding. To analyze the participants' knowledge of learners, they were asked about the difficulties their students had during their teaching practice and what they did to overcome these difficulties. They were also observed to find answer to how they explained the terms and concepts that their students had difficulty in understanding. Four main themes emerged. These can be listed as *being aware of students' proficiency levels, dealing with students' problems, making use of students' previous experiences, and arousing students' interests.*

Being aware of students' proficiency levels

Emrah was well aware of his students' proficiency levels as he believes "the most important problem for me in the lesson, students' proficiency levels were lower than expected for 7th grade students" (Interview 1, Question 9, 14 May 2012). Knowing this, he made use of pictures to make the text more meaningful to the students. However, he overused the mother tongue. "Even in simple instructions, he explained what students would do in Turkish" (Second Observer).

Dealing with students' problems

Before starting his teaching practice, Emrah provided some anticipated problems and their solutions in his lesson plan.

Table 31: *Anticipated Problems and Their Solutions Provided in Emrah's Lesson Plan*

	Anticipated Problems	Solutions
Form	Some of the students are not familiar with the words linking with health and treatments or medicines. As our topic is about medicines, students cannot	Showing students related pictures of new words. If students do not know the meaning or the word, it will not be problem for

	infer the words' meanings and have difficulty to accommodate them in their minds.	them because they can easily infer it from the picture.
Meaning	Students may have difficulty in memorizing new words, as the words are a bit difficult for their proficiency levels. On the other hand, they may also have problem by matching the pictures to the words because they may confuse or they may not remember the meanings of them in the activities.	Giving a short story which includes target words, and the target words will be linked to the story. Even though they do not know what the meaning of the word is, they will infer the meaning or match it with the action in the story when the students watch and listen to the story.
Pronunciation	Students do not know how to pronounce new words such as 'radiation', 'miracle' 'medicine'.	Making students repeat the words again and again.

After teaching, Emrah listed some other problems that his students faced such as (1) not understanding even the simplest instructions, (2) the difficulties in the use of guessing technique, (3) problems with filling the gaps of a dialogue individually.

Not in long instructions, but also after basic, easy instructions, they all asked 'what does it mean?' Also, they didn't understand the passage. For that reason, using guessing technique was difficult for me, but I tried to overcome this problem with the help of related pictures that I chose from the daily life objects. And also in dialogue activity which students fill the gaps while using target words in a dialogue, individual work forced them, so I preferred to change the activity pair work.

As he said, Emrah provided some solutions to students' problems. Firstly, He made use of mother tongue too much to make them understand the instructions. However, he could not make use of the target language considering his students' levels. The observer teacher suggested that he could have tried to explain them by using mimes and gestures. Secondly, he made it possible for the students to guess the meanings of the words with the help of pictures from daily life. Lastly, he realized that students had difficulty while they were doing the activities individually. Thus, he made use of pair work (Interview 1, Question 9, 14 May 2012).

As for the students' pronunciation mistakes which was the main problem observed during his teaching practice, one of the observers recommended he should

have read the text himself first as a role model. Instead, he asked some of the students to read it aloud which caused many pronunciation mistakes. He tried to correct these mistakes immediately which caused too many interruptions during the reading section. All observers and Emrah himself agreed that it would be better to read the text first and ask students read it silently after teaching the pronunciation of some key words. While teaching how new words were pronounced, Emrah made use of ‘impressionistic transcription’ of the words (Abercrombie, 1964; cited in Wells, 2006: 3) instead of phonetic transcription. He wrote the impressionistic transcription of the words (writing how the words are read in Turkish such as /sörcürü/ for the word ‘surgery’) in parentheses just after writing each word on the board.

In sum, Emrah anticipated most of the problems his students would have. However, some of his solutions to the problems either changed or did not work. He made use of mother tongue to a great extent to solve most of the problems faced in his teaching practice.

Making use of students’ previous experiences

During the observation, the researcher and the other observers noted that Emrah made effective use of two cartoon characters: Rango and Sam before starting the lesson. He made up a story in which new words were presented using these cartoon characters with whom the students were familiar. He related the lesson to not only his students’ previous knowledge, but also their interests.

Arousing students’ interests

During his teaching practice, it was also observed that Emrah achieved to arouse students’ interest and keep their motivation alive with the help of a game presented in the warm-up session, a story given in the lead-in session, and a puzzle and a final game as an activity. He did not make use of the lead-in session presented in the book. Instead, he preferred to make use of a story which would arouse students’ interest much more than the activity presented in the book. Students seemed to participate willingly in the lesson though they had difficulties in understanding the instructions and the reading passage itself.

4.2.1.4 Emrah's Knowledge on Teaching Methods and Techniques

When the interview transcript and the observation procedure were analyzed, Emrah made use of an eclectic method mostly preferring communicative approach in the activities, but grammar translation and direct method while presenting the new words. The methods, approaches and techniques he used during his teaching practice can be seen in the following table.

Table 32: *Teaching Methods, Approaches and Techniques used by Emrah*

Part of the Lesson	Methods and Approaches Used	Techniques Used
Warm-up	Communicative Approach Content-based Approach	Language game Semantic mapping (related words)
Lead-in	Communicative Approach	Using words in a given story Teaching vocabulary in context
Presentation	Grammar Translation Method Direct Method Community Language Learning	Translation of a passage Reading comprehension questions Using words in sentences Pictures and sample sentences used to achieve direct relation between the form and meaning, Reading aloud Question and answer exercise Human Computer: Repeating the correct form as many times as students need.
Assessment		
Activity 1	Natural Approach	Problem solving activity (A puzzle)
Activity 2	Audio-Lingual Method Communicative Approach	Completing the dialogue and dialogue memorization Vocabulary taught within context Role play
Activity 3	Communicative Approach	Task-based activity, Sticking the pictures of the words given on the board Using pictures to support meaning
Homework	Communicative Approach	Writing a story using the words taught during the lesson similar to Rango's

Visual aids are very important to support meaning. Thus, Emrah claims that he made use of daily life objects and pictures to make the meaning clearer. Dialogues were also used to let students use the new words in a given context (Interview 1, Question 7, 14 May 2012).

First of all, as the passage and target words, which I tried to teach, were so abstract, I tried to link the words with students' daily life pictures and objects. And also, instead of just giving words then ask them, I tried to be careful about giving them in a task or a story or linking them with daily pictures. After presentation, through evaluation part, not only knowing the words but also using them in daily life matters such as dialogues was important for me. On the other hand, in vocabulary teaching, as association is important for me, 'picture=word' combination is important for me. Because, if student forgets the word or the meaning of the vocabulary with the help of picture when they see, they can easily remember it.

The other techniques he used are skimming, scanning and guessing the meaning of a word as he mentioned, "while teaching vocabulary with a reading passage, I think skimming, scanning, guessing the meaning are fundamental techniques" (Interview 1, Question 10, 14 May 2012). He also made use of either synonyms or simplified definitions of the words while conveying their meanings to the students.

4.2.1.5 Emrah's Knowledge on Assessment

While analyzing the prospective teachers' knowledge on assessment two main themes emerged: '*test techniques the prospective teachers used*', and '*test techniques they would use if they had a second chance to assess the students' comprehension of the same words*'.

Test techniques Emrah used to assess students' comprehension

After teaching the words, Emrah evaluated whether the students learned them or not by using a puzzle, a gap filling activity, and a game (Interview 1, Question 11, 14 May 2012).

After teaching the words, I used a puzzle activity to make them realize the words easily and match them with their Turkish equivalents and also I used a gap filling in a dialogue activity to make them not only know the words' meaning but also success in using them

in daily life usage, dialogues, conversations, etc... Finally, I chose a game in which students hear the target words' name, and then find its related pictures and stick the name of the vocabulary on the board.

In the 'Evaluation and Assessment' part of his lesson plan, Emrah provided some other ways he used to assess students' comprehension which are observation, question-answer (short answer questions) and summarizing.

The observation results also verify what test techniques Emrah made use of while evaluating his students' comprehension. Common test techniques noted by the observers are use of a puzzle, a completion activity, a game, summarizing, and some short-answer questions. He also observed the students having difficulty in learning and pronouncing the new words and gave necessary feedback for them.

Test techniques Emrah would use if he had a second chance to assess the students' comprehension of the same words

His answer to the last interview question shows that he would make use of matching and multiple-choice questions if he had a second chance to assess the students' comprehension of the same words. In the quantitative study, it was found out that experienced prospective teachers tend to use multiple-choice and matching questions more frequently than the inexperienced ones do. The more experience they get, the more frequently they tend to use matching and multiple-choice test techniques. What Emrah said verified this finding: "if I had a second chance to teach the same topic, matching or a multiple choice activity would be easier for students and for general understanding" (Interview 1, Question 12, 14 May 2012).

4.2.2 Filiz's Case

Filiz is another participant of the qualitative study. Her GPA is above 3.00. Thus, she is regarded as more successful student. Moreover, she had teaching experience in addition to the "School Experience" and "Teaching Practice" courses as she gave private lessons to different students. Moreover, she taught English to a group of primary school students for the requirements of the course named

‘Community Service’. She, as an English teacher, was a really well-prepared one who hardly ever had problems in her teaching practice. Her warm-up activity aroused interest of the students. Later, she made use of a video which was directly related to the reading comprehension passage. Thus, students had little difficulty in guessing the topic of the lesson. The prospective teacher made use of the target language as much as possible. She used the mother tongue of the learners only to check their understanding. Her mimes and gestures, demonstration technique, pictures and videos made it possible for learners to understand all the instructions in the target language. With all its stages, her lesson plan was a detailed and organized one. Therefore, she had few problems in her teaching practice. Though she made an important mistake in one of the activity sheets, she skillfully changed the activity from a completion to a translation activity. In the wrap up, students summarized all the things they learned which showed that the prospective teacher was successful in her teaching practice. Her teaching practice was observed by the researcher, the classroom teacher and two other prospective teachers. The results of the interview and the observation procedure are presented in the following parts under five headings.

4.2.2.1 Filiz’s Knowledge of English

While analyzing the subject matter knowledge of Filiz, four themes emerged: *‘importance attached to knowledge and skills’*, *‘English for communication’*, *‘importance attached to subject matter knowledge rather than the pedagogical knowledge’*, and finally *‘grammar and pronunciation mistakes of the prospective teacher’*.

Importance attached to knowledge and skills

Being asked what skills and knowledge an effective teacher of English should have, Filiz responded, “All the four skills are important... Some grammar, vocabulary and general world knowledge are also essential for teaching English.” (Interview 2, Question 3, 15 May 2012). The observation results of her teaching

practice also shows that she has a very good command of English and this affects the way she teaches when compared with other prospective teachers selected for the qualitative phase of the study.

Among other skills, she attaches the most importance to reading. She believes that her knowledge of reading affected her knowledge of other skills and language areas (Interview 2, Question 6, 15 May 2012).

Firstly, I improved my reading skill. As our lecturers had recommended many books, I read them at least two or three times. Therefore, this affected the other skills of mine. For example, although I have not had a chance to practise speaking English for four years [at the ELT department], I am better at speaking when compared to the previous years.

As she read too much, she gained the pedagogical and subject-matter knowledge she needed to become an effective teacher. At first, she thought that much of this theoretical knowledge is unnecessary. However, she now wishes to put this theoretical knowledge into practice as soon as possible.

My first impression was that being an English teacher required knowing so much academic language, understanding long sentences, using formal language and so on. I sometimes thought that there was no need to know so much theoretical knowledge as I thought that I would never use them in real classes. However, after a few years later I changed my mind as I unconsciously began to use this theoretical knowledge in real life. Even so, at the moment I believe that if we had a chance to put the theoretical knowledge into practice as soon as we have just learned it, it could be much more permanent and efficient.

Considering the answers she had given to the questions, it is clear that she believes that she has the required knowledge and skills to be an effective English teacher. However, what she needs is the teaching experience to put all her knowledge and skills into practice.

English for communication

As Emrah does, Filiz also implies that she improved her speaking skills during the years when she was a student at the ELT department of COMU. As she believes "... ideal English classes should have interactive communication" (Interview 2, Question 3, 15 May 2012), speaking and listening are also important to

her. Considering her responses, it can be said that the ELT program had positive effect on Filiz's subject matter knowledge helping her to be more competent in using English.

Importance attached to subject matter knowledge rather than the pedagogical knowledge

Unlike Emrah, Filiz attaches more importance to the knowledge of English than the pedagogical knowledge. While Emrah thinks that knowledge of English is a tool for teaching it effectively, Filiz claims that it is a must to teach (Interview 2, Question 5, 15 May 2012).

Knowing English means for English teachers to be able to use and improve their pedagogical knowledge because a person who does not know English cannot transfer what he or she knows to their students and cannot make progress him/herself in the area. If the teachers know English, they can overcome the unexpected problems and create new opportunities for the students.

To Emrah, knowledge of English will be useless unless the teachers know how they will teach it. However, in the opinion of Filiz, it is the prerequisite to teach English effectively.

Grammar and pronunciation mistakes of the prospective teacher

Filiz made few grammatical and pronunciation mistakes while she is teaching vocabulary to his students. Although the researcher made use of not only the notes taken, but also the video records of the observation procedure, Filiz made few mistakes regarding noun clauses, spelling words, word choice, and few pronunciation mistakes. When the video recordings of her teaching practice were analyzed in detail, it was seen that she was really well-prepared to correctly pronounce all the words she was going to teach.

The grammar and pronunciation mistakes were listed in the table below. They were found out when the researcher and a second analyzer analyzed the notes taken during the observation procedure and the interview.

Table 33: *Grammar and Pronunciation Mistakes Filiz Made*

Number	Grammar or Pronunciation Mistake	Correct Form of the Mistake	The mistake was done during
1	To learn how much did you learn...	To learn how much you learned... (Noun Clause)	Observation procedure
2	Read the text on the slayd	Read the text on the slide	Lesson plan
3	People who have cancer increase every year	The number of people...	Follow-up Activity
4	Straight /strait/	/streit /	Observation procedure
5	Circular /'si:.kʊ.lər/	/'sɜ:.kjʊ.lər/	Observation procedure

4.2.2.2 Filiz's Knowledge on Planning Lessons

Filiz's lesson plan was also analyzed by three researchers using Lesson Plan Assessment Form: the researcher (R), the expert (E) and the instructor (I). They all agreed on their responses and their comments which were provided in a separate column.

Table 34: *The results of Filiz's Lesson Plan Assessment*

Poor = 1		Fair = 2		Satisfactory = 3		Good = 4	Excellent = 5
	Prospective teacher can ...	R	E	I	$\bar{x}$	COMMENTS	
1	explain the aims and the objectives of the lesson clearly.	5	5	5	5.00	R: She explained the cognitive and socio-affective aims and outcomes of the lesson clearly at the very beginning of her lesson plan.	
2	decide on appropriate teaching methods, techniques and strategies for the performance objectives of the lesson.	5	5	5	5.00	E: To teach the selected vocabulary items, she prepared many activities all of which were well-organized and serve the aims and objectives of the lesson.	
3	forecast possible questions to be asked by the students and provide possible answers for them.	5	5	5	5.00	R: She provided possible problems that she could face in terms of form, meaning, and pronunciation.	
4	define the terms and concepts that students may have difficulty to understand during the lesson.	5	5	5	5.00	E: With effective use of videos, pictures, mime and gestures, activities, the prospective teacher achieved to convey meaning to her students.	

5	pinpoint what should be done to clarify these terms and concepts.	5	5	5	5.00	E: She specified what she can do to clarify the terms at the very beginning of the lesson plan under the heading of anticipated problems and solutions. However, she did more than what she specified to clarify them.
6	design a set of activities/techniques helping the teacher achieve the aims and the objectives of the lesson.	5	5	5	5.00	R: To teach the words she selected, she designed warm-up, lead-in, pre-reading, while reading and follow-up activities which enabled students to actively participate the lesson and learn.
7	decide on the ways to make students ready for the lesson in the warm-up period.	5	5	5	5.00	E: She planned a game for the warm-up session which aroused students' interest. In the lead-in part, the students watched an authentic video in which the words were presented and they got familiar with the words to be taught during her teaching practice.
8	clearly explain how the activities should be done in the practice session.	4	5	5	4.66	I: In the warm-up session, she had some difficulties in grouping students as her instruction was not clear enough for the students to understand.
9	determine the appropriate teaching materials to be used during the lesson.	5	5	5	5.00	R, E, I: As teaching materials, she used board, board marker, video, reading text and worksheets effectively.
10	decide on what is to be taught first according to the course content and students' levels.	4	5	5	4.66	R: She planned to pre-teach the new words using pictures. However, in her teaching practice she skipped this part.
11	write clear instructions for different parts of the lesson plan.	5	5	5	5.00	R, E, I: The instructions given before the activities were clear. They were easy to understand. Moreover, Filiz's effective use of her mime and gestures let the students easily comprehend the instructions.
12	explain the ways to evaluate whether the students have learned or not.	5	5	5	5.00	R: She made use of a matching, question-answer, fill-in the blanks and summarizing to evaluate what students learned.
13	make use of the limited time effectively.	3	4	4	3.66	R: When compared with the allotted time in her lesson plan, her actual teaching practice took longer. As she planned to make use of many activities, the time was not enough to do them all. For the fear of not being able to finish what she planned to do in her first lesson, she did the activities too fast. On the other hand, in the second lesson, she slowed down her pace which caused her not to be able to do the wrap-up section. The first lesson ended while she was teaching the new words.

Filiz also believed that her lesson plan was a well-prepared one. However, during the interview she mentioned that the only problem she had with the lesson plan was the time allotted to the activities (Interview 2, Question 8, 15 May 2012).

If I had a second chance to teach the same topic, firstly I would be more careful about time management. Within the first forty minutes, I was faster than I had expected and so I tried to be slower for the other lesson.

From her statements, it can be understood that no matter how well a teacher gets prepared for the lesson, there are always unexpected things to happen in it.

Moreover, before the guessing activity I planned to pre-teach the new words. However, as the students were familiar with the words I was surprised a bit and forgot to teach them. When I saw the word, decrease, the word I added to the guessing activity, I remembered that I skipped that part and I returned that section. ... At the post reading section, the electricity went off, so I could not show them the answers on the ppt. ... Lastly, if I had a few more minutes I would do the last summary.

Though some parts of her plan changed unexpectedly, she was successful in dealing with these changes. After the electricity went off, she could not show the answers to the students on the PowerPoint presentation. She took the photocopies of the answer key that she had for the fill in the blanks activity and changed it to a translation activity. The way she dealt with the unexpected problems proved that she had desired level of pedagogical content knowledge which can also be defined as knowing what, why and how to teach.

All in all, Filiz clearly explained the aims and objectives of the lesson and how the activities should be done in the practice session, and the ways to evaluate whether the students had learned or not. The order of the activities was effectively planned and students had few problems while she was presenting the new words to be taught. She also presented a board work in her lesson plan with the help of which she managed to use the board effectively in her teaching practice. Similar to Emrah, she had problems in time allotment. Some activities lasted longer and some others lasted shorter than she had expected. Though she had some unexpected things happened in her teaching plan, she skillfully managed to deal with those problems.

4.2.2.3 Filiz's Knowledge of Learners

In order to learn about Filiz's knowledge of learners, her answers to the interview questions and the observation results of her teaching practice were analyzed. Four main themes emerged. These can be listed as '*being aware of students' proficiency levels*', '*dealing with students' problems*', '*making use of students' previous experiences*', and '*arousing students' interests*'.

Being aware of students' proficiency levels

Her answer to the seventh interview question shows that she was knowledgeable about her learners' age and proficiency levels. When she was asked about the important points she considered while preparing her lesson plan, she answered "first of all, I paid attention to the age and proficiency level of the students" (Interview 2, Question 7, 15 May 2012). However, she also accepted that students were better at guessing the words and understanding the topic than she had expected them to be (Interview 2, Question 9, 15 May 2012). When the activities were not above their levels, students seemed to participate in them willingly. Thus, Filiz "found the lesson enjoyable and efficient thanks to their participation and attention" (Interview 2, Question 8, 15 May 2012).

Filiz also changed the questions in the course book. She designed new reading comprehension questions including the new vocabulary items. Students actively participated in answering the questions as they know the vocabulary items beforehand. "Presenting vocabulary within context is absolutely necessary, yet this has to be followed up by teacher-prepared classroom tasks which assign the learner a high involvement load" (Akar, 2010: 19). Akar's argument is well-founded. After teaching the selected words, Filiz aimed to foster task-induced involvement and was successful in doing so.

Dealing with students' problems

At the beginning of her lesson plan, Filiz provided some anticipated problems and their solutions.

Table 35: *Anticipated Problems and Their Solutions Provided in Filiz's Lesson Plan*

	Anticipated Problems	Solutions
Form	The text is written in simple present and past tense. However, students may have difficulty in understanding some structures. For example, infinitive phrases might be a problem. (eg. Our mission is <i>to increase the awareness of patients</i>)	If they are confused, I will state the function of infinitive phrases briefly.
Meaning	There are unknown words such as surgery, treatment, medicine, miracle, etc.	As for meaning, I will teach the new words by deduction from the text and in pre-reading section.
Pronunciation	Students may mispronounce new words such as surgery, cancer, miracle, treatment, save, mission, survival rate, etc.	To teach pronunciation I will have them repeat the words.

As mentioned before, she was successful in dealing with the unexpected problems. After she taught, Filiz also listed some other problems that her students faced such as the problems with the matching activity and not understanding some parts of the activities.

In while activity section, in the second activity I tried to prepare clear and simple definitions for them [the words]. However, the matching of medicine= treatment was a bit problematic as there was treatment at the other section too. It caused confusion. When they did not understand some parts, I gave some clues and they overcame the difficulties fortunately.

Before, during and after the lesson, she was well aware of the problems she would face or faced. However, among the anticipated problems, students did not face any difficulty in terms of 'form' as she believed they would have difficulties in understanding the infinitive phrases. As for meaning, she did more than what she planned to do in her lesson plan. She made use of a video, definitions, sample sentences, pictures, summarizing to make the meaning clear.

As for the students' pronunciation mistakes, she taught the unknown words before she read the text. She wrote all the unknown words with their meanings and

sample sentences on the board. Later, she read the text herself first and asked students to read it silently to answer the comprehension questions. She did immediate correction while students were reading their answers to the comprehension questions. Unlike Emrah, she wrote neither the impressionistic transcription of the words nor their phonetic transcription. She made use of whole class, group and individual repetition of the words to teach the students how they could pronounce the words correctly.

Making use of students' previous experiences

When she was asked about the important points she considered while planning her lesson plan, she mentioned that she was aware of the students' previous experiences and she tried to activate the students and their background knowledge using various activities.

I paid attention to the age and proficiency level of the students. I tried to activate them with questions. I also found a video and prepared some PowerPoint slides to activate their background knowledge. These were essential because without the activation it would be impossible for them to comprehend the text.

During the observation, it was also seen that she related the topic to students' daily life. She asked some questions in order to both relate the new topic to students' previous experiences and to arouse their interest such as "When do you go to hospital?", "Do you often get ill?", "Do you know a person who is cancer?", "Did he/she beat the cancer? If yes, how?"

Arousing students' interests

To arouse students' interests she asked questions to them which also made use of their previous experiences. Various activities she prepared and presented kept students' attention alive until the end of the lesson. Students moved from one activity to another without being allowed to be bored. The game, the video and the interesting activities were all designed to keep students' motivation alive during her teaching practice.

4.2.2.4 Filiz's Knowledge on Teaching Methods and Techniques

The results of the observation and the interview showed that Filiz mostly made use of communicative approach in her lesson. However, she preferred using some other methods and approaches (eclectic method) whenever it was necessary. She avoided using Turkish (students' mother tongue). Instead, she made use of authentic videos, games, pictures, and body language to make the meaning clearer for her students. The methods, approaches and techniques she used during her teaching practice can be seen in the following table.

Table 36: *Teaching Methods, Approaches and Techniques used by Filiz*

Part of the Lesson	Methods and Approaches Used	Techniques Used
Warm-up	Communicative Approach	Language game
Lead-in	Communicative Approach	Meaning conveyed through visual aids Authentic video presentation Teaching vocabulary in context
Pre-reading		
Activity 1 Set the scene	Communicative Approach	Asking questions related to students' daily life
Activity 2 Pre-teaching	Direct Method Behaviorist Approach	Pictures and sample sentences used to achieve direct relation between the form and meaning Repetition of the words until they are pronounced correctly Habit formation by means of repetition
Activity 3 Intelligent Guessing	Communicative Approach	Task-based activity Students discuss and guess whether the statements are true or false before reading the text
While Reading		
Activity 1	Grammar Translation	Reading comprehension Students check their answers Translation of a passage from English to Turkish

Assessment	
Activities	Matching the word with the correct definition, Reading Comprehension Questions, Fill-in the blanks, Summarizing
Homework	Writing 3 true and 3 false sentences about the text

Though Filiz used various methods and techniques to teach vocabulary to the seventh grade students, she felt that she would have been more creative if she had been more experienced. She attaches great importance to experience and believes that she needs "... to be more experienced to develop new and creative activities and to be able to use variety of techniques and methods in ELT" (Interview 2, Question 6, 15 May 2012).

After her teaching practice, she was asked to tell the other methods and techniques she could make use of to teach the same lesson more effectively. She answered (Interview 2, Question 10, 15 May 2012):

I used question and answer, skimming and guessing, repetition, discussion techniques during the lesson. I do not remember any other techniques to be used. I best made use of the ones I know, and I think that they were enough to teach the new vocabulary items.

In addition to the techniques she mentioned, she made use of synonyms or simple definitions of the words in English with a sample sentence for each word as Emrah did. She was successful in using various methods and techniques. Students willingly and actively participated in the lesson and the results of her assessment showed that the students learned the new words.

4.2.2.5 Filiz's Knowledge on Assessment

Similar to Emrah's case, two main themes also emerged in Filiz's case while analyzing her knowledge on assessment. *The test techniques she used and the test techniques she would use if she had a second chance to assess the students' comprehension of the same words* were presented below under two separate headings.

Test techniques Filiz used to assess students' comprehension

After teaching the words, Filiz evaluated whether the students learned them or not by using summarizing, question and answer (reading comprehension questions), matching and a gap filling activity. Moreover, she provided help for the students having difficulty in pronouncing the new words, corrected their errors, and gave necessary feedback for them.

Test techniques Filiz would use if she had a second chance to assess the students' comprehension of the same words

When asked about what other test techniques she would use if she had a second chance to teach the same vocabulary items, she answered she would use sentence completion, multiple choice and essay questions to assess students' learning. She also believed that some word games would be enjoyable to teach and assess students' understanding.

Similar to what Emrah mentioned, she tends to use multiple-choice questions as she becomes more experienced. Filiz either used or wanted to use traditional test techniques as Emrah did. Neither of the prospective teachers were interested in alternative test techniques such as using portfolios, projects, self evaluation, and so on.

4.2.3 Halil's Case

Halil was another prospective teacher to be observed and interviewed for the qualitative phase of the study. His GPA is 2.82 which means he is regarded as less successful student as it is below 3.00. Furthermore, he did not have any teaching experience except for the "School Experience" and "Teaching Practice" courses.

In general, the observation results showed that Halil had some problems in controlling the students during the activities. As the activities did not arouse students' interest, his class was too noisy and his classroom management was poor.

He prepared a lesson plan some parts of which he could not follow during his teaching practice. In the lead-in section, he used the pictures in the book and wanted the students guess what the people's illnesses are. As the pictures were not much related to the topic, students had difficulty in guessing the topic of the lesson. He used the students' mother tongue excessively. Also, he could not use the time efficiently. He followed the activities in the course book. As he did not prepare any extra activities (except for the domino game) for the students, the lesson finished before he had expected it to finish.

Halil's teaching practice was observed by the researcher and the classroom teacher. In the following parts, the results of the interview and the observation procedure are presented by categorizing it into five main titles.

4.2.3.1 Halil's Knowledge of English

While analyzing Halil's knowledge of English, three themes emerged: *'developing language skills'*, *'being aware of the importance of subject matter knowledge'*, *'grammar and pronunciation mistakes of the prospective teacher'*.

Developing language skills

Halil attached importance to developing language skills when he was asked what skills and knowledge an effective teacher of English should have. He responded that an effective teacher of English "... should have enough knowledge about English in terms of language skills" (Interview 3, Question 3, 16 May 2012).

When his answers to the interview questions were analyzed, he did not mention anything about knowledge of grammar or vocabulary. He believes that ELT department had positive effect on developing his language skills as he says, "In 2007, I came to Çanakkale Onsekiz Mart University. It was the first time I had listening class and now I think I improved it" (Interview 3, Question 4, 16 May 2012).

Being aware of the importance of subject matter knowledge

As it can be inferred from his answer to the fifth interview question, Halil believes that knowledge of English helps him teach better. He alleged that

It [knowledge of English] helps us to teach English better, if we do not know English, if we do not have enough knowledge about it then how can we teach it? The more we know, the better we teach.

To him, knowledge of English is a prerequisite to teach it effectively. However, the observation results show that though he was aware of the importance of the subject matter knowledge, he had many problems in his teaching practice, which showed that he still lacks subject matter knowledge to teach English effectively.

His answer to the fifth interview question verifies the observation results. He claimed that ELT department taught him a lot about how to teach English. However, his knowledge of grammar got worse as he only had “Contextual Grammar” course in his first year of the ELT department (Interview 3, Question 4, 16 May 2012).

I did not know anything about how to teach English, but more or less, I have an idea about teaching. Especially, Teaching Language Skills class is very important for us to learn how to teach English. I think our lecturer is a great chance for us and helps us to improve ourselves. As for grammar, I took the course four years ago. Therefore, we forgot most of the things we learned.

Although he did not make use of the target language very often during his teaching practice, he had great number of grammar and pronunciation mistakes which can be seen in detail in following.

Grammar and pronunciation mistakes of the prospective teacher

Halil made some grammatical and pronunciation mistakes while he was teaching vocabulary to his students. During his teaching practice, the researcher and the classroom teacher took notes. Not only the notes taken, but also the video records of the observation procedure, the interview and his teaching materials were analyzed to find the prospective teacher’s mistakes. From the mistakes Halil made, it can be seen that he has some problems with even the most basic grammar rules such as singular and plural nouns, countable and uncountable nouns, tenses. He also made some mistakes regarding parts of speech, use of prepositions, spelling, and word

choice. The second, fourth, seventh, eighth, tenth and eleventh mistakes show that these mistakes are the results of his thinking in Turkish while he is translating what he thinks into English. Though he hardly ever used the target language, he made some pronunciation mistakes that can be seen in the following table.

Table 37: *Grammar and Pronunciation Mistakes Halil Made*

Number	Grammar or Pronunciation Mistake	Correct Form of the Mistake	The mistake was done during
1	I have never experience	... never been experienced	Interview Question 1
2	When we look other universities	When we observe other universities	Interview Question 4
3	These are the most important question	These are the most important questions	Interview Question 6
4	... related with	... related to	Interview Question 7
5	They had some problem about...	They had some problems about...	Interview Question 9
6	When they were reading the passage, they mispronounce some words	..., they mispronounced some words	Interview Question 9
7	... wrote that words to the board ...	... wrote that words on the board ...	Interview Question 9
8	New vocabularies ...	New Vocabulary ...	Lesson Plan
9	... have difficulty in pronouncing...	... have difficulty in pronouncing...	Lesson Plan
10	Get feedbacks...	Get feedback...	Lesson Plan
11	Today, we will do reading.	Today, we will do a reading activity.	Lesson Plan
12	Percentage /'pɜ:sən.tɪtʃ/	/pə'sen.tɪdʒ/	Observation procedure
13	Radiation /ræ'di:ʃən/	/reɪ.dɪ'etʃən/	Observation procedure
14	Mission /'mɪʒən/	/'mɪʃən /	Observation procedure
15	Go please...	Go on please...	Observation procedure
16	62 % → sixty-two percentage	62 % → sixty-two percent	Observation procedure
17	Our topic name is...	The name of our topic is...	Observation procedure
18	Did you /dɪd ju:/	/dɪdʒu/	Observation procedure
19	Value was taught as an adjective...	Value is a noun...	Observation procedure

Even though Halil used English less frequently than Emrah did in his teaching practice, Halil made more mistakes in pronunciation.

4.2.3.2 Halil's Knowledge on Planning Lessons

Halil's lesson plan was also analyzed by three researchers using Lesson Plan Assessment Form: the researcher (R), the expert (E) and the instructor (I). The results and their comments can be seen in the following table.

Table 38: *The results of Halil's Lesson Plan Assessment*

Poor = 1 Fair = 2 Satisfactory = 3 Good = 4 Excellent = 5						
	Prospective teacher can ...	R	E	I	$\bar{X}$	COMMENTS
1	explain the aims and the objectives of the lesson clearly.	4	4	4	4.00	R, E, I: Halil explained the cognitive, socio-affective and psychomotor aims of the lesson in his lesson plan. However, students did not seem to enjoy the lesson as he specified 'enjoying the lesson' as a socio-affective aim. Most of the students did not participate in the activities.
2	decide on appropriate teaching methods, techniques and strategies for the performance objectives of the lesson.	3	4	3	3.33	R, E: His teaching practice shows that he had problems while teaching vocabulary to the students. He made use of pictures, repetition and question-answer. The order of the activities caused confusion with the students.
3	forecast possible questions to be asked by the students and provide possible answers for them.	3	4	3	3.33	R: Students mostly asked questions about the pronunciation of the words in the reading passage. He thought that students would only have difficulty in pronouncing three words: treatment, patient, miracle. However, they mispronounced most of the words in the text. He wrote the words the pronunciation of which students had difficulty in. Yet, he himself mispronounced some of them.
4	define the terms and concepts that students may have difficulty to understand during the lesson.	2	3	3	2.66	R, E, I: In order to define the terms and concepts, he excessively used students' mother tongue. He should have specified to which category of parts of speech each word belongs. Not knowing to which category of parts of speech each word belongs, students had difficulty in understanding their meanings. Thus, he explained them in Turkish.

5	pinpoint what should be done to clarify these terms and concepts.	3	3	3	3.00	R: In the anticipated problems and solutions part, he specified that he would explain the meanings of the words with only visuals (no demonstration, no sample sentences, and no definitions).
6	design a set of activities/techniques helping the teacher achieve the aims and the objectives of the lesson.	2	2	3	2.33	R: The prospective teacher did not design any extra activities (except for the domino game). He followed the book, which did not arouse much interest in the class.
7	decide on the ways to make students ready for the lesson in the warm-up period.	3	3	3	3.00	R, E: Unlike others, his warm-up activity had nothing in English. A student went out of the class and the others changed the places of three things and asked the student to find out what three things were. Instead of making students ready for the lesson, this warm-up activity caused confusion and too much noise in the class. Halil shouted at the students to be silent many times during this activity.
8	clearly explain how the activities should be done in the practice session.	4	4	4	4.00	R: As he did not have many activities, he clearly explained how the activities should be done in the practice session.
9	determine the appropriate teaching materials to be used during the lesson.	3	4	3	3.33	R, E, I: He made use of board, board marker, and pictures. He taught the words with no use of technology such as PowerPoint slides, videos, etc.
10	decide on what is to be taught first according to the course content and students' levels.	4	4	4	4.00	R: The pictures given in the student book on page 152 (See Appendix 12 for the activity) were shown in the while-reading section though they were designed for warm-up activity.
11	write clear instructions for different parts of the lesson plan.	4	4	4	4.00	R, E, I: The instructions given before the activities were clear as they were mostly given in students' mother tongue. Instructions for the Domino game were given in the lesson plan, but not during the lesson.
12	explain the ways to evaluate whether the students have learned or not.	4	4	4	4.00	R: Domino game and summarizing were used to evaluate what students learned.
13	make use of the limited time effectively.	2	2	2	2.00	R, E: The time given for each activity he planned to use in his lesson plan did not match with the one he actually used in his teaching practice. Thus, he finished the lesson earlier than he was supposed to. As he did not have any extra materials or activities, he asked students to play the game called "something is different" which the students also played in the warm-up section.

In his interview, as for the skills and knowledge effective teachers should have, Halil expressed that "First of all, a teacher should know students' needs and

should plan his or her lesson according to their needs” (Interview 3, Question 3, 16 May 2012). From his answer, it can be understood that he attaches utmost importance to lesson planning. However, both his plan and his teaching practice were problematic, which shows that knowledge makes an effect, but experience makes perfect.

In brief, the aims and objectives of the lesson were explained in his lesson plan. Yet, he could not achieve some of the aims he planned to. Some problems were observed in the order of the activities and students had some problems while learning the new words as he could not follow what he planned to do in his lesson plan during his teaching practice. Similar to other two prospective teachers, he had problems in time allotment. While the other two prospective teachers finished the lesson on time by using extra activities, he finished it before he had expected.

4.2.3.3 Halil’s Knowledge of Learners

To analyze Halil’s knowledge of learners, he was asked about the difficulties his students had during his teaching practice and what he did to overcome these difficulties. Three main themes emerged from his answers to the interview questions regarding his knowledge of learners: *‘being aware of students’ proficiency levels’*, *‘dealing with students’ problems’*, and *‘arousing students’ interests and keeping their motivation alive’*.

Being aware of students’ proficiency levels

When he was asked about the important points he considered while preparing his lesson plan, he answered (Interview 3, Question 7, 16 May 2012):

This is again related with students’ needs and proficiency levels. For example, I will prepare a vocabulary lesson plan, the most important things are high frequency level and low frequency level also the key words, we cannot teach every unknown words that is why we should be careful about what to teach.

His answer to the seventh interview question shows that he was knowledgeable about his students’ needs and their proficiency levels. Though he claimed that he knew his

students' levels, he did not make any changes in the activities to simplify them for his students as Filiz did.

Dealing with students' problems

Before starting his teaching practice, Halil provided some anticipated problems and their solutions at the beginning of his lesson plan.

Table 39: *Anticipated Problems and Their Solutions Provided in Halil's Lesson Plan*

	Anticipated Problems	Solutions
Form	No problems are expected.	
Meaning	Students may not understand some sentences because of the unknown words.	I will explain the meanings of the words with visuals.
Pronunciation	Students may have difficulty in pronouncing the words 'treatment', 'patient', and 'miracle'.	I will make my students repeat after me chorally and individually so they will learn how to pronounce the words.

The observation results indicate that Halil anticipated some of the problems his students would face during his teaching practice. However, his students had more problems than he had anticipated. Firstly, Halil believed that students would not have any difficulty or problems related to the form. After the lesson, his answer to the ninth interview question showed that his students had problems not only in meaning, but also in form as he mentioned, "They [the students] found the questions, related to passage, difficult. I gave time to let them answer the questions, but most of them could not answer the questions. For this reason, we did the questions together". Though the students learned most of the words in the reading comprehension questions, they had difficulties in understanding the questions as they did not understand the form of some questions.

Secondly, he proposed using visuals as a solution to understand the meanings of the unknown words. However, some words (like innovation) were so abstract that he could not make the meaning clear by only using a visual. Finally, in general, his

solution to the students' pronunciation mistakes worked well though he himself made some mistakes while teaching students how to pronounce the words.

Arousing students' interests and keeping their motivation alive

While trying to arouse students' interest in the warm-up section, Halil could not control the class and his game-like activity ended in confusion and too much noise. In the lead in section, as expressed before, Emrah and Filiz used a story and a video in which the words to be taught were present. These techniques made students familiar with the unknown words and aroused their interest. However, Halil used two of the pictures in the course book in the lead-in section. Students had difficulty in guessing the topic and they started to talk among themselves while the teacher was introducing the topic given in the reading comprehension passage.

Not being successful in arousing students' interest, he also could not motivate students in learning the new words. Students actively participated in the Domino Game which he used at the end of the lesson. He could have made use of some other activities to arouse students' interest and keep their motivation alive instead of the ones he followed from the book.

4.2.3.4 Halil's Knowledge on Teaching Methods and Techniques

When the observation procedure was analyzed, it was found out that Halil made use of Grammar translation method in general. Most of the time, Teacher - Student interaction occurred and the teacher was strict authority. The lesson was teacher centered. Most of his time was spent to control the class. As the activities were above the students' proficiency levels, students did not participate in them which caused problems related to the classroom management. He preferred using picture flashcards instead of using some other techniques such as videos, PowerPoint presentations, and so on.

Table 40: *Teaching Methods, Approaches and Techniques used by Halil*

Part of the Lesson	Methods and Approaches Used	Techniques Used
Warm-up		Game in Turkish A student went out of the class and others changed the places of three things. After coming back to class, he guessed the objects whose places were changed.
Lead-in	Communicative Approach Grammar Translation Method	Using two pictures given in the course book as lead-in activity to the topic Using mother tongue when students do not understand the meaning conveyed through the pictures
Pre-teaching		
Activity 1	Communicative Approach Grammar Translation Method Behaviorist Approach	Stick the pictures of the words given on the board Using pictures to support meaning Using mother tongue when students do not understand the meaning conveyed through the pictures Repetition of the words until they are pronounced correctly Habit formation by means of repetition
While Reading		
Activity 1	Grammar Translation Method	Excessive use of mother tongue while doing the activity
Activity 2	Grammar Translation Method	Reading comprehension questions Students check their answers Translation of a passage from English to Turkish
Assessment		
Activities	Summarizing in Turkish, Domino game (Translation of the words taught)	
Homework	In his lesson plan, he planned to give homework from workbook. However, he forgot to give it during his actual teaching practice.	

During his observation procedure, it was realized that Halil did not read the passage aloud. Thus, students had pronunciation mistakes while they were reading aloud. Moreover, others did not listen to the student who was reading the text aloud. Teacher's reading the text aloud himself is important technique for him to model how to read it correctly.

When Halil was asked what other methods and techniques he could have used to teach the same lesson more effectively, he did not understand what the researcher meant. The researcher clarified the question and provided some samples. Later, Halil mentioned that he would have used the same techniques, but brainstorming instead of using pictures in the lead-in section of his teaching practice.

4.2.3.5 Halil's Knowledge on Assessment

When Halil's knowledge on assessment was analyzed, two main themes emerged similar to other prospective teachers: '*test techniques the prospective teacher used*' and '*test techniques they would use if they had a second chance to assess the students' comprehension of the same words*'.

Test techniques Halil used to assess students' comprehension

After teaching the words, Halil evaluated whether the students learned them or not by using a domino game and summarizing (Interview 3, Question 11, 16 May 2012).

In the activity II, I wanted them to match the words with their definitions and in the follow up section they played a domino game, and in the wrap- up section they repeated the words they had learned both in English and in Turkish. I evaluated in this way.

The observers of his teaching practice noted down the same techniques Halil mentioned. However, they only added the use of short answer questions as the test technique Halil used to assess students' comprehension right after his teaching practice.

Test techniques Halil would use if he had a second chance to assess the students' comprehension of the same words

His answer to the last interview question shows that he would use the same techniques if he had a second chance to assess the students' comprehension of the same words. He only preferred using a language game as he believed that he failed to keep his students' motivation alive.

4.2.4 Cross-case Analysis Findings

Three prospective English teachers' competencies were discussed considering their pedagogical content knowledge in the previous sections. In this section, cross-case analysis of their teaching experiences focuses on their similarities and differences by examining the categories identified in each teacher's pedagogical content knowledge: knowledge of English, knowledge on planning lessons, knowledge of learners, knowledge on teaching methods and techniques and knowledge on assessment. Cross-case analysis was conducted to find out whether there were common or different patterns among three different prospective English teachers.

As statistically significant differences were found among the prospective teachers' perceptions of their PCK in the quantitative study, the researcher tried to explain the significant differences between the experienced and inexperienced prospective teachers by comparing and contrasting Filiz and Emrah's teaching practices as they both have GPA above 3.00. Emrah and Halil's teaching practices were analyzed to see the differences due to the participants' GPA as they were both inexperienced. Finally, the teaching practice of Filiz and that of Halil were analyzed to find out the effect of being both experienced and more successful student.

When three prospective teachers are compared and contrasted, it can be obviously seen that Filiz's teaching practice was the best one as she was both experienced and more successful (with a GPA above 3,00). She hardly ever had

problems in her teaching practice as she was really well-prepared for the lesson. Similarly, the silence and the orderliness in Emrah's class was not the result of his authoritarian manners, but his well-prepared and organized teaching practice. However, Halil had some problems in controlling the students during the activities as what he planned did not match with what he did in his actual teaching practice.

Filiz and Emrah managed to arouse students' interest and keep their motivation alive by using a video or a story which were directly related to the reading comprehension passage, while Halil used the pictures given on page 152 in the student's book. Considering all categories of prospective teachers' PCK, it can be claimed that prospective teachers' GPA affects their teaching practice as much as their experience does. Though there were some differences in their teaching practices, Filiz and Emrah seemed to be more successful in teaching the target words to the students than Halil did. In addition to their general pedagogical knowledge discussed here, the categories of their PCK are presented in the following parts in detail.

4.2.4.1 Knowledge of English

Though the themes emerged regarding the prospective teachers' knowledge of English showed some similarities, there were differences in their teaching practice. The following table summarizes the results obtained from the qualitative data collection instruments: lesson plans, observations and interviews.

Table 41: *Prospective Teachers' Knowledge of English*

Emrah's KE	Filiz's KE	Halil's KE
<i>Importance attached to literature</i> Use of short story	<i>Importance attached to knowledge and skills</i> All four skills are important Grammar and Vocabulary	<i>Developing language skills</i> Mentioned nothing about grammar or vocabulary
<i>English for communication</i> Being more competent in using English	<i>English for communication</i> Speaking and listening skills improved	

<i>Importance attached to pedagogical knowledge (PK) rather than the subject matter knowledge</i> Knowledge of English (KE) is a tool for teaching Without PK, KE is useless	<i>Importance attached to subject matter knowledge rather than the pedagogical knowledge</i> Knowledge of English is the prerequisite to teach it effectively	<i>Being aware of the importance of subject matter knowledge (SMK)</i> KE helps him teach better Being aware of the importance of SMK is not enough to teach English
<i>Grammar and pronunciation mistakes of the prospective teacher</i> Singular and plural nouns, countable and uncountable nouns, simple present third person singular –s, active-passive voice, adjectives and adverbs, use of nouns instead of verbs, gerunds-infinitives, use of prepositions, word order in questions, use of conjunctions and collocations, and pronunciation mistakes.	<i>Grammar and pronunciation mistakes of the prospective teacher</i> Noun clauses, spelling words, word choice, and few pronunciation mistakes	<i>Grammar and pronunciation mistakes of the prospective teacher</i> Singular and plural nouns, countable and uncountable nouns, tenses, parts of speech, use of prepositions, spelling, word choice, and mistakes as a result of his thinking in Turkish while he is translating what he thinks into English Pronunciation mistakes (Though he hardly ever used the target language)

Participants' knowledge of semantics

The observation results of the prospective teachers show that Emrah and Filiz taught the new words by showing their pictures and providing sample sentences of these words, while Halil just showed the pictures to teach the words. Having neither any teaching experience nor a GPA above 3.00, Halil did not use his knowledge of semantics (word and sentence meaning) while teaching vocabulary to learners.

Use of English

Emrah and Filiz believed that ELT department had positive effect on their subject matter knowledge as it helped them to be more competent in using English. Both prospective teachers tried to make use of English as much as possible and attached importance to communication. Halil mentioned nothing about knowledge on

grammar or vocabulary. He claimed that ELT department helped him develop his language skills, especially listening. However, he hardly ever used the target language. Whenever he used it, he immediately used students' mother tongue to explain what he said.

Importance attached either to the subject matter knowledge or to the pedagogical knowledge

Filiz attached more importance to subject matter knowledge than she did to pedagogical knowledge. She believes that if the teachers know English, they can overcome the unexpected problems and create new opportunities for the students. As she is both experienced and more successful, her knowledge of English was the best when compared with other participants of the study. Emrah sees pedagogical knowledge more important than the subject matter knowledge. To him, knowledge of English will be useless unless one does not have pedagogical knowledge. Attaching less importance to knowledge of English, Emrah had more grammatical mistakes than Filiz did though both participants' GPA was above 3.00. As a result, knowledge of English is not a knowledge domain to be underestimated. On the contrary, teacher should pay the attention to it with all its grammar, pronunciation, and vocabulary.

Grammar and pronunciation mistakes of the prospective teachers

When the mistakes they made and their knowledge on grammar were analyzed, it can be seen that Emrah and Halil made mistakes regarding the simplest grammar rules such as singular and plural nouns, countable and uncountable nouns, tenses during their teaching practice. Yet, Filiz made few grammatical mistakes regarding noun clauses, spelling, and word choice. Being an experienced prospective teacher, Filiz attaches more importance to knowledge of English, which helps her develop grammatical accuracy. When the pronunciation mistakes they did are analyzed, Halil made more mistakes than the other participants did though he mostly preferred to use students' mother tongue. Emrah and Filiz had the same number of pronunciation mistakes done during their teaching practice. Halil, having a GPA below 3,00, was the worst in applying his knowledge of phonology (the sound system).

4.2.4.2 Knowledge on Planning Lessons

To explain the results obtained from the quantitative data collection process, both quantitative and qualitative data obtained from the lesson plan assessment form was used. Moreover, the prospective teachers' lesson plans were analyzed. As an alternative data collection technique, document analysis provided researcher to examine the prospective teachers' knowledge on planning lessons in detail. In addition to the document analysis technique, the seventh and eight interview questions were asked to get further information about their knowledge on planning lessons. In the following table, the mean value of each item assessed by the researcher, the expert and the instructor is presented for each participant.

Table 42: *Prospective Teachers' Knowledge on Planning Lessons*

Poor = 1 Fair = 2 Satisfactory = 3 Good = 4 Excellent = 5				
	Prospective teacher can ...	$\bar{X}$ Emrah	$\bar{X}$ Filiz	$\bar{X}$ Halil
1	explain the aims and the objectives of the lesson clearly.	5,00	5,00	4,00
2	decide on appropriate teaching methods, techniques and strategies for the performance objectives of the lesson.	4,00	5,00	3,33
3	forecast possible questions to be asked by the students and provide possible answers for them.	4,66	5,00	3,33
4	define the terms and concepts that students may have difficulty to understand during the lesson.	4,66	5,00	2,66
5	pinpoint what should be done to clarify these terms and concepts.	4,66	5,00	3,00
6	design a set of activities/techniques helping the teacher achieve the aims and the objectives of the lesson.	4,33	5,00	2,33
7	decide on the ways to make students ready for the lesson in the warm-up period.	4,00	5,00	3,00
8	clearly explain how the activities should be done in the practice session.	5,00	4,66	4,00
9	determine the appropriate teaching materials to be used during the lesson.	4,66	5,00	3,33
10	decide on what is to be taught first according to the course content and students' levels.	4,00	4,66	4,00
11	write clear instructions for different parts of the lesson plan.	5,00	5,00	4,00
12	explain the ways to evaluate whether the students have learned or not.	5,00	5,00	3,33
13	make use of the limited time effectively.	3,33	3,66	3,33
TOTAL $\bar{X}$		4,48	4,84	3,36

As it can be seen in the total mean values of the items, it can be concluded that planning effective lesson plans requires both knowledge and experience. Being experienced and having a GPA of more than 3.00, Filiz prepared and followed her lesson plan better than the other participants ($\bar{x} = 4.82$) did, while Halil had some problems in his lesson plan ($\bar{x} = 3.36$).

Deciding on the ways of how to make students ready for the lesson in the warm-up session

When the observers' comments are examined, it can be seen that Filiz planned a game for the warm-up session which aroused students' interest. In the lead-in part, the students' watched an authentic video in which the target words were presented and students got familiar with the words to be taught. Similarly, Emrah planned a game for the warm-up section. However, he had few problems during the game as the parts of the game were not equally difficult for each group of students. For example, it was really difficult to find animals starting with the letter 'e'. In the lead-in section, he used a short story and showed students related pictures of the story, which also helped the students understand the meanings of the words to be taught. Halil's warm-up activity had nothing in English. He asked one of the students to go out of the class and the others to change the places of the three things in the class. The student came back and tried to guess what changed in the class. Rather than making students ready for the lesson, this activity caused confusion and too much noise in the class. As for the lead-in activity, he used the pictures on page 152. He prepared nothing special for the students in the lead-in section contrary to what Emrah and Filiz did.

Writing clear instructions for different parts of the lesson plan

Prospective teachers had some problems while they were doing what they actually planned. Filiz had some problems while grouping the students in the warm-up session. However, the rest of her instructions were easy to understand and her effective use of mime and gestures let students easily understand the instructions. Emrah and Halil's instructions were a bit above students' levels. Thus, they both felt

the need to explain the instructions using students' mother tongue, Turkish. The more experienced the prospective teachers are, the more they tend to use the target language in their teaching practice.

Time allotment

All prospective teachers wrote their predictions about how long each activity will last in the first column of their lesson plans (See Appendix 14 for Sample Lesson Plan). However, their predicted time allotted to each activity did not match with the one they actually used in their teaching practice. They all had problems regarding time allotment. Though their time allotted to each activity changed slightly, Emrah and Filiz finished their lessons on time. However, Halil's lesson ended long before he had expected it to end. Students waited for the bell to ring and made too much noise.

To sum up, the prospective teachers' knowledge on planning lessons differed more in terms of their GPA than it did in terms of their experience. There were slight differences between the experienced Filiz's and inexperienced Emrah's lesson plans. However, Halil, whose GPA is below 3.00, could not follow what he planned to do in his lesson plan during his teaching practice and had some problems while teaching the new words.

4.2.4.3 Knowledge of Learners

To learn about prospective teachers' knowledge of learners, their answers to the interview questions and the observation results of their teaching practice were analyzed. The researcher tried to find the answer of what difficulties their students had during their teaching practice and what they did to overcome these difficulties. Moreover, observation was carried out to find answer to how they explained the terms and concepts that their students had difficulty in understanding. The prospective teachers' teaching practice showed some similarities and differences with regard to their knowledge of the learners.

Using appropriate sources and materials for their students

Emrah and Filiz made use of various activities considering their students' language levels. They even changed the reading comprehension questions given in the book. Emrah changed them to get students to understand the passage easily and to help the students guess the meanings of the words which he had written in the passage in bold. Filiz changed the fourth question considering her students' language levels. As she did not teach some of the words given in the question in the pre-teaching section, she changed the question to 'After the doctor became well again, what did he say?' (See Appendix 12 for the fourth question). She did not teach all the target words highlighted in students' book. She chose different words to be taught as she thought students would do the following activities easily if she taught those words. She arranged the activities according to students' levels, needs and interests. Similarly, Emrah did necessary adaptations in his teaching material. Yet, Halil did not change any of the questions as he believed there was no need to change questions.

Dealing with students' problems

At the beginning of their lesson plans, all the participants provided some anticipated problems and their solutions. However, they experienced more problems than they had anticipated. For example, Emrah mentioned that he had some other problems in his teaching practice. The problems his students faced were; (1) not understanding even the simplest instructions, (2) the difficulties in the use of guessing technique, (3) problems with filling the gaps of a dialogue individually. Moreover, Halil had not anticipated any problems related with form, but his answer to the ninth interview question showed that his students had problems not only in meaning, but also in form. His students did not understand the form of some questions. As for Filiz, she was well aware of the problems she faced or would face. She was also successful in dealing with the unexpected problems. However, she also listed some other problems that her students faced such as the problems with the matching activity and not understanding some parts of the activities. Even though they all had problems in their teaching practice, observers agreed that Filiz was the best at dealing with both anticipated and unexpected problems.

Explaining the terms and concepts their students had difficulty in understanding

While explaining the terms and concepts the students had difficulty in understanding, each prospective teacher used different strategies. Pictures from daily life and sample sentences were used in Emrah's teaching practice to make the meaning clear. However, he preferred to use mother tongue whenever students did not understand what he was trying to explain. Halil translated nearly all the words into Turkish when students had difficulty in understanding them. He showed pictures to the students to make the meaning clear, but some of the words (like innovation) were so abstract that he could not explain the meanings of the words by only using visuals. However, having some teaching experience, only Filiz tried to explain the terms and concepts their students had difficulty in understanding without using students' mother tongue. She made use of a video, definitions, sample sentences, pictures, and summarizing to explain what was difficult for the students to understand. She taught the unknown words before she read the text. She wrote all the unknown words with their sample sentences on the board.

Making use of students' previous experiences and arousing their interests

Using two cartoon characters, Emrah effectively related the lesson not only to students' previous experiences, but also to their interests. The observers and the researcher noted that Emrah achieved to arouse students' interest and keep their motivation alive with the help of the game presented in the warm-up session, a story given in the lead-in section, and a puzzle and a final game as classroom activities. Students willingly participated in the classroom activities though they had difficulties in understanding the instructions. Similarly, Filiz attached importance to activating students' previous experiences. She mentioned that she had paid attention to the age and proficiency level of the students. She presented a video, and some PowerPoint slides to activate students' background knowledge. She believed that without the activation it would have been impossible for them to comprehend the text. Furthermore, she asked some lead-in questions to relate the new topic to students' previous experiences and to arouse their interest. The game, the video and the activities were all designed to keep students' motivation alive. When the video

recordings and the observer notes were examined, it was found out that Halil followed the activities in the book, which caused him not to be able to arouse students' interests and keep their motivation alive. Only in the Domino game did the students participate in the lesson. He could have made use of some other activities to keep students' motivation alive.

4.2.4.4 Knowledge on Teaching Methods and Techniques

When the prospective teachers' interview transcripts and the observation procedures are analyzed, it can be summarized that Emrah followed an eclectic method mostly preferring communicative approach in the activities, but grammar translation and direct method while presenting the new words. Similarly, Filiz mostly made use of communicative approach in her lesson. However, she preferred using some other methods and approaches whenever it was necessary. She avoided using students' mother tongue while Emrah used it whenever he needed it. Instead of using students' mother tongue, she made use of authentic videos, games, pictures, and body language to make the meaning clearer. The third prospective teacher, Halil preferred to use grammar translation method in general. During his teaching practice, Teacher-Student interaction occurred and the teacher was strict authority. As the activities he used were above the students' proficiency levels and did not attract students' attention, the students did not participate in them willingly which caused problems related to the classroom management. Similar to Emrah, he preferred using Turkish whenever he needed. As an experienced prospective teacher, only Filiz avoided to use mother tongue while teaching the new words to her students.

Use of various appropriate methods and techniques to teach vocabulary was best achieved by the prospective teachers whose GPA is above 3.00 (Emrah and Filiz). Their students willingly and actively participated in the lesson and the results of their assessment showed that the students learned the new words. The methods, approaches and techniques the prospective teachers used can be compared and contrasted in the following table.

Table 43: The Methods, Approaches and Techniques the Prospective Teachers Used

Stage	EMRAH	
	Method, Approach, Technique	
Pre-Teaching	Communicative Approach Language game, using words in a given story, teaching vocabulary in context Content-based Approach Semantic mapping (related words)	
	Grammar Translation Method Translation of a passage, reading comprehension questions, using words in sentences Direct Method Pictures and sample sentences used to achieve direct relation between the form and meaning, reading aloud, question and answer exercise Community Language Learning Human computer	
While Teaching		
After Teaching Assessment	Problem solving activity (A puzzle), completing the dialogue and dialogue memorization, role play, task-based activity, sticking the pictures of the words given on the board, using pictures to support meaning	
Stage	FILİZ	
	Method, Approach, Technique	
Pre-Teaching	Communicative Approach Language game, meaning conveyed through visual aids, authentic video presentation, asking questions related to students' daily life, task-based activity, students discuss and guess whether the statements are true or false Direct Method Pictures and sample sentences used to achieve direct relation between the form and meaning Behaviorist Approach Repetition of the words until they are pronounced correctly, habit formation by means of repetition	
	Grammar Translation Reading comprehension, students check their answers, translation of a passage from English to Turkish	
While Teaching		
After Teaching Assessment	Matching the word with the correct definition, reading Comprehension questions, fill-in the blanks, summarizing	
Stage	HALİL	
	Method, Approach, Technique	
Pre-Teaching	Game in Turkish (changing the places of the objects) Communicative Approach Using two pictures given in the course book as lead-in activity to the topic Grammar Translation Method Using mother tongue when students do not understand the meaning conveyed through the pictures Behaviorist Approach Repetition of the words until they are pronounced correctly, habit formation by means of repetition	
	Grammar Translation Method Excessive use of mother tongue while doing the activity, reading comprehension questions, students check their answers, translation of a passage from English to Turkish	
While Teaching		
After Teaching Assessment	Summarizing in Turkish, Domino game (Translation of the words taught)	

4.2.4.5 Knowledge on Assessment

The prospective teachers preferred to assess their students' comprehension using different means of assessment. What test techniques they used and what other test techniques they would use if they had second chance to assess the students' comprehension can be seen in the following table.

Table 44: *Different Means of Assessment Prospective Teachers Used and Would Use to Assess Students' Comprehension*

Test techniques they...	Emrah	Filiz	Halil
used to assess students' comprehension	Puzzle Gap filling activity Game Observation Short-answer Questions Summarizing	Summarizing Question and answer Matching Gap filling activity Observation	Domino Game Short-answer Questions Summarizing
would use if they had a second chance to assess	Matching Multiple-choice questions	Sentence completion Multiple-choice Essay questions Word games	The same techniques he used A game

In their answers to the eight and twelfth interview questions, all the prospective teachers believed that they would change the activities in their lesson plans and use different test techniques to assess students' comprehension if they had a second chance to teach the same vocabulary. It can be concluded that prospective teachers will be able to reflect the results of the assessment process to their future practices as they would make necessary adjustments in their lesson plans and in the ways they assess their learners' comprehension levels.

None of the participants assessed students' comprehension using essay tests, and alternative assessment tools such as portfolios, performance-based assessment,

self-assessment, and checklist. As an experienced prospective teacher, Filiz assessed her students' comprehension using a matching activity. Emrah also expressed that he would have assessed his students' success through multiple-choice questions and matching activities if he had had a second chance to teach the same topic. As the prospective teachers become more experienced, they tend to use multiple-choice questions and matching activities. Though there are many traditional and alternative test techniques to be used, prospective teachers tend to use a limited number of techniques to assess students' comprehension.

4.3 Summary

In this chapter, the quantitative results of the study have been presented using descriptive and inferential statistics. Moreover, qualitative data obtained from the selected participants' (three prospective teachers of English) lesson plans, observation procedures, and interviews have been analyzed to explain the quantitative results. Both within-case and cross-case analysis of the participants have been carried out to see the differences due to prospective teachers' experience or GPA. Both quantitative and qualitative data have been integrated and presented to draw conclusions and implications in the following chapter.

CHAPTER FIVE

CONCLUSION, DISCUSSION AND IMPLICATIONS

5.0 Introduction

In this chapter, the summary and interpretation of the significant findings are discussed in the light of the related literature. The scope of the study is broadened with both quantitative and qualitative analysis. As the study follows sequential explanatory design of mixed method research, the findings of quantitative data are supported and explained by qualitative data collection methods (document analysis, observation and interviews) in order to fully understand pre-service English teachers' competencies through their pedagogical content knowledge. At the end of the chapter, bearing the research findings and the generalizations drawn from those findings in mind, some implications for the pre-service foreign language teacher education programs and for further research are presented.

5.1 Conclusion and Discussion

In this part of the study, quantitative and qualitative findings are combined and discussed in the light of the related research studies. Comparative analysis of the quantitative and qualitative results is discussed and “a general profile” of the prospective English teachers' pedagogical content knowledge at Çanakkale Onsekiz Mart University is inferred (Baxter and Lederman, 1999: 154).

Prospective teachers' knowledge of English

Analyzing the participants' different domains of knowledge through descriptive and inferential statistics in parallel with the research questions, the researcher found out that prospective teachers agreed they have the required competencies in general. However, quantitative data analysis results indicate that their knowledge of English is the only knowledge domain the mean value of which is

below 4.00. The results show similarities with those of Şahin's (2006). In his study, participants regarded themselves as inadequate in the knowledge of a language. Though the prospective teachers of English see themselves competent in other knowledge domains, they believe that they do not have required knowledge of the language they teach.

Being both experienced and more successful, Filiz believes that subject matter knowledge of the teachers is more important than their pedagogical knowledge. She expresses that teachers cannot overcome the unexpected problems and it is impossible for them to create new opportunities for the students unless they have good command of English. As she attached more importance to the knowledge of English, her knowledge of English was the best when compared with other participants of the study. Unlike Filiz, Emrah considered pedagogical knowledge to be more important than the subject matter knowledge and he made more grammatical mistakes than Filiz did. To teach effectively, prospective teachers should not underestimate the knowledge of English and pay the attention to it with all its grammar, pronunciation, and vocabulary. Namely, not being competent in subject matter knowledge prevents being a good teacher in the classroom (Guyton & Farokhi, 1987; Minor, Onwuegbuzie & Witcher, 2000).

Another finding of quantitative data analysis reveals that that the prospective teachers agree they can apply their understanding of semantics (word/sentence meaning) to assist their students in using a wide range of vocabulary in English ($\bar{X}_{\text{item 4}} = 4.30$). Observing the prospective teachers' teaching practices, the researcher realized that two of the prospective teachers taught the new words by showing their pictures and providing sample sentences of these words. However, one of them, having neither any teaching experience nor a GPA above 3.00, just showed the pictures and translated them into Turkish, students' mother tongue to teach the words. He did not use his knowledge of semantics (word and sentence meaning) while teaching vocabulary to learners. According to Johnston and Goettsch's (2000) study, experienced teachers put more emphasis on using examples during

explanations. In the present study, not only experienced but also more successful students made use of examples while clarifying the meanings of the words taught. From these remarks, it can be concluded that knowledge of semantics is developed not only by teaching experience, but also by pre-service teacher education.

When the relevant item of the questionnaire is analyzed, it can be seen that prospective teachers know English grammar very well. Filiz, believing that her studies on academic reading helped her develop her subject matter knowledge, made the least number of grammar mistakes when compared with what Emrah and Halil did. Emrah made as many mistakes as Halil did. Being inexperienced prospective teachers, Emrah and Halil made lots of grammar mistakes. Though the quantitative data analysis results of the prospective teachers' knowledge of grammar did not show any statistically significant differences in terms of gender, GPA, or teaching experience, observation results imply that the experienced prospective teacher has much better command of English grammar.

Another important finding of the quantitative data analysis is that the prospective teachers having a GPA above 3.00 can apply their knowledge of phonology (the sound system) better than the less successful students can. Qualitative data analysis results also verify this finding as Filiz and Emrah made less pronunciation mistakes than Halil, though Halil made very little use of the target language.

Prospective teachers' knowledge on planning lessons

Among the other knowledge domains, prospective teachers' knowledge on planning lessons has the highest total mean value. They believe that they can prepare effective lesson plans. When the lesson plans of the participant prospective teachers were analyzed, it was found out that they had necessary theoretical knowledge to plan their lessons in an appropriate way. However, they all had either few or some problems in implementing the lesson plan while they were teaching vocabulary to the students. Being experienced and having a GPA of more than 3.00, Filiz prepared and followed her lesson plan better than the other participants did.

Prospective teachers of COMU strongly agree that they can write clear instructions for different parts of the lesson plan ($\bar{X}_{\text{item 19}} = 4.55$). When their lesson plan assessment forms were analyzed, it was found out that their instructions for the activities were clear. They had some problems while they were doing what they actually planned though. All three participants of the qualitative study had problems regarding time allotment. In an earlier study, Kwo (1996) specified two major concerns of prospective teachers. These concerns were pacing in relation to time constraints and unexpected learning difficulties. Both concerns were also observed in this study. Student teachers' predicted time allotted to each activity did not match with the one they actually used in their teaching practice.

Interestingly, only one out of 127 participants did not agree that he/she can decide on the ways of how to make students ready for the lesson and plan his/her lessons considering his/her students' language levels, learning styles, interests and needs. Observation results indicated that Filiz and Emrah made use of video and storytelling successively. However, Halil preferred to ask questions about the pictures in students' books, which caused students get uninterested. One out of three participants, both less successful and in experienced, could not achieve to keep students' interests alive and consider his students' language levels, learning styles, interests and needs. Moreover, nearly all of the prospective teachers believe that they can make use of various activities while planning their lessons. Their answers to the questionnaire shows only one out of 127 participants did not agree that he/she can make use of various activities in his/her lesson plan. Observation results verify this finding. Either worked effectively or not, Emrah, Filiz and Halil tried to make use of various activities while teaching the new words.

One important result that can be drawn from prospective teachers' knowledge on planning lessons is that though there were not any statistically significant differences in terms of gender, GPA, or teaching experience, the participants teaching practices differed more in terms of their GPA than it did in terms of their experience.

Prospective teachers' knowledge of learners

The participants' responses to the questionnaire items showed that nearly 98 percent of the participants believe they can make use of appropriate sources and materials for their learners. Having GPA above 3.00, Emrah and Filiz adapted the reading comprehension questions and the activities given in students' book so that they would be appropriate for their students' interests, needs, and levels. However, Halil did not change any of the questions as he believed there was no need to do so. In adapting materials considering students' needs and levels, participants' GPA played more important role than their teaching experiences. The least successful prospective teacher tended to teach vocabulary without paying sufficient attention to students' English proficiency, needs, and backgrounds.

In the quantitative phase of the study, it was also found out that prospective teachers were not that much sure about dealing with almost any learning problems of their students, and forecasting possible questions to be asked and providing their possible answers. In the qualitative phase of the study, the results were similar. Though all the participants provided some anticipated problems and their solutions, they experienced more problems than they had anticipated. Unexpected learning difficulties what Kwo (1996) specified as one of the major concerns of the student teachers were also observed in their teaching practices while they were dealing with the problems.

Another interesting result of the quantitative study was that prospective teachers without experience believe they can forecast possible questions to be asked and provide their possible answers better than the experienced ones can. Similarly, they think they are better than the experienced ones in explaining the terms and concepts their students have difficulty in understanding and in explaining what should be done to clarify these terms and concepts. On the other hand, qualitative results turned out to be completely different from the quantitative ones. Even though all three prospective teachers had problems in their teaching practice, observers reached to a consensus that Filiz, who was experienced, was the best at dealing with both anticipated and unexpected problems. Inexperienced prospective teachers'

perceptions regarding their knowledge of learners did not match with their actual teaching practices. “To know how to speak about teaching is not the same as knowing how to actually teach” (Strauss, 1993: 289). Namely, what they believed they could do and what they actually did were different. This finding was similar to that of Mullock (2006). In her study, the teacher with less experience showed little difference with the other more experienced ones in terms of one pedagogical thought category (knowledge of the students). Though she explained this result in different ways, it could also be because more experienced teachers were much more aware of what they could actually do.

Prospective teachers’ knowledge on teaching methods and techniques

According to the quantitative data analysis results, the prospective teachers believe they are knowledgeable about the methods and techniques to be used in their teaching practice. The results also show that the prospective teachers can make use of an eclectic method or communicative approach better than they do traditional teaching methods. Observation and interview results reveal that this is not the case for less successful students. Emrah and Filiz, whose GPAs are above 3.00, achieved to use various appropriate methods and techniques to teach vocabulary. However, Halil, whose GPA is below 3.00, used grammar translation method in general.

The students with a GPA above 3.00 are more successful in choosing the appropriate method and technique while teaching vocabulary. Moreover, they believe that they can make use of an eclectic method better than the ones with GPA between 2.00 and 2.99. The observation results of Emrah and Filiz’s teaching practices make it clear that more successful learners tend to combine the techniques of different methods and approaches better than the others do. As in adapting materials considering students’ needs and levels, participants’ GPA again played more important role than their teaching experiences in choosing appropriate methods and techniques to be used. This verifies the positive impact of the courses taken in the ELT departments on the prospective teachers’ knowledge base discussed in the literature (Atay, Kaşlıoğlu & Kurt, 2010; Banegas, 2009; Koçoğlu, 2009).

Except for the two out of 127 participants, prospective teachers believe that they can make use of communicative approach or an eclectic method. In contrast, 53 participants (41,7 percent) either disagree with or feel neutral about the fact that they can make use of traditional teaching methods such as grammar translation and direct method. However, the observation results and interview transcripts revealed that all three prospective teachers preferred grammar translation and direct method while presenting the new words while they were supporting their presentation with some eclectic and communicative activities. Once more, Strauss's (1993) argument is verified as their perceptions of what they could do were different from their actual teaching practices.

Though she is regarded as an experienced prospective teacher, Filiz herself does not see her experience sufficient and believes that she needs to be more experienced to develop new and creative activities and to be able to use variety of techniques and methods in ELT. Slight differences were observed in Emrah and Filiz's teaching practices. It can thus be concluded that prospective teachers' GPA affects their teaching practice more than their experience does. As in Şahin's (2006) study, gender differences do not have any impact on prospective teachers' preferences of the teaching methods and techniques used.

All in all, as in Ellison's (2007) study, it can be concluded that teacher knowledge, especially PCK is complex in nature. It is more than what skills and methods the teacher knows. It includes all the issues related to the teachers' personality, as well as their beliefs about the students and their beliefs about their ability to teach.

Prospective teachers' knowledge on assessment

According to the item having the highest mean value related to their knowledge on assessment, prospective teachers believe that they can reflect the results of the classroom assessment process to their future practices. Also, the item with the second highest mean value suggests that they can give appropriate feedback

according to the results of the measurement process. Their answers to the interview questions verify this finding. All of them believed that they would change the activities in their lesson plans and use different test techniques to assess students' comprehension if they had a second chance to teach the same vocabulary. Therefore, it can be concluded that they tend to reflect the results of the assessment process to their future practices.

Another result that can also be drawn from the quantitative phase of the study is that participants do not perceive themselves as being knowledgeable about the uses of wide variety of assessment strategies. It was also observed that prospective teachers used a very limited number of techniques to assess students' comprehension although there were many traditional and alternative test techniques to be used. This may mean that they are not really knowledgeable about various test techniques to be used in their teaching practices.

The researcher also found statistically significant difference between the students with higher and lower GPAs. The students with GPA above 3.00 prefer to use essay tests, portfolios, performance based assessment, self-assessment and checklists more than the ones whose GPA is below 3.00. However, none of the participants assessed students' comprehension using essay tests, or alternative assessment tools such as portfolios, performance-based assessment, self-assessment, and checklist during their teaching practice. As their GPA is higher than the others, they know about these test techniques more than the other students do. Hence, they believe they will use such tests more frequently than the students whose GPA is below 3.00. Though they know about such tests, they do not prefer using these tests in their teaching practice.

The quantitative data analysis results regarding the teaching experience of the participants reveal that experienced prospective teachers tend to use multiple-choice and matching questions more frequently than the inexperienced ones do. Köksal and Cesur (2012: 48) also found in their study that the more experienced the instructors are, the more efficient they find the multiple-choice questions prepared by the test

constructors working for the testing office. In their study, instructors mostly preferred to use multiple-choice and matching. Similarly, Filiz assessed her students' comprehension using a matching activity and Emrah expressed that he would have assessed his students' success through multiple-choice questions and matching activities if he had had second chance to teach the same topic. As the prospective teachers become more experienced, they tend to use multiple-choice questions and matching activities.

When their pedagogical content knowledge is investigated, prospective teachers' GPA plays the most important role explaining the differences among them. Some other differences can also be explained considering whether they have any teaching experience or not. Finally, being either male or female does not make any significant difference (only in the use of performance based assessment as the result of the quantitative phase) in terms of the prospective teachers' PCK.

5.2 Implications

As the subject matter knowledge is of great importance, prospective teachers of English should be asked to get a pre-determined score from standardized English language tests in order to graduate from their departments. They should be required to know the language at least at C1 level of the Common European Framework of Reference (CEFR). All the participants of the study were prospective teachers when the data collection process was going on. Now, they have all graduated from the ELT department of Çanakkale Onsekiz Mart University. Though Filiz was the best of the three participant prospective teachers, she has not been appointed as an English teacher and is still preparing for the KPSS (Public Personnel Selection Exam). Thus, the content of the KPSS exam should be revised and teachers of English should be responsible for their content (knowledge of English) and pedagogical knowledge (knowledge of learners, planning lessons, instructional strategies, and assessment) bases. An exam similar to TKT (Teaching Knowledge Test) organized by the University of Cambridge can be developed considering the EFL settings in Turkey

and applied to the prospective teachers of English. The results of such exams would be better to appoint teachers as they would assess EFL teachers' knowledge base for effective teaching rather than their knowledge on Mathematics, Turkish, History and Geography. Furthermore, the following implications can be drawn for the pre-service foreign language teacher education programs and the future research.

5.2.1 Implications for the Pre-service Foreign Language Teacher Education Programs

What teacher candidates knew theoretically and what they did in their actual teaching practice did not match to a great extent. A well-structured ELT program will narrow the gap between the teaching practices and theoretical pedagogy of language teacher preparation courses. Thus, "it is the responsibility of teacher education programs to offer ways for teachers to see links between theory and practice" (Bigelow & Ranney, 2005: 199). When teachers manage to combine the theory and practice and develop their pedagogical content knowledge, "knowledge gained from both will benefit both (Bigelow & Ranney, 2005: 199). Similarly, as Popko (2005: 402) recommends, teaching about English in grammar and linguistic courses with separate methodology courses may not be the best way to approach English language teacher preparation. Knowledge of English itself can be helpful; however, no knowledge is helpful without application.

Thus, the ELT programs should be revised. Courses that are designed to develop teacher candidates' subject matter knowledge such as 'Contextual Grammar' and 'Vocabulary Knowledge' should also ensure that they have protocols for applying certain aspects of knowledge about language to their own teaching. For example, courses named 'Pedagogical Grammar' or 'Pedagogical Vocabulary', in which the focus would be on methods of teaching grammar and vocabulary, can be integrated in the ELT program. In such courses, the teacher candidates can be taught different grammatical issues and the ways how they can teach such issues to their learners.

As Bartels (2009: 130) suggests, the courses they took at the ELT departments “need to stop focusing on academic practices, such as reading studies and discussing theories”. Instead, these courses should provide teacher candidates with learning experiences in which (1) they use or develop their knowledge about language to ‘engage in teaching-like tasks’ and (2) they learn to design and carry out practice activities which help them acquire knowledge about language.

The present study verifies the fact that subject matter and pedagogical competencies have a strong connection with teachers’ performance and in-class teaching practice. Filiz, one of the participants of this study, had a good command of English and her subject matter knowledge was much better than that of the other participants. This in turn influenced her teaching practice in a positive way. Believing that subject matter knowledge is more important than pedagogical knowledge, Filiz made fewer mistakes than Emrah did, who attached more importance to pedagogical knowledge. Moreover, contrary to Filiz, Halil had problems regarding his subject matter knowledge. Thus, he had some problems in his teaching practice as well. Therefore, EFL teacher education programs should raise their student teachers’ awareness on subject matter (content) knowledge.

EFL teacher education programs need to provide further opportunities for EFL teacher candidates to develop their content knowledge: grammar, vocabulary, pronunciation, and so on. To be able to explain the concepts in their classrooms effectively, teachers need to have willingness and confidence to grapple with the concepts at deep level (Hislam & Cajkler, 2005: 311). Grammatical knowledge at a deep level requires intensive teaching. Moreover, in the opinion of Pemberton (2003), there are three main ways of learning vocabulary: memorizing, using and recycling. He suggests that in order to avoid forgetting what one has learned, he/she should learn words repeatedly, with increasing intervals between learning sessions. As it can be understood from their statements, continuous and intensive teaching of both vocabulary and grammar should be provided to the teacher candidates in the ELT departments. Rather than the courses taught only in their first years of education such as ‘Contextual Grammar’, ‘Vocabulary Knowledge’, and ‘Listening and

Phonetics', future teachers of English should be provided more courses which will help their knowledge of grammar, vocabulary and pronunciation develop in time till they graduate. Therefore, courses taught at the ELT program should be revised so that the prospective teachers can develop their subject matter knowledge not only in their first years, but also in the other three years of their education.

Understanding teacher knowledge requires understanding its sources as these sources shape teachers' conceptions of teaching and learning, and they affect the teachers' development of knowledge (Tsui, 2003). Teacher knowledge is generally accepted to be constructed from four possible sources: teacher education, disciplinary background, apprenticeship of observation, and classroom teaching experience (Grossman, 1990; Richards, 1998; Tsui, 2003). Bearing these sources in mind, disciplinary background and teacher education is provided to the prospective teachers of English in the ELT department of COMU by means of the courses they take during their four-year-education. However, they only have apprenticeship of observation in the fall term, and classroom teaching in the spring term of their last year. Future teachers of English can be given the opportunities to assist the instructors working at Çanakkale Onsekiz Mart University. Language teacher education program can organize new projects with the help of which ELT students can observe the instructors who teach English at different levels to the preparatory students of COMU at the School of Foreign Languages as "observation is a powerful source of insight and discovery and can help the prospective teachers develop new strategies for teaching" (Crandall, 1998; cited in Zhang, 2008: 235).

In the four-year-program, ELT students should not only be provided with apprenticeship of observation but also be given the chance to teach English to the preparatory students which will develop their classroom teaching experience which is generally considered to be the most important source of knowledge about teaching (Grossman, 1990; Tsui, 2003). Experience is a continuous lifelong phenomenon which "means that all experience shapes or shades in some way further experience" (McCaughtry, 2005: 391). Teacher education program should organize and support new relationships between the new and experienced teachers (Freeman, 2002).

Therefore, prospective teachers' teaching practices can be enhanced by providing them with new opportunities to have more teaching experience. To further illustrate, the students of ELT departments can be 'assistant teachers' of the instructors working at Çanakkale Onsekiz Mart University accompanying them one or two hours a week in their courses at the preparatory classes of the School of Foreign Languages. This will also enable the pre-service English language teachers to carry out more practicum hours than they do currently.

As Sundusiyah (2009) closely worked with a Chinese student to improve the students' pronunciation performance for several weeks and benefited from conducting a self-study improving her pronunciation teaching practice and her understanding of that practice study, ELT students can be given similar chances to teach preparatory students of the School of Foreign Languages voluntarily. Trying to teach an hour or two in a week to a student learning English, each prospective teacher will benefit from his/her tutorial practice and find the chance of exploring his/her own weaknesses and strengths regarding their pedagogical content knowledge, which will also help them be more experienced English language teachers.

"Reflection in response to their own classrooms helps teachers contextualize their personal practical knowledge, thus making meaning of this knowledge" (Golombek, 1998: 461). Therefore, language teacher education programs should foster reflection that contextualizes teacher knowledge. Prospective teachers should be taught to conduct action research effectively. By conducting action research, they can directly examine what they know about the language, the curriculum, the students, the instructional strategies, and the ways of assessing students. This will in turn help them realize what they did in the past, are doing now and will do to teach more effectively in the future considering their own teaching practices.

As Ariogul also (2006: 157) suggests, self-reflection and collaboration opportunities need to be created in pre-service training. With the help of the questions asked during the interviews, prospective teachers shared their experiences

of teaching. This perhaps let them the chance to talk about and understand their knowledge for the first time. Realizing what they know and what they further need to know may help prospective teachers develop their knowledge base. Thus, foreign language teacher education programs should provide the teacher candidates with the opportunities to think about their understanding of their teaching practice.

EFL teacher education programs ought to find ways to raise teacher candidates' awareness that knowledge of learners plays a significant role in effective EFL teaching as the participants seem to have difficulties in anticipating the problems they would face. According to the results obtained from the quantitative data, inexperienced prospective teachers thought that they would anticipate students' problems effectively and solve these problems during their classroom teaching practices. After observing their actual teaching practices, qualitative data results revealed that experienced prospective teachers were much better in anticipating and solving the problems than the inexperienced teachers were. Prospective teachers were not aware of their actual capacity to deal with the problems in their classes. Thus, teacher education programs should provide the future teachers of English with opportunities to raise their awareness of possible problems they will face when they become real teachers, to examine the causes and the negative effects of the problems, and to consider and practice effective strategies to deal with the problems. To achieve these, a course named 'Dealing with Problematic Classes' can be integrated to the program. Instruction of this course should be based on problem-based learning approach in which "students receive a problem and work in teams to try to identify the nature of the problem and the resources they will need to solve the problem" (Major & Palmer, 2006: 623). This course can teach prospective teachers what to do if the students are all at different levels, if they keep using their own language, if they are uncooperative, if they do not want to talk (Harmer, 1998), if they do not understand the instructions, and if they have some misconceptions regarding grammar, vocabulary, pronunciation and other skill areas.

5.2.2 Implications for Further Research

As this study was limited to the selected case which was a group of prospective English language teachers studying in the ELT department of Çanakkale Onsekiz Mart University, further research in other universities is needed to collect more data on teacher knowledge. Though the focus of present study was on vocabulary teaching, other areas, aspects and skills of English language teaching should be studied in the future. Teachers' knowledge on different areas, aspects and skills will contribute the teacher education programs.

As there were only three participants for the qualitative phase of the research study, the researcher could examine the effect of having teaching experience on the teaching practices of the students whose GPA is above 3.00, Filiz and Emrah. However, the researcher could not examine the effect of having teaching experience on the teaching practices of the students whose GPA is below 3.00 because there were no experienced prospective teachers whose GPA is below 3.00 to be compared and contrasted with Halil. Further research can shed light on the effect of having teaching experience (private courses, teaching to small groups, and the like) on the teaching practices of the students who have low level of GPA at the ELT departments.

Ways of integrating courses named 'Pedagogical Grammar' or 'Pedagogical Vocabulary' in the ELT program, in which the focus would be on methods of teaching grammar and vocabulary, can be investigated and sample course materials and design could be developed for the teacher candidates of English.

Crandall (2000: 35) claims that "there is a growing sense that language teacher education programs have failed to prepare teachers for the realities of the classroom". As the prospective teachers' perceptions and their teaching practices showed some significant differences in terms of their GPA, it can be said that the courses the prospective teachers took and the score they got from those courses have

effect on their teaching practices. For further research, the impact of different courses they took at the ELT department on their teacher knowledge can be investigated, which will clarify whether Crandall's (2000) claim is true or not.

Besides being an inexperienced and less successful student, Halil was also an evening student. As there was not a student who is both inexperienced and less successful among the day students, Halil was chosen as the sample of the qualitative phase. In further research, the impact of another variable, being a day or evening student, on pre-service teachers' knowledge base can be investigated as the lecturers carrying out the courses for the day or evening students may change in their own competencies and the procedures they employ.

Finally, future teachers of English who both have teacher education and teach voluntarily to the students at the School of Foreign Languages, and the ones who just have their teacher education in the ELT department of COMU can be compared and contrasted in future research studies to see whether it will make any significant differences to have tutorial practice as it did in Sundusiyah's (2009) study.

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APPENDICES

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Appendix 1

Questionnaire

EXAMINING COMPETENCIES OF PROSPECTIVE ENGLISH TEACHERS THROUGH THEIR PEDAGOGICAL CONTENT KNOWLEDGE

Dear Prospective Teachers,

The main purpose of this questionnaire is to investigate the prospective language teachers' competencies through their Pedagogical Content Knowledge. I regard your answers as a valuable contribution to my study. Your answers will be kept confidential. You do not have to write your name, and no one will know your specific answers to this questionnaire.

Thank you for your kind co-operation in completing this questionnaire.

Kürşat CESUR

PART -1-: Please put a cross (X) into the brackets which are appropriate for you.	
Gender:	a. Male () b. Female ()
What is your GPA (Grade Points Average)? Please, write your GPA here _____.	
a. 3.00 and Above ()	b. Between 2.00 and 2.99 () c. Below 2.00 ()
Have you had any teaching experience <u>except for the 'School Experience' and 'Teaching Practice' courses?</u>	
If yes, please write what it was like (one to one private lesson, group courses, etc.) and how long it took.	
a. No ()	b. Yes () _____

PART -2-: Please put a cross (X) into the box which is appropriate for you.					
Strongly Disagree= 1	Disagree = 2	Neutral = 3	Agree = 4	Strongly Agree = 5	
1. I can apply my knowledge of phonology (the sound system) to help students develop oral, reading and writing skills in English.	1	2	3	4	5
2. I can apply my knowledge of morphology (the structure of words) to assist students' development of oral and literacy skills in English.	1	2	3	4	5
3. I can apply my knowledge of syntax (phrase and sentence structure) to assist students in developing written and spoken English.	1	2	3	4	5
4. I can apply my understanding of semantics (word/sentence meaning) to assist students in using a wide range of vocabulary in English.	1	2	3	4	5
5. I can apply my knowledge of pragmatics (the effect of context on language) to help students communicate effectively.	1	2	3	4	5
6. I have a good command of English.	1	2	3	4	5
7. I can use the English language to communicate clearly and effectively while speaking.	1	2	3	4	5
8. It is easy for me to understand conferences, radio and television talks in English.	1	2	3	4	5
9. I can read and understand popular novels and story books in English with no use or only little use of a dictionary.	1	2	3	4	5
10. I can write all types of essays, letters, etc. to communicate without having any difficulties.	1	2	3	4	5
11. I'm good at pronouncing the English words, stress and intonation patterns correctly.	1	2	3	4	5
12. I have a wide knowledge of vocabulary.	1	2	3	4	5
13. I know the English grammar very well.	1	2	3	4	5

14. I can plan my lessons considering my students' language levels, learning styles, interests and needs.	1	2	3	4	5	
15. I can write aims and behavioral objectives of the lesson clearly.	1	2	3	4	5	
16. I can prepare lesson plans that will help me reach my aims.	1	2	3	4	5	
17. I can decide on the ways of how to make students ready for the lesson in the warm-up session.	1	2	3	4	5	
18. I can relate the lesson with the previous and following lessons.	1	2	3	4	5	
19. I can write clear instructions for different parts of the lesson plan.	1	2	3	4	5	
20. I can make use of various activities.	1	2	3	4	5	
21. I can use appropriate sources and materials for my students.	1	2	3	4	5	
22. I can forecast possible questions to be asked and provide their possible answers.	1	2	3	4	5	
23. I can explain the terms and concepts my students have difficulty in understanding.	1	2	3	4	5	
24. I can explain what should be done to clarify the terms and concepts my students have difficulty in understanding.	1	2	3	4	5	
25. I can make use of the target language considering my students' levels.	1	2	3	4	5	
26. I can motivate my students to learn.	1	2	3	4	5	
27. I can keep their motivation and interest alive.	1	2	3	4	5	
28. I can deal with almost any learning problems of the students.	1	2	3	4	5	
29. I have an understanding of how students develop and learn.	1	2	3	4	5	
30. I'm aware of the learning styles (visual, verbal, aural, logical, etc.) of my students.	1	2	3	4	5	
31. I know the learning strategies (using background knowledge, making predictions, summarizing, cooperating, etc.) of my students.	1	2	3	4	5	
32. I can make use of appropriate methods and techniques in the teaching process.	1	2	3	4	5	
I can make use of appropriate methods and techniques to improve students'	33. reading skills.	1	2	3	4	5
	34. writing skills.	1	2	3	4	5
	35. listening skills.	1	2	3	4	5
	36. speaking skills.	1	2	3	4	5
	37. vocabulary knowledge.	1	2	3	4	5
	38. knowledge of grammar.	1	2	3	4	5
	39. pronunciation.	1	2	3	4	5
40. I can make use of traditional teaching methods (Grammar Translation, Direct Method, etc.).	1	2	3	4	5	
41. I can make use of communicative approach in English language teaching to improve my students' communication skills.	1	2	3	4	5	
42. I can make use of an eclectic method (combining the techniques of many other methods and approaches).	1	2	3	4	5	

43. I can determine the aims of assessment practices.	1	2	3	4	5
44. I'm well informed about the uses of a wide variety of assessment strategies.	1	2	3	4	5
45. I can choose the methods of assessment which is appropriate for my students.	1	2	3	4	5
46. I can integrate all language skills while assessing the students' success.	1	2	3	4	5
47. I can give appropriate feedback according to the results of the measurement process.	1	2	3	4	5
48. I can reflect the results of the classroom assessment process to my future practices.	1	2	3	4	5

PART -3-: Please put a cross (X) into the box which is appropriate for you.

Never= 1	Rarely = 2	Sometimes = 3	Usually = 4	Always = 5		
Decide how often you can use the following means of assessment in order to assess your students' success.	49. Multiple-Choice Questions	1	2	3	4	5
	50. Short-Answer Questions	1	2	3	4	5
	51. True-False Questions	1	2	3	4	5
	52. Matching	1	2	3	4	5
	53. Completion	1	2	3	4	5
	54. Essay Tests	1	2	3	4	5
	* Please specify if there are any other techniques you would like to add:					
	55. Portfolios	1	2	3	4	5
	56. Projects	1	2	3	4	5
	57. Performance-based Assessment	1	2	3	4	5
	58. Self-assessment Questionnaires	1	2	3	4	5
	59. Checklists for Students' Behaviors	1	2	3	4	5
	60. Videos of Role Plays	1	2	3	4	5
* Please specify if there are any other techniques you would like to add:						

Thanks for your time.

Appendix 2

Piloting the Questionnaire

PILOTING THE QUESTIONNAIRE

1. How long did it take you to complete this questionnaire?

2. Were the instructions clear?

3. Were any of the questions / sentences unclear or ambiguous? If so, can you write which and why?

4. Are there any words or phrases that you want to be explained? If 'yes', can you please write them?

5. Did you object to answering any of the questions?

6. In your opinion, have any major topics been omitted? If 'yes', can you please write which topics should also be included in this questionnaire?

7. Was the layout of the questionnaire clear/attractive?

8. Do you have any comments?

(Adapted from Bell, 1993)

Appendix 3

Interview Questions

INTERVIEW SCHEDULE

Interviewer: Kürşat CESUR	Date:
Interviewee:	Duration:

Introduction

I'm having my PhD degree at the ELT department, Gazi University. I'm doing a research on "Examining Competencies of Prospective English Teachers through their Pedagogical Content Knowledge". I regard your answers as a valuable contribution to my study. The results of the study will shed light on your teaching competencies. In the analysis part of the study, your names will be kept confidential so you may express your ideas openly. This interview will nearly take 30-40 minutes. Thank you for your kind co-operation.

General Questions

1. Have you ever had any teaching experience except for the "School Experience" and "Teaching Practice" courses? Where, when and how long did you teach?
2. What is your Grade Point Average (GPA)?

Interview Questions

3. What skills and knowledge should an effective teacher of English have?
4. Could you please describe your first day at the ELT program and compare it with where you are right now?
5. What do you think it means for an English teacher to know English?
6. How did the lessons you took in the ELT department affect your Knowledge of English?
7. What were the important points you considered while preparing your lesson plan?
8. If you had a second chance to teach the same topic, what would you change, add or omit in your lesson plan?

- 9.** What difficulties did your students have during your teaching practice and what did you do to overcome these difficulties?
- 10.** What other methods and techniques could you make use of to teach the same lesson more effectively?
- 11.** How did you evaluate whether your students learned or not? What test techniques did you make use of while evaluating their comprehension?
- 12.** What other test techniques would you use if you had a second chance to teach the same topic?

Appendix 4

Lesson Plan Assessment Form

LESSON PLAN ASSESSMENT FORM

In this study, prospective language teachers' competencies are examined through their Pedagogical Content Knowledge. Thus, a "Lesson Plan Assessment Form" has been formed as planning lessons is a part of teachers' pedagogical content knowledge. This form aims to assess the competencies of prospective teachers in preparing effective lesson plans. If you have any further comments on their lesson plans, please specify them in the "Comment" part.

Prospective Teacher's Name:

Name of the Unit:

Duration of the Lesson:

Topic:

Please put a cross (X) into the box which is appropriate for you.										
He/She is		Poor = 1	Fair = 2	Satisfactory = 3	Good = 4	Excellent = 5				
							COMMENT			
1	explain the aims and the objectives of the lesson clearly.	1	2	3	4	5				
2	decide on appropriate teaching methods, techniques and strategies for the performance objectives of the lesson.	1	2	3	4	5				
3	forecast possible questions to be asked by the students and provide possible answers for them.	1	2	3	4	5				
4	define the terms and concepts that students may have difficulty to understand during the lesson.	1	2	3	4	5				
5	pinpoint what should be done to clarify these terms and concepts.	1	2	3	4	5				
6	design a set of activities/techniques helping the teacher achieve the aims and the objectives of the lesson.	1	2	3	4	5				
7	decide on the ways to make students ready for the lesson in the warm-up period.	1	2	3	4	5				
8	clearly explain how the activities should be done in the practice session.	1	2	3	4	5				
9	determine the appropriate teaching materials to be used during the lesson.	1	2	3	4	5				
10	decide on what is to be taught first according to the course content and students' levels.	1	2	3	4	5				
11	write clear instructions for different parts of the lesson plan.	1	2	3	4	5				
12	explain the ways to evaluate whether the students have learnt or not.	1	2	3	4	5				
13	make use of the limited time effectively.	1	2	3	4	5				

Appendix 5

Observation Procedure

Observer's Name: Kürşat CESUR	Date:
Prospective Teacher:	Duration:
Name of the Unit: Modern Medicine	

Purpose

The purpose of this observation is to determine how prospective English teachers use their pedagogical content knowledge in their teaching practices. Since “Teaching Practice” course is the first experience for most of the prospective teachers before they start working as English teachers, it is important to understand for their future career what is going on during their actual teaching practice. Their perceptions of their own competencies were investigated through a questionnaire and some significant differences were found out. Therefore, the following questions will both explain those differences occurring between the variables and provide guideline for classroom observation procedure.

1. To what extent does the prospective teacher apply his/her knowledge of phonology to his/her teaching practice?
2. How does the prospective teacher explain the terms and concepts that his/her students have difficulty in understanding?
3. What methods and techniques does he/she make use of to improve students' vocabulary knowledge while teaching?
4. To what extent can he/she make use of the eclectic method and combine the techniques of many other methods and approaches?
5. How does the prospective teacher evaluate and assess their students' comprehension after teaching?

Data Collection

Two lesson hours in which the prospective teachers were supposed to teach some vocabulary through a reading comprehension passage were observed by the researcher to explore their transfer of knowledge into teaching practice. Note taking and video camera recording were used to record classroom activities and teacher behavior during the lessons. Prospective teachers' knowledge of English, their knowledge on planning lessons, of the learners, on teaching methods and techniques, and on assessment were considered by the teacher during the observation.

Appendix 6
Written Permission Obtained from the Head of the Foreign Languages
Education Department



T.C.
ÇANAKKALE ONSEKİZ MART ÜNİVERSİTESİ
EĞİTİM FAKÜLTESİ
YABANCI DİLLER EĞİTİMİ BÖLÜMÜ

21.02.2012

SAYI: B.30.2.ÇAÜ.0.12.00.3/903-58

KONU: Araştırma İzni

Sayın: Kürşat CESUR

İlgi:17.02.2012 tarihli dilekçeniz.

Gazi Üniversitesi Eğitim Bilimleri Enstitüsü İngilizce Öğretmenliği programı 088164405 numaralı Doktora öğrencisi Kürşat CESUR'un başlığı "İngilizce Öğretmeni Adaylarının Yeterliklerinin Pedagojik Alan Bilgisi Açısından Değerlendirilmesi: Durum Çalışması" olan doktora tezinin önerisi ve çalışma planı incelenmiş olup, araştırmanın uygulama çalışmalarının ÇOMÜ Eğitim Fakültesi İngiliz Dili Eğitimi Anabilim Dalı öğrencilerine 2011-2012 Akademik Yılı Bahar Yarıyılında okutulan 404 kodlu "Öğretmenlik Uygulaması" dersinde yapılması uygun görülmüştür.

Gereğini bilgilerinize rica ederim.

Prof. Dr. Dinçay KÖKSAL
Yabancı Diller Eğitimi Bölüm Başkanı

Appendix 7

Explanation and Sample Coding System

ID	Name
1	Emrah
2	Filiz
3	Halil
	CODES
PK	Pedagogical knowledge
KE	Knowledge of English
KL	Knowledge of Learners
KTM	Knowledge of Teaching methods and techniques
KA	Knowledge of Assessment
KPL	Knowledge on Planning lessons

After transcribing the interviews, and writing down important findings from the observations and lesson plans, the researcher categorized the participants' responses for the ease of data management. Codes and subcodes were created from the transcriptions of the data depending on the research questions. All the data, codes and themes were transformed into Microsoft Excel 2010 which helped the researcher in his case and cross-case analysis. In the following table 'ID' stands for the name of the participants, 'Q' stands for the number of question in the interview.

ID	Q	Response	Code	Themes
1	4	Actually, except for knowing English, I have learned to teach. This was the best award I got here.	KE/PK	Importance of teaching
1	9	The most important problem for me in the lesson, students' proficiency levels were lower than expected in 7th grade students	KL	Students' proficiency levels
1	10	I think skimming, scanning, guessing the meaning are fundamental techniques, I cannot remember any others for teaching vocabulary with a reading passage.	KTM	Techniques used while Teaching
2	3	It is because ideal English classes should have interactive communication.	KE	Language for communication
2	7	First, I paid attention to the age and proficiency level of the students.	KL	Students' proficiency levels
2	11	I used summary, question and answer technique, matching activity to evaluate their understanding.	KA	Techniques used in testing
3	3	First of all, a teacher should know students' needs and should plan his / her lesson according to their needs.	KL/KPL	Students' needs
3	9	They had some problems about pronunciation while teaching the words and I modeled the words and had them repeat.	KL	Solving Problems
3	9	They found the questions, related to passage, difficult. I gave time to answer the questions but most of them could not do the questions for this reason we did them together	KL	Students' proficiency levels

Appendix 8
Frequency Table of the Items

Items	Disagree		Neutral		Agree		Total	
	n	Valid %	n	Valid %	n	Valid %	n	Valid %
Item 1	3	2,4	14	11,0	110	86,6	127	100
Item 2	3	2,4	16	12,6	108	85,0	127	100
Item 3	7	5,5	10	7,9	110	86,6	127	100
Item 4	2	1,6	7	5,5	18	92,9	127	100
Item 5	2	1,6	14	11,1	110	87,3	126	100
Item 6	3	2,4	23	18,1	101	79,5	127	100
Item 7	5	3,9	31	24,4	91	71,7	127	100
Item 8	6	4,7	29	22,8	92	72,4	127	100
Item 9	6	4,7	33	26,0	88	69,3	127	100
Item 10	20	15,9	39	31,0	67	53,2	126	100
Item 11	14	11,0	34	26,8	79	62,2	127	100
Item 12	9	7,1	39	30,7	79	62,2	127	100
Item 13	5	3,9	12	9,4	110	86,6	127	100
Item 14	1	0,8	4	3,1	122	96,1	127	100
Item 15	4	3,1	13	10,2	110	86,6	127	100
Item 16	2	1,6	6	4,7	119	93,7	127	100
Item 17	1	0,8	9	7,1	117	92,1	127	100
Item 18	1	0,8	6	4,7	120	94,5	127	100
Item 19	2	1,6	3	2,4	122	96,1	127	100
Item 20	1	0,8	6	4,8	119	94,4	126	100
Item 21	2	1,6	1	0,8	124	97,6	127	100
Item 22	2	1,6	24	18,9	101	79,5	127	100
Item 23	3	2,4	12	9,4	122	88,2	127	100
Item 24	1	0,8	16	12,7	109	86,5	126	100
Item 25	3	2,4	10	7,9	114	89,8	127	100
Item 26	2	1,6	10	7,9	114	90,5	126	100
Item 27	3	2,4	11	8,7	113	89,0	127	100
Item 28	11	8,7	30	23,6	86	67,7	127	100
Item 29	2	1,6	12	9,5	112	89,9	126	100
Item 30	2	1,6	8	6,3	116	92,1	126	100
Item 31	2	1,6	11	8,7	114	89,8	127	100
Item 32	2	1,6	9	7,4	111	91,0	122	100
Item 33	3	2,4	9	7,1	115	90,6	127	100

Items	Disagree		Neutral		Agree		Total	
	n	Valid %	n	Valid %	n	Valid %	n	Valid %
Item 34	4	3,1	26	20,5	97	76,4	127	100
Item 35	3	2,4	20	15,7	104	81,9	127	100
Item 36	4	3,1	22	17,3	101	79,5	127	100
Item 37	2	1,6	4	3,1	121	95,3	127	100
Item 38	2	1,6	7	5,5	118	92,9	127	100
Item 39	6	4,8	22	17,5	98	77,8	126	100
Item 40	20	15,7	33	26,0	74	58,3	127	100
Item 41	2	1,6	10	7,9	115	90,6	127	100
Item 42	2	1,6	16	12,6	109	85,8	127	100
Item 43	6	4,7	15	11,8	106	83,5	127	100
Item 44	12	9,4	32	25,2	83	65,4	127	100
Item 45	5	4,0	23	18,3	98	77,8	126	100
Item 46	5	3,9	18	14,2	104	81,9	127	100
Item 47	2	1,6	10	7,9	115	90,6	127	100
Item 48	2	1,6	7	5,5	118	92,9	127	100

Frequency Table of the Test Techniques

Test Types	Never		Rarely		Sometimes		Usually		Always		Total	
	n	Valid %	n	Valid %	n	Valid %	n	Valid %	n	Valid %	n	Valid %
Item 49	3	2,4	13	10,2	35	27,6	41	32,3	35	27,6	127	100
Item 50	3	2,4	9	7,1	44	34,6	45	35,4	26	20,5	127	100
Item 51	3	2,4	13	10,2	38	29,9	50	39,4	23	18,1	127	100
Item 52	1	0,8	6	4,7	26	20,5	48	37,8	46	36,2	127	100
Item 53	6	4,7	5	3,9	24	18,9	58	45,7	34	26,8	127	100
Item 54	7	5,5	23	18,1	41	32,3	37	29,1	19	15,0	127	100
Item 55	9	7,1	9	7,1	26	20,5	45	35,4	38	29,9	127	100
Item 56	5	3,9	3	2,4	21	16,5	48	37,8	50	39,4	127	100
Item 57	3	2,4	3	2,4	21	16,5	42	33,1	58	45,7	127	100
Item 58	1	0,8	11	8,7	35	27,6	50	39,4	30	23,6	127	100
Item 59	5	3,9	11	8,7	39	30,7	43	33,9	29	22,8	127	100
Item 60	2	1,6	10	7,9	23	18,3	41	32,5	50	39,7	126	100

Appendix 9

Mann-Whitney U Test Results Based on Participants' Gender

Items	Gender	N	Mean Rank	Sum of Ranks	U	P
Item 1	Male	28	62,82	1759,00	1353,000	,826
	Female	99	64,33	6369,00		
Item 2	Male	28	67,55	1891,50	1286,500	,511
	Female	99	62,99	6236,50		
Item 3	Male	28	60,86	1704,00	1298,000	,563
	Female	99	64,89	6424,00		
Item 4	Male	28	57,68	1615,00	1209,000	,245
	Female	99	65,79	6513,00		
Item 5	Male	28	60,93	1706,00	1300,000	,639
	Female	98	64,23	6295,00		
Item 6	Male	28	59,66	1670,50	1264,500	,436
	Female	99	65,23	6457,50		
Item 7	Male	28	67,88	1900,50	1277,500	,497
	Female	99	62,90	6227,50		
Item 8	Male	28	64,46	1805,00	1373,000	,935
	Female	99	63,87	6323,00		
Item 9	Male	28	65,21	1826,00	1352,000	,832
	Female	99	63,66	6302,00		
Item 10	Male	28	64,52	1806,50	1343,500	,859
	Female	98	63,21	6194,50		
Item 11	Male	28	65,36	1830,00	1348,000	,814
	Female	99	63,62	6298,00		
Item 12	Male	28	67,82	1899,00	1279,000	,493
	Female	99	62,92	6229,00		
Item 13	Male	28	72,79	2038,00	1140,000	,114
	Female	99	61,52	6090,00		
Item 14	Male	28	57,66	1614,50	1208,500	,234
	Female	99	65,79	6513,50		
Item 15	Male	28	53,25	1491,00	1085,000	,053
	Female	99	67,04	6637,00		
Item 16	Male	28	61,98	1735,50	1329,500	,712
	Female	99	64,57	6392,50		
Item 17	Male	28	62,04	1737,00	1331,000	,720
	Female	99	64,56	6391,00		
Item 18	Male	28	64,88	1816,50	1361,500	,872
	Female	99	63,75	6311,50		
Item 19	Male	28	59,77	1673,50	1267,500	,419
	Female	99	65,20	6454,50		
Item 20	Male	28	55,68	1559,00	1153,000	,134
	Female	98	65,73	6442,00		

*p <.05

Items	Gender	N	Mean Rank	Sum of Ranks	U	P
Item 21	Male	28	60,54	1695,00	1289,000	,505
	Female	99	64,98	6433,00		
Item 22	Male	28	66,48	1861,50	1316,500	,650
	Female	99	63,30	6266,50		
Item 23	Male	28	63,88	1788,50	1382,500	,982
	Female	99	64,04	6339,50		
Item 24	Male	28	67,96	1903,00	1247,000	,415
	Female	98	62,22	6098,00		
Item 25	Male	28	65,82	1843,00	1335,000	,743
	Female	99	63,48	6285,00		
Item 26	Male	28	61,18	1713,00	1307,000	,660
	Female	98	64,16	6288,00		
Item 27	Male	28	66,66	1866,50	1311,500	,632
	Female	99	63,25	6261,50		
Item 28	Male	28	65,20	1825,50	1352,500	,835
	Female	99	63,66	6302,50		
Item 29	Male	28	63,41	1775,50	1369,500	,987
	Female	98	63,53	6225,50		
Item 30	Male	28	64,93	1818,00	1332,000	,788
	Female	98	63,09	6183,00		
Item 31	Male	28	65,54	1835,00	1343,000	,782
	Female	99	63,57	6293,00		
Item 32	Male	28	52,75	1477,00	1071,000	,090
	Female	94	64,11	6026,00		
Item 33	Male	28	63,05	1765,50	1359,500	,864
	Female	99	64,27	6362,50		
Item 34	Male	28	63,54	1779,00	1373,000	,935
	Female	99	64,13	6349,00		
Item 35	Male	28	67,82	1899,00	1279,000	,500
	Female	99	62,92	6229,00		
Item 36	Male	28	69,54	1947,00	1231,000	,328
	Female	99	62,43	6181,00		
Item 37	Male	28	71,21	1994,00	1184,000	,169
	Female	99	61,96	6134,00		
Item 38	Male	28	70,32	1969,00	1209,000	,228
	Female	99	62,21	6159,00		
Item 39	Male	28	68,93	1930,00	1220,000	,336
	Female	98	61,95	6071,00		
Item 40	Male	28	67,52	1890,50	1287,500	,552
	Female	99	63,01	6237,50		

*p < .05

Items	Gender	N	Mean Rank	Sum of Ranks	U	P
Item 41	Male	28	63,80	1786,50	1380,500	,972
	Female	99	64,06	6341,50		
Item 42	Male	28	56,64	1586,00	1180,000	,187
	Female	99	66,08	6542,00		
Item 43	Male	28	70,77	1981,50	1196,500	,203
	Female	99	62,09	6146,50		
Item 44	Male	28	55,77	1561,50	1155,500	,151
	Female	99	66,33	6566,50		
Item 45	Male	27	62,89	1698,00	1320,000	,915
	Female	99	63,67	6303,00		
Item 46	Male	28	55,71	1560,00	1154,000	,141
	Female	99	66,34	6568,00		
Item 47	Male	28	64,25	1799,00	1379,000	,964
	Female	99	63,93	6329,00		
Item 48	Male	28	61,71	1728,00	1322,000	,676
	Female	99	64,65	6400,00		
Item 49	Male	28	64,00	1792,00	1386,000	1,000
	Female	99	64,00	6336,00		
Item 50	Male	28	68,61	1921,00	1257,000	,430
	Female	99	62,70	6207,00		
Item 51	Male	28	65,73	1840,50	1337,500	,767
	Female	99	63,51	6287,50		
Item 52	Male	28	59,21	1658,00	1252,000	,409
	Female	99	65,35	6470,00		
Item 53	Male	28	56,50	1582,00	1176,000	,193
	Female	99	66,12	6546,00		
Item 54	Male	28	55,21	1546,00	1140,000	,138
	Female	99	66,48	6582,00		
Item 55	Male	28	56,18	1573,00	1167,000	,184
	Female	99	66,21	6555,00		
Item 56	Male	28	55,98	1567,50	1161,500	,164
	Female	99	66,27	6560,50		
Item 57	Male	28	48,00	1344,00	938,000	,005
	Female	99	68,53	6784,00		
Item 58	Male	28	54,29	1520,00	1114,000	,096
	Female	99	66,75	6608,00		
Item 59	Male	28	55,36	1550,00	1144,000	,142
	Female	99	66,44	6578,00		
Item 60	Male	28	63,63	1781,50	1368,500	,983
	Female	98	63,46	6219,50		

*p < .05

Appendix 10

Mann-Whitney U Test Results Based on Participants' GPA

Items	GPA	N	Mean Rank	Sum of Ranks	U	P
Item 1	3.00 and Above	22	76,41	1681,00	882,000	,047
	Between 2.00 and 2.99	105	61,40	6447,00		
Item 2	3.00 and Above	22	67,98	1495,50	1067,500	,526
	Between 2.00 and 2.99	105	63,17	6632,50		
Item 3	3.00 and Above	22	65,84	1448,50	1114,500	,771
	Between 2.00 and 2.99	105	63,61	6679,50		
Item 4	3.00 and Above	22	58,86	1295,00	1042,000	,417
	Between 2.00 and 2.99	105	65,08	6833,00		
Item 5	3.00 and Above	22	62,23	1369,00	1116,000	,842
	Between 2.00 and 2.99	104	63,77	6632,00		
Item 6	3.00 and Above	22	65,77	1447,00	1116,000	,784
	Between 2.00 and 2.99	105	63,63	6681,00		
Item 7	3.00 and Above	22	60,61	1333,50	1080,500	,609
	Between 2.00 and 2.99	105	64,71	6794,50		
Item 8	3.00 and Above	22	65,27	1436,00	1127,000	,847
	Between 2.00 and 2.99	105	63,73	6692,00		
Item 9	3.00 and Above	22	59,39	1306,50	1053,500	,488
	Between 2.00 and 2.99	105	64,97	6821,50		
Item 10	3.00 and Above	22	71,77	1579,00	962,000	,215
	Between 2.00 and 2.99	104	61,75	6422,00		
Item 11	3.00 and Above	22	67,16	1477,50	1085,500	,638
	Between 2.00 and 2.99	105	63,34	6650,50		
Item 12	3.00 and Above	22	56,25	1237,50	984,500	,231
	Between 2.00 and 2.99	105	65,62	6890,50		
Item 13	3.00 and Above	22	57,25	1259,50	1006,500	,296
	Between 2.00 and 2.99	105	65,41	6868,50		
Item 14	3.00 and Above	22	63,27	1392,00	1139,000	,906
	Between 2.00 and 2.99	105	64,15	6736,00		
Item 15	3.00 and Above	22	61,91	1362,00	1109,000	,746
	Between 2.00 and 2.99	105	64,44	6766,00		
Item 16	3.00 and Above	22	68,75	1512,50	1050,500	,455
	Between 2.00 and 2.99	105	63,00	6615,50		
Item 17	3.00 and Above	22	65,25	1435,50	1127,500	,844
	Between 2.00 and 2.99	105	63,74	6692,50		
Item 18	3.00 and Above	22	64,57	1420,50	1142,500	,928
	Between 2.00 and 2.99	105	63,88	6707,50		
Item 19	3.00 and Above	22	63,55	1398,00	1145,000	,940
	Between 2.00 and 2.99	105	64,10	6730,00		
Item 20	3.00 and Above	22	63,66	1400,50	1140,500	,979
	Between 2.00 and 2.99	104	63,47	6600,50		

*p < .05

Items	GPA	N	Mean Rank	Sum of Ranks	U	P
Item 21	3.00 and Above	22	62,64	1378,00	1125,000	,821
	Between 2.00 and 2.99	105	64,29	6750,00		
Item 22	3.00 and Above	22	63,36	1394,00	1141,000	,920
	Between 2.00 and 2.99	105	64,13	6734,00		
Item 23	3.00 and Above	22	69,64	1532,00	1031,000	,380
	Between 2.00 and 2.99	105	62,82	6596,00		
Item 24	3.00 and Above	22	72,00	1584,00	957,000	,182
	Between 2.00 and 2.99	104	61,70	6417,00		
Item 25	3.00 and Above	22	64,64	1422,00	1141,000	,921
	Between 2.00 and 2.99	105	63,87	6706,00		
Item 26	3.00 and Above	22	61,91	1362,00	1109,000	,795
	Between 2.00 and 2.99	104	63,84	6639,00		
Item 27	3.00 and Above	22	58,45	1286,00	1033,000	,390
	Between 2.00 and 2.99	105	65,16	6842,00		
Item 28	3.00 and Above	22	66,75	1468,50	1094,500	,681
	Between 2.00 and 2.99	105	63,42	6659,50		
Item 29	3.00 and Above	22	59,86	1317,00	1064,000	,559
	Between 2.00 and 2.99	104	64,27	6684,00		
Item 30	3.00 and Above	22	75,18	1654,00	887,000	,058
	Between 2.00 and 2.99	104	61,03	6347,00		
Item 31	3.00 and Above	22	70,59	1553,00	1010,000	,306
	Between 2.00 and 2.99	105	62,62	6575,00		
Item 32	3.00 and Above	22	62,36	1372,00	1081,000	,886
	Between 2.00 and 2.99	100	61,31	6131,00		
Item 33	3.00 and Above	22	73,48	1616,50	946,500	,141
	Between 2.00 and 2.99	105	62,01	6511,50		
Item 34	3.00 and Above	22	75,30	1656,50	906,500	,090
	Between 2.00 and 2.99	105	61,63	6471,50		
Item 35	3.00 and Above	22	67,66	1488,50	1074,500	,578
	Between 2.00 and 2.99	105	63,23	6639,50		
Item 36	3.00 and Above	22	60,95	1341,00	1088,000	,643
	Between 2.00 and 2.99	105	64,64	6787,00		
Item 37	3.00 and Above	22	79,18	1742,00	821,000	,013
	Between 2.00 and 2.99	105	60,82	6386,00		
Item 38	3.00 and Above	22	73,55	1618,00	945,000	,117
	Between 2.00 and 2.99	105	62,00	6510,00		
Item 39	3.00 and Above	22	70,73	1556,00	985,000	,270
	Between 2.00 and 2.99	104	61,97	6445,00		
Item 40	3.00 and Above	22	71,55	1574,00	989,000	,272
	Between 2.00 and 2.99	105	62,42	6554,00		

*p < .05

Items	GPA	N	Mean Rank	Sum of Ranks	U	P
Item 41	3.00 and Above	22	68,18	1500,00	1063,000	,513
	Between 2.00 and 2.99	105	63,12	6628,00		
Item 42	3.00 and Above	22	78,16	1719,50	843,500	,029
	Between 2.00 and 2.99	105	61,03	6408,50		
Item 43	3.00 and Above	22	59,95	1319,00	1066,000	,512
	Between 2.00 and 2.99	105	64,85	6809,00		
Item 44	3.00 and Above	22	63,61	1399,50	1146,500	,954
	Between 2.00 and 2.99	105	64,08	6728,50		
Item 45	3.00 and Above	22	55,23	1215,00	962,000	,204
	Between 2.00 and 2.99	104	65,25	6786,00		
Item 46	3.00 and Above	22	61,75	1358,50	1105,500	,730
	Between 2.00 and 2.99	105	64,47	6769,50		
Item 47	3.00 and Above	22	63,86	1405,00	1152,000	,983
	Between 2.00 and 2.99	105	64,03	6723,00		
Item 48	3.00 and Above	22	63,48	1396,50	1143,500	,935
	Between 2.00 and 2.99	105	64,11	6731,50		
Item 49	3.00 and Above	22	61,00	1342,00	1089,000	,662
	Between 2.00 and 2.99	105	64,63	6786,00		
Item 50	3.00 and Above	22	64,43	1417,50	1145,500	,949
	Between 2.00 and 2.99	105	63,91	6710,50		
Item 51	3.00 and Above	22	71,14	1565,00	998,000	,293
	Between 2.00 and 2.99	105	62,50	6563,00		
Item 52	3.00 and Above	22	59,68	1313,00	1060,000	,521
	Between 2.00 and 2.99	105	64,90	6815,00		
Item 53	3.00 and Above	22	74,00	1628,00	935,000	,135
	Between 2.00 and 2.99	105	61,90	6500,00		
Item 54	3.00 and Above	22	77,91	1714,00	849,000	,043
	Between 2.00 and 2.99	105	61,09	6414,00		
Item 55	3.00 and Above	22	84,80	1865,50	697,500	,002
	Between 2.00 and 2.99	105	59,64	6262,50		
Item 56	3.00 and Above	22	74,80	1645,50	917,500	,107
	Between 2.00 and 2.99	105	61,74	6482,50		
Item 57	3.00 and Above	22	83,43	1835,50	727,500	,003
	Between 2.00 and 2.99	105	59,93	6292,50		
Item 58	3.00 and Above	22	78,27	1722,00	841,000	,035
	Between 2.00 and 2.99	105	61,01	6406,00		
Item 59	3.00 and Above	22	79,41	1747,00	816,000	,024
	Between 2.00 and 2.99	105	60,77	6381,00		
Item 60	3.00 and Above	22	68,66	1510,50	1030,500	,441
	Between 2.00 and 2.99	104	62,41	6490,50		

*p <.05

Appendix 11

Mann-Whitney U Test Results Based on Participants' Teaching Experience

Items	Teaching Experience	N	Mean Rank	Sum of Ranks	U	P
Item 1	NO	53	57,92	3069,50	1638,500	,071
	YES	74	68,36	5058,50		
Item 2	NO	53	60,82	3223,50	1792,500	,349
	YES	74	66,28	4904,50		
Item 3	NO	53	61,53	3261,00	1830,000	,470
	YES	74	65,77	4867,00		
Item 4	NO	53	60,23	3192,00	1761,000	,270
	YES	74	66,70	4936,00		
Item 5	NO	53	63,04	3341,00	1910,000	,893
	YES	73	63,84	4660,00		
Item 6	NO	53	63,29	3354,50	1923,500	,840
	YES	74	64,51	4773,50		
Item 7	NO	53	64,11	3398,00	1955,000	,975
	YES	74	63,92	4730,00		
Item 8	NO	53	57,67	3056,50	1625,500	,075
	YES	74	68,53	5071,50		
Item 9	NO	53	57,05	3023,50	1592,500	,053
	YES	74	68,98	5104,50		
Item 10	NO	53	65,67	3480,50	1819,500	,547
	YES	73	61,92	4520,50		
Item 11	NO	53	63,55	3368,00	1937,000	,901
	YES	74	64,32	4760,00		
Item 12	NO	53	60,47	3205,00	1774,000	,314
	YES	74	66,53	4923,00		
Item 13	NO	53	60,93	3229,50	1798,500	,380
	YES	74	66,20	4898,50		
Item 14	NO	53	66,98	3550,00	1803,000	,373
	YES	74	61,86	4578,00		
Item 15	NO	53	68,27	3618,50	1734,500	,221
	YES	74	60,94	4509,50		
Item 16	NO	53	66,92	3547,00	1806,000	,395
	YES	74	61,91	4581,00		
Item 17	NO	53	59,69	3163,50	1732,500	,210
	YES	74	67,09	4964,50		
Item 18	NO	53	66,57	3528,00	1825,000	,454
	YES	74	62,16	4600,00		
Item 19	NO	53	66,63	3531,50	1821,500	,424
	YES	74	62,11	4596,50		
Item 20	NO	53	64,19	3402,00	1898,000	,833
	YES	73	63,00	4599,00		

*p < .05

Items	Teaching Experience	N	Mean Rank	Sum of Ranks	U	P
Item 21	NO	53	64,60	3424,00	1929,000	,853
	YES	74	63,57	4704,00		
Item 22	NO	53	72,72	3854,00	1499,000	,011
	YES	74	57,76	4274,00		
Item 23	NO	53	72,15	3824,00	1529,000	,019
	YES	74	58,16	4304,00		
Item 24	NO	53	72,01	3816,50	1483,500	,013
	YES	73	57,32	4184,50		
Item 25	NO	53	63,42	3361,50	1930,500	,869
	YES	74	64,41	4766,50		
Item 26	NO	53	65,70	3482,00	1818,000	,507
	YES	73	61,90	4519,00		
Item 27	NO	53	64,09	3397,00	1956,000	,978
	YES	74	63,93	4731,00		
Item 28	NO	53	69,50	3683,50	1669,500	,128
	YES	74	60,06	4444,50		
Item 29	NO	53	67,87	3597,00	1703,000	,194
	YES	73	60,33	4404,00		
Item 30	NO	52	61,92	3220,00	1842,000	,641
	YES	74	64,61	4781,00		
Item 31	NO	53	60,67	3215,50	1784,500	,339
	YES	74	66,39	4912,50		
Item 32	NO	51	58,95	3006,50	1680,500	,443
	YES	71	63,33	4496,50		
Item 33	NO	53	68,42	3626,50	1726,500	,204
	YES	74	60,83	4501,50		
Item 34	NO	53	68,50	3630,50	1722,500	,212
	YES	74	60,78	4497,50		
Item 35	NO	53	64,93	3441,50	1911,500	,793
	YES	74	63,33	4686,50		
Item 36	NO	53	66,32	3515,00	1838,000	,514
	YES	74	62,34	4613,00		
Item 37	NO	53	65,48	3470,50	1882,500	,653
	YES	74	62,94	4657,50		
Item 38	NO	53	63,24	3351,50	1920,500	,817
	YES	74	64,55	4776,50		
Item 39	NO	52	62,92	3272,00	1894,000	,873
	YES	74	63,91	4729,00		
Item 40	NO	53	68,12	3610,50	1742,500	,268
	YES	74	61,05	4517,50		

*p < .05

Items	Teaching Experience	N	Mean Rank	Sum of Ranks	U	P
Item 41	NO	53	67,22	3562,50	1790,500	,352
	YES	74	61,70	4565,50		
Item 42	NO	53	67,08	3555,00	1798,000	,380
	YES	74	61,80	4573,00		
Item 43	NO	53	69,38	3677,00	1676,000	,107
	YES	74	60,15	4451,00		
Item 44	NO	53	66,25	3511,50	1841,500	,532
	YES	74	62,39	4616,50		
Item 45	NO	53	64,63	3425,50	1874,500	,747
	YES	73	62,68	4575,50		
Item 46	NO	53	63,75	3379,00	1948,000	,945
	YES	74	64,18	4749,00		
Item 47	NO	53	69,84	3701,50	1651,500	,090
	YES	74	59,82	4426,50		
Item 48	NO	53	67,91	3599,00	1754,000	,256
	YES	74	61,20	4529,00		
Item 49	NO	53	56,15	2976,00	1545,000	,034
	YES	74	69,62	5152,00		
Item 50	NO	53	67,74	3590,00	1763,000	,309
	YES	74	61,32	4538,00		
Item 51	NO	53	61,71	3270,50	1839,500	,532
	YES	74	65,64	4857,50		
Item 52	NO	53	52,72	2794,00	1363,000	,002
	YES	74	72,08	5334,00		
Item 53	NO	53	60,76	3220,50	1789,500	,371
	YES	74	66,32	4907,50		
Item 54	NO	53	66,28	3513,00	1840,000	,540
	YES	74	62,36	4615,00		
Item 55	NO	53	60,96	3231,00	1800,000	,412
	YES	74	66,18	4897,00		
Item 56	NO	53	62,85	3331,00	1900,000	,751
	YES	74	64,82	4797,00		
Item 57	NO	53	66,64	3532,00	1821,000	,462
	YES	74	62,11	4596,00		
Item 58	NO	53	60,12	3186,50	1755,500	,291
	YES	74	66,78	4941,50		
Item 59	NO	53	62,06	3289,00	1858,000	,600
	YES	74	65,39	4839,00		
Item 60	NO	52	62,63	3256,50	1878,500	,812
	YES	74	64,11	4744,50		

*p < .05

Appendix 12

Reading Comprehension Passage: 'Miracles of Medicine'

A. Reading and Speaking

a. Look at the pictures. What's the matter with them? Write sentences under the pictures.



He has a toothache.



b. Read the text. Did drugs save the doctor's life?



MIRACLES OF MEDICINE

What's the value of life?

Unfortunately, we ignore that question until we get sick.

Modern medicine allows patients to live longer, to be healthier and to have more productive lives. Who doesn't want to beat cancer, to get lower his / her blood pressure or to control his / her diabetes? Nobody, of course.

Over a year ago, I had an extensive cancer surgery. I began a long series of difficult chemotherapy and radiation treatments. When I was very ill, I had the worst days in my life.

Miraculously, a new cancer drug saved my life. I was like a new-born baby. Innovations in medicine improve the survival rate of cancer. The survival rate of cancer was 10 % over the past 20 years. Today, it is 62 %. The drugs make the cancer a treatable disease.

Every day, some patients wait for a new miracle anxiously. It could be your son or your father. With every new medicine, we save lives and improve the quality of life for countless people. Our mission is to increase the awareness of patients.

What's the value of life? For us, it is priceless.

c. Answer the questions.

1. What does modern medicine give us?

It gives us a long healthy and more productive life.

2. What were the doctor's treatments?

3. What saved the doctor's life?

4. How did the doctor feel when he recovered?

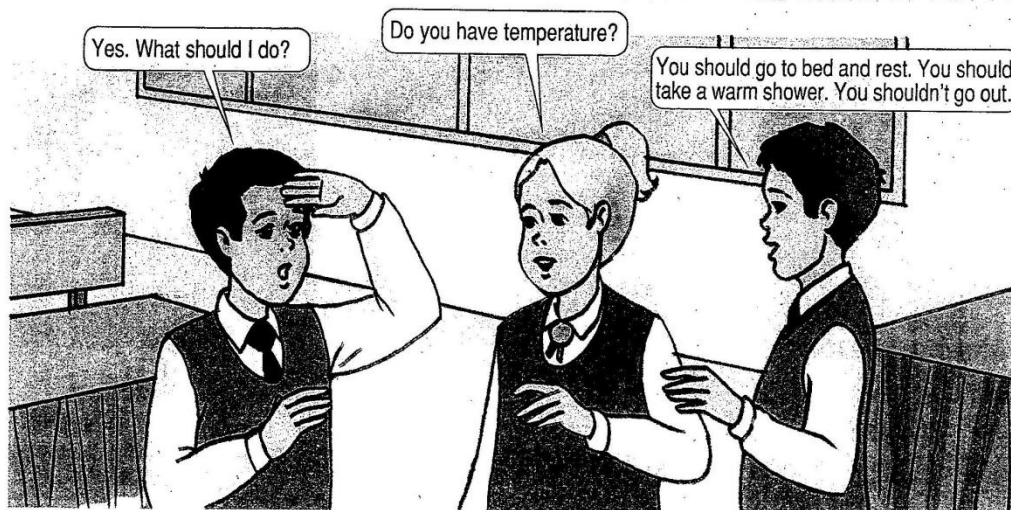
5. What was the survival rate of cancer 20 years ago?

6. What is doctors' mission?

d. Match the words with their definitions.

- | | |
|---------------|--|
| 1. to beat | a. the introduction of new things or new ways of doing something |
| 2. innovation | b. valuable |
| 3. treatable | c. wonderful or surprising event |
| 4. miracle | d. to defeat someone or something |
| 5. save | e. innumerable |
| 6. countless | f. help someone to avoid harmful situations |
| 7. priceless | g. curable |

e. Work in groups. Choose an illness and mime it. Your friends guess your illness and give advice.

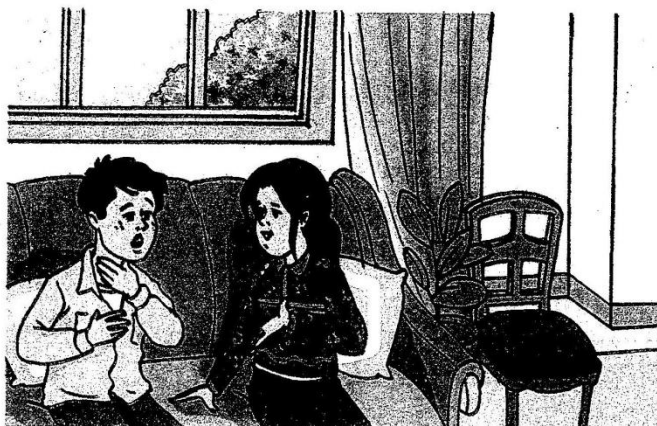


B. Speaking

Work in pairs. Look at Card A or Card B. Card B is on page 172. Make a dialogue and act it out.

CARD A

You are ill. You have a sore throat. Your partner gives you some advice. Here is the information about you: You don't like cold water and you never drink it. You don't like ice-cream and you never eat it. You are afraid of doctors. You don't want to see a doctor, but accept to see a doctor.



Unit 15 MODERN MEDICINE
Miracles

A Look at the pictures. Circle the correct sentences.

- 

a. I have a headache.
b. I have a toothache.
- 

a. I have an earache.
b. I have a backache.
- 

a. I have a sore throat.
b. I have the flu.
- 

a. I have a headache.
b. I have a temperature.
- 

a. I have a toothache.
b. I have the measles.
- 

a. I have an earache.
b. I have the flu.

B Match the advice with the illnesses in activity A.

1. You should see a dentist. 2. You should drink warm milk. 3. You shouldn't listen to loud music.

4. You should have a warm shower. 5. You should sleep for a while. 6. You shouldn't carry heavy things.

C Match the questions with the answers.

What's the matter with you?
How are you?
How can I help you?
Does your leg hurt?
When did the pain start?
Can you follow a diet program?

I'd like to see a doctor, please.
Yes, it does.
I'm doing fine.
I don't feel well today.
Yes, I can.
I have a headache.

D "A healthy mind is in a healthy body." What do you understand from that sentence? Write a paragraph about it.



E Complete them with your own sentences.

- If you eat less fast food, ...
- If you do exercise regularly, ...
- If you are overweight, ...
- If you have a backache, ...
- If you play computer games so often, ...
- If you drink too much fatty drinks, ...
- If you have a sore throat, ...

F Look at the list about Juliet. Write her eating habits and daily routines.



Eating habits		Daily routines
Likes	Dislikes	sleep 12 hours a day
hamburger	fish	no breakfast
chocolate cake	milk	work as a secretary
ice-cream	vegetables	play computer games all evenings
chips		
coffee		

G Look at the pictures. Put them in an order. Write a story for Michael.



Appendix 13

Sample Interview

INTERVIEW SCHEDULE

Interviewer: Kürşat CESUR	Date: 15.05.2012
Interviewee: Filiz Ersoy	Duration: 30 min.

Introduction

I'm having my PhD degree at the ELT department, Gazi University. I'm doing a research on "Examining Competencies of Prospective English Teachers through their Pedagogical Content Knowledge". I regard your answers as a valuable contribution to my study. The results of the study will shed light on your teaching competencies. In the analysis part of the study, your names will be kept confidential so you may express your ideas openly. This interview will nearly take 30-40 minutes. Thank you for your kind co-operation.

General Questions

1. Have you ever had any teaching experience except for the "School Experience" and "Teaching Practice" courses? Where, when and how long did you teach?

Filiz: Yes, I gave private lessons to students for a few months and I taught English to a group of primary school students for the requirements of the course named 'Community Service'.

2. What is your Grade Point Average (GPA)?

Filiz: 3,01

Interview Questions

3. What skills and knowledge should an effective teacher of English have?

Filiz: All the four skills are important. However, especially speaking and listening are significant to be an effective English teacher. It is because ideal English classes should have interactive communication. Some grammar, vocabulary and general world knowledge are also essential for teaching English.

4. Could you please describe your first day at the ELT program and compare it with where you are right now?

Filiz: My first impression was that being an English teacher required knowing so much academic language, understanding long sentences, using formal language and so on. I sometimes thought that there was no need to know so much theoretical knowledge as I thought that I would never use them in real classes. However, after a few years later I changed my mind as I unconsciously began to use this theoretical knowledge in real life. Even so, at the moment I believe that if we had a chance to put the theoretical knowledge into practice as soon as we have just learned it, it could be much more permanent and efficient.

5. What do you think it means for an English teacher to know English?

Filiz: Knowing English means for English teachers to be able to use and improve their pedagogical knowledge because a person who does not know English cannot transfer what he or she knows to their students and cannot make progress him/herself in the area. If the teachers know English, they can overcome the unexpected problems and create new opportunities for the students. But, it also depends how much experienced the teacher is.

6. How did the lessons you took in the ELT department affect your Knowledge of English?

Filiz: Firstly I improved my reading skill. As our lecturers had recommended many books, I read them at least two or three times. Therefore, this affected the other skills of mine. For example, although I have not had a chance to practise speaking English for four years, I am better at speaking when compared to the previous years. As for pedagogical knowledge, I learned both practical and theoretical knowledge especially in teaching skills lesson. This lesson included so much useful knowledge that I thought that it would be better to have it more than a year. Now, I am more confident in myself as an English teacher of future. However, I need to be more experienced to develop new and creative activities and to be able to use variety of techniques and methods in ELT.

7. What were the important points you considered while preparing your lesson plan?

Filiz: First of all, I paid attention to the age and proficiency level of the students. I tried to activate them with questions. I also found a video and prepared some ppts (PowerPoint Presentation) to activate their background knowledge. These were essential because without the activation it would be impossible for them to comprehend the text. I planned to teach unknown words in pre-teaching and while reading sections to have them do the following activities.

8. If you had a second chance to teach the same topic, what would you change, add or omit in your lesson plan?

Filiz: If I had a second chance to teach the same topic, firstly I would be more careful about time management. Within the first forty minutes, I was faster than I had expected and so I tried to be slower for the other lesson. Moreover, before the guessing activity I planned to pre-teach the new words. However, as the students were familiar with the words I was surprised a bit and forgot to teach them. When I saw the word, decrease (the word I added to the guessing activity), I remembered that I skipped that part and I returned that section. After I pre-thought the targeted words, they could correct their mistake in the guessing activity. I would apply erase and elicit technique and have them do more repetition at that moment, but any problem did not occur in while reading part about these words. In while activity section, in the second activity I tried to prepare clear and simple definitions for them, but the matching of medicine= treatment was a bit problematic as there was treatment at the other section. It caused confusion. At the post reading section, the electricity went off, so I could not show them the answers on the ppt. As for follow-up unfortunately, I took the photocopies of the answer key of mine for the fill in the blanks activity. Therefore, I had to change it to a translation activity. Lastly, if I had a few more minutes I would do the last summary. Fortunately, I got necessary feedback and had them do summary in post-reading activity. I have found the lesson enjoyable and efficient thanks to their participation and attention.

9. What difficulties did your students have during your teaching practice and what did you do to overcome these difficulties?

Filiz: I think they were better at guessing the words and understanding the topic than I had expected. When they did not understand some parts, I gave some clues and they overcame the difficulties fortunately.

10. What other methods and techniques could you make use of to teach the same lesson more effectively?

Filiz: I used question and answer, skimming and guessing, repetition, discussion techniques during the lesson. I do not remember any other techniques to be used. I best made use of the ones I know and think that they were enough to teach the new vocabulary items.

11. How did you evaluate whether your students learned or not? What test techniques did you make use of while evaluating their comprehension?

Filiz: I used summary, question and answer technique, matching and gap filling activity to evaluate their understanding.

12. What other test techniques would you use if you had a second chance to teach the same topic?

Filiz: I would use sentence completion, multiple choice and essay questions to teach the same topic. Some word games would be also enjoyable to teach.

Appendix 14

Sample Lesson Plan

Student Teacher: Filiz Ersoy

Date of presentation: 09 May 2012

School: Turgut Reis İlköğretim Okulu

Time: 80 min.

Class: 7

Class level: Intermediate

Topic: Modern medicine

Aim(s):

Cognitive

- 1) Guessing the title of the text
- 2) Guessing the facts about the text before reading
- 3) Skimming the text to check the guesses
- 4) Deducing the meaning of unknown words.
- 5) Understanding specific information in the text.
- 6) Discriminate the meanings of words via reading

Socio-Affective

- 7) Speaking in the class willingly.
- 8) Feeling secure and comfortable.
- 9) Working voluntarily in groups and pairs.

Outcomes:

Sts

Cognitive

- 1.1 Circle the correct option among the given titles.
- 2.1 Write true or false to state their guesses.
- 3.1 Compare their guesses and text by skimming.
- 4.1 Select/match the meaning of the words.
- 5.1 Answer the reading comprehension questions.
- 6.1 Fill in the blanks with the target words correctly.

Socio-affective

- 7.1 Answer the questions without being afraid of making mistakes.
- 8.1 Follow the lesson carefully.
- 9.1 Respect each other's ideas even though they don't agree.

Anticipated problems:

Form: The text is written in simple present and past tense basically. However, students may have difficulty in understanding some structures. For example infinitive phrases might be a problem. (eg. Our mission is *to increase the awareness of patients*. Modern medicine allows patients *to live longer, to be healthier and to have more productive lives*.)

Meaning: There are unknown words such as surgery, treatment, medicine, miracle...

Pronunciation: They may mispronounce new words. (Surgery, cancer, miracle, treatment, save, mission, survival rate...)

Cultural: There is no cultural difference between the languages.

Solutions:

In terms of form, if they are confused, I will state the function of infinitive phrases briefly. (It makes the action a noun.) As for meaning, I will teach the new words by deduction from the text and in pre-reading section. To teach pronunciation I will have them repeat the words.

Materials: board, board-marker, video, reading text, worksheets.

Instructional strategies: Question and answer, Inductive approach, skimming and guessing, discussion, erase and elicit technique.

Time	Type of Interaction	Procedure	Related aims and outcomes
10'	T-ss Ss ss-T	Warm-up - Greet students. - Ask: "You look very energetic today. Would you like to play a game?" Elicit the answer - Divide the class into 3 groups. - Distribute papers. - Give the instructions: 'read the text on the slayd and write your answer to the paper. Write the most answer and be the winner. - Check understanding. - Start the game and monitor the groups. - Finish the activity and give feedback.	Aims 7,8,9 Outcomes 7.1,8.1, 9.1
3' 5' 4'	t-ss ss ss-t t-ss	Lead-in Establish rapport Ask: 'when do you go to hospital? Do you often get ill?' discuss the qs. - Say: Now we will watch a video about our topic. Instruction: Watch the video and circle the words you hear. (cancer, treatments, surgery...) - Check understanding. - Start and finish the activity. Give feedback. - Ask: 'now what do you think about the topic? What is it about?'	Aim 1, 7, 8 Outcome 1.1, 7.1, 8.1.

1'	ss-t	- Say: "now look at the pictures. What do you see? Who are they? What are they doing?" - Elicit answers and give feedback. - Now let's guess the topic. Introduce the topic: - Say: 'Today we will read a text about miracles of medicine.' - Have them repeat and ask Turkish meaning of it. - Put the topic on the board. Pre-reading: Activity 1(Set the scene) - Familiarize students with the topic. - Ask some questions: 'do you know a person who is cancer? Did he/she beat the cancer? If yes, how?'	Aims 7, 8 Outcomes 7.1, 8.1
3'	t-ss ss-t	Activity 2: preteach - Now let's learn some new words. - Surgery, patient, drug, increase vs. decrease. - Show the pictures one by one. - Have them repeat each and put them on board. Use erase and elicit technique.	
5'	t-ss ss-t	Activity 3 (True-False Activity) - Have your learners work in pairs. - Give the instructions. Say: You learnt some new information about the topic. Now read the sentences and guess if they are true or false. We will check them later. - Check the instruction. - Distribute the handouts. - Start the activity. - Monitor the sts. - Finish the act and elicit the answers. Write how many people say T/F.	Aim 2, outcome 2.1
3'	t-ss ss ss-t		

2'	t-ss ss ss-t	While reading: Act 1: - Instruction: Read the text quickly and check whether your guesses are correct or not. You have 1 min. - Start the act and monitor the sts. - Have sts compare their answers. - Elicit the answers and give feedback.	Aim 3, outcome 3.1.
13'	t-ss ss ss-t	Act 2: - Instruction: 'find the word in the text and match the correct definition.' Demo the first one. - Check their understanding. - Start the act, monitor them. - Have them do pair check. - Elicit ans and give feedback.	Aim 4, Outcome 4.1
10'	t-ss ss ss-t	Act 3: - Instruction: 'read the text and answer the questions.' - Check their understanding. - Start the act and monitor the sts. - Have them do pair-check. - Elicit the answers and give feedback.	Aim 5, outcome 5.1
8'	t-ss ss ss-t	Post reading: - Ask sts self evaluation qs: " were you good at guessing meaning? Was it difficult? - Task evaluation: do you remember the words? Let's see. - Organize the learners: work in 3 groups. - Distribute hand-outs. (Show the words on the ppt and give them the definitions of each one.)Instruction: match the words with the definitions. - Check understanding. - Start it and monitor sts. - Elicit answers, give feedback.	Aims 7, 8,9 Outcomes 7.1, 8.1,9.1.

10	t-ss ss ss-t	Follow up: (vocabulary extra-work) - Instruction: 'fill in the blanks with the correct word above.' - Check the instruction. - Start and monitor the sts. - Pair-check. - Elicit the answers and give feedback. Wrap up: - Have learners summarize the topic. - Give homework. 'look at the text and write 3 false and 3 true sentences.' - Say goodbye. ☺	Aim 6, outcome 6.1
	t-ss ss-t		Aims 7,8 Outcomes 7.1, 8.1

Miracles of medicine

warm-up

Group

A B C

Pre-teach

T / F

Patient	1) _____
Drugs	2) _____
Surgery	3) _____
Increase	4) _____
decrease	5) _____

Miracle: Surprising event .Some patients wait for a new *miracle* anxiously.

Treatment: Using drugs, exercises and methods to cure an ill person.I began a long series of difficult chemotherapy and radiation *treatments*.

Save: To rescue a person from dangers.A new cancer drug *saved* my life.

Mission: Job,duty. Our *mission* is to increase the awareness of patients.

Medicine: Treatment. Modern *medicine* allows patients to live longer.

Survival rate: The percentage (%) of people who can live for a period of time after diagnosis. The *survival rate* of cancer was 10% over the past 20 years.