

AN INVESTIGATION ON CONSTRUCTIVIST CLASSROOM
CHARACTERISTICS IN ELT METHODOLOGY II COURSES

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ABSTRACT

AN INVESTIGATION ON CONSTRUCTIVIST CLASSROOM CHARACTERISTICS IN ELT METHODOLOGY II COURSE

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The purpose of this study was to investigate to what extent constructivist classroom characteristics existed in *ELT Methodology II* courses in ELT departments. Secondly, the aim was to explore the extent to which constructivist learning activities and evaluation strategies were perceived to be useful by the students and the instructors. Thirdly, the study also attempted to find out the extent to which the students and the instructors in ELT departments had constructivist conceptions of learning and teaching. Finally, it was aimed to find out whether students' perception of constructivist classroom characteristics differed according to certain variables such as university, sex, type of high school the students graduated from, expected average score in the course and perceived competency in English.

Subjects of the study involved 410 students taking *ELT Methodology II* course (*Özel Öğretim Yöntemleri II*) during 2001-2002 academic year in ELT departments of four universities (Middle East Technical University, Gazi University, Çukurova University and Dicle University) and 15 instructors teaching this course at these universities.

Data were collected between May – July 2002 through administration of a questionnaire (Constructivist Classroom Characteristics Questionnaire) to the students, interviews with the students and the instructors and observation of students' microteaching practices in *ELT Methodology II* classes. Data analysis was carried out through both quantitative (frequencies, means, standard deviations, one-way ANOVA) and qualitative analysis techniques.

The results of the study indicated that majority of the students and the instructors perceived the classroom characteristics to be constructivist although there were a few differences in their perceptions. Observations of microteaching also showed that classroom characteristics were constructivist with respect to the variety of the learning activities used by the students, feedback procedures in the classroom and negotiation and cooperation among the students. Secondly, both the students and the instructors perceived constructivist learning activities and evaluation strategies to be more useful compared to the traditional ones. Thirdly, majority of the students and the instructors held either cognitivist or constructivist conceptions of learning. On the other hand, the students were behaviorist in their conceptions of teaching while the instructors were constructivist. Finally, the results indicated that perception of constructivist classroom characteristics differed according to universities, expected average score and perceived competency in English whereas it did not differ according to student sex and the type of high schools the students graduated from.

The results revealed that the learning activities, evaluation strategies, students' learning experiences and instructors' roles in the classroom should be reconsidered and improved in order to make *ELT Methodology II* classes more constructivist in nature.

Keywords: Constructivism, Constructivist Approach, Teacher Education, Constructivist Teacher Education, Constructivist Classroom, Constructivist Classroom Characteristics.

ÖZ

İNGİLİZCE ÖĞRETMENLİĞİ ÖZEL ÖĞRETİM YÖNTEMLERİ II DERSLERİNDEKİ OLUŞTURMACI SINIF ÖZELİKLERİNİN ARAŞTIRILMASI

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Bu çalışmanın amacı, İngilizce Öğretmenliği bölümlerinde verilen *Özel Öğretim Yöntemleri II* derslerinin ne derece oluşturmacı (constructivist) sınıf özelliklerine sahip olduğunu araştırmaktır. İkinci olarak, amaç, oluşturmacı öğrenme etkinliklerinin ve değerlendirme stratejilerinin öğrenciler ve öğretim elemanları tarafından ne derece yararlı bulunduğunu araştırmaktır. Üçüncü olarak, bu çalışma, İngilizce Öğretmenliği bölümlerindeki öğrencilerin ve öğretim elemanlarının oluşturmacı öğrenme ve öğretme kavramlarını ne derece benimsediklerini bulmaya çalışmaktadır. Son olarak, öğrencilerin oluşturmacı sınıf özellikleriyle ilgili algılarının üniversite, cinsiyet, mezun olunan lise türü, dersten beklenen ortalama not ve İngilizce yeterlilik algısı gibi değişkenlere göre değişip değişmediğini bulmak amaçlanmıştır.

Çalışmanın denekleri, 2001-2002 akademik yılında, dört üniversitenin (Ortadoğu Teknik Üniversitesi, Gazi Üniversitesi, Çukurova Üniversitesi ve Dicle Üniversitesi) İngilizce Öğretmenliği bölümlerinde *Özel Öğretim Yöntemleri II* dersini alan 410 öğrenciyi ve bu üniversitelerde bu dersi veren 15 öğretim elemanını kapsamaktadır.

Veriler, Mayıs – Temmuz 2002 arasında, öğrencilere anket (Oluşturmacı Sınıf Özellikleri Anketi) uygulanması, öğrenciler ve öğretim elemanlarıyla yapılan görüşmeler ve öğrencilerin *Özel Öğretim Yöntemleri II* derslerindeki mikroöğretim uygulamalarının gözlemlenmesiyle toplanmıştır. Veri analizi, hem nicel (frekans analizi, ortalamalar, standart sapmalar ve tek yönlü varyans analizi) hem de nitel analiz teknikleriyle gerçekleştirilmiştir.

Çalışmanın sonuçları, algılarında bazı farklılıklara rağmen, öğrencilerin ve öğretim elemanlarının çoğunluğunun sınıf özelliklerini oluşturmacı nitelikte algıladıklarını göstermiştir. Öğrencilerin gözlemlenen mikroöğretim uygulamaları da, öğrencilerin kullandığı öğrenme etkinliklerinin çeşitliliği, sınıfta kullanılan dönüt (feedback) yöntemleri ve öğrenciler arasındaki görüş alışverişi ve işbirliği bakımından, sınıf özelliklerinin oluşturmacı nitelikte olduğunu ortaya çıkarmıştır. İkincisi, hem öğrenciler hem de öğretim elemanları, oluşturmacı öğrenme etkinliklerini ve değerlendirme stratejilerini, geleneksel olanlara göre daha yararlı olarak algılamaktadırlar. Üçüncü olarak, öğrencilerin ve öğretim elemanlarının çoğunluğu bilişsel ya da oluşturmacı öğrenme kavramlarını benimsemektedirler. Ancak, öğrencilerin öğretme kavramları davranışçı iken, öğretim elemanlarının kavramları oluşturmacıdır. Son olarak, sonuçlar oluşturmacı sınıf özellikleri algısının, üniversitelere, dersten beklenen ortalama nota, İngilizce yeterlilik algısına göre değiştiğini, ancak, öğrenci cinsiyetine ve mezun olunan lise türüne göre değişmediğini göstermiştir.

Sonuçlar, İngilizce Öğretmenliği *Öğretim Yöntemleri II* derslerinin nitelik bakımından oluşturmacı olabilmesi için, sınıftaki öğrenme etkinliklerinin, değerlendirme stratejilerinin, öğrencilerin öğrenme yaşantılarının ve öğretim elemanlarının rollerinin yeniden gözden geçirilmesi ve geliştirilmesi gerektiğini göstermektedir.

Anahtar Sözcükler: Oluşturmacılık, Oluşturmacı Yaklaşım, Öğretmen Yetiştirme, Oluşturmacı Öğretmen Yetiştirme, Oluşturmacı Sınıf, Oluşturmacı Sınıf Özellikleri.

To My Family

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Table 3.5. Data Collection Procedure

		S U B J E C T S						
RESEARCH QUESTIONS	TYPE OF DATA COLLECTION	METU		Gazi University		Çukurova University		Diğir University
		Student	Instructor	Student	Instructor	Student	Instructor	Student
1, 3, 4	Questionnaire (May – June 2002)	107	–	128	–	90	–	8
1, 2, 3	Interview (May – June 2002)	8 (2 x 4)*	3	16 (2 x 8)*	8	8 (2 x 4)*	3	8 (4 x 2)**
1	Observation (May – June 2002)	26 (12 hours)	–	47 (24 hours)	–	–	–	–

* interviews conducted in pairs

** interviews conducted in fours

CHAPTER I

INTRODUCTION

In this chapter, first, the background to the present study is presented. Next, the purpose and significance of the study and definitions of the key terms are provided. In the second chapter, the relevant literature is reviewed. The third chapter is devoted to the method of the study. The results of the study are reported in the fourth chapter while conclusions and implications for practice and further research are presented in the last chapter.

1.1. Background to the Study

This study aims to investigate to what extent constructivist classroom characteristics such as constructivist learning activities, evaluation strategies, learning experiences, instructor roles and conceptions of learning and teaching existed in English Language Teaching (ELT) Methodology II courses in ELT departments at Faculties of Education and to identify the implications for improving the current classroom characteristics to make them more constructivist. The aim was also to find out whether the perceptions of constructivist classroom characteristics differed according to certain variables such as universities, sex, type of high school, expected average score and perceived competency in English.

For the past 30 years, education has been experiencing a revolution. The goals of education have changed. Memorization of facts has been recognized to be less important than developing skills for problem-solving and life-long learning. In line with these changes, the desire to understand the nature of learning has also been enhanced. Currently, theoretical and empirical studies in education are favoring a knowledge construction model over the traditional information transmission model (Yarger, Thomas, Boysen and Marlino, 1999). Constructivism as a knowledge construction model has

received a considerable attention in education especially for the past two decades because it has been perceived as a more natural, relevant, productive and empowering framework for instructing teacher education students as well as for other students (Cannella and Reiff, 1994, cited in Abdal-Haqq, 1998). Recently, the principles of constructivist approach have been widely applied in teacher education especially in science, mathematics and primary school education as well as in other academic areas (Roth, 1990, cited in Cochran, DeRuiter and King, 1993; von Glasersfeld, 1990).

According to constructivist approach, which is alternatively called authentic instruction, teaching for understanding or student-centered instruction, learning is an active but not an absorptive process (Clements and Battista, 1990). Moreover, it is both an individual and a social process (Andrew and Isaacs, 1995, cited in Fardouly, 2001). Although there are several varied approaches which are considered to be constructivist, the major principles that are common among most constructivist approaches are summarized below (Airasian and Walsh, 1997; Feng, 1995; Kamii, Manning and Manning, 1991, cited in Bonstetter, 1998; Richardson, 1997; Smerdon, Burkam and Lee, 1999; von Glasersfeld, 1990):

- Learning is the active creation of knowledge structures (schemata) from personal experience and interaction with the environment.
- Knowledge must be constructed by the learner; it cannot be supplied by the teacher. It is acquired through the involvement with content instead of imitation and repetition.
- Meaning is intimately connected with experience. Students come into a classroom with their own experiences and a cognitive structure based on those experiences.

Theoretical origins of constructivist approach can be traced back to ancient philosophers such as Socrates, Plato, Kant and Aristotle and their views concerning knowledge (Caverly and Peterson, 1996). The educational philosophies influenced by constructivism are mainly based on progressivism, reconstructionism, pragmatism and existentialism (Demirel, 2000). Although there are a variety of interpretations of constructivism, the principles of Piagetian and Vygotskian constructivism have been widely applied in teacher education and in other fields (Abdal-Haqq, 1998; Caverly and Peterson, 1996). Even though constructivist approach is considered to be a learning theory, but not a teaching theory, several pedagogical implications are drawn from it to

facilitate learning (Abdal-Haqq, 1998; Airasian and Walsh, 1997; Bonstetter, 1998; Fosnot 1993, cited in Brooks and Brooks, 1993).

Learning activities in constructivist classrooms are characterized by active engagement, inquiry, reflective thinking, problem solving and collaboration with others. Rather than a dispenser of knowledge, the teacher is mainly a guide, a facilitator, a co-explorer and an initiator of activities who encourages learners to question, to challenge and formulate their own ideas, opinions and conclusions. (Airasian and Walsh, 1997; Krol and La Boskey, 1994, cited in Abdal-Haqq, 1998; Richardson, 1997). A constructivist teacher is also expected to assume leadership qualities and be empathetic and supportive (Fisher, Taylor and Fraser, 1996; Taylor and Maor, 2000).

Major principles to facilitate constructivist learning are summarized below (Brooks and Brooks, 1993):

- 1. Posing problems of emerging relevance to students:** This does not mean that students are free to study whatever they want on any given day, but it means that the teacher must plan the lesson so that the topic will be of interest to students.
- 2. Structuring learning around primary concepts:** Much of traditional education breaks the concepts into parts and concentrates on the individual parts. However, constructivist approach suggests that the details should be studied in depth once students see the big picture.
- 3. Seeking and valuing students' points of view:** According to constructivist perspective, in order to tailor the instruction to the students' needs, the teacher should know what students are thinking. For this purpose, the teacher should also allow opportunities for students to express their points of view and to elaborate on them.
- 4. Adapting curriculum to address students' suppositions:** It is crucial that teachers actively learn about their students' thinking and apply this knowledge to their lesson planning. Lesson planning flexibility is crucial for addressing student needs.

- 5. Assessing student learning in the context of teaching:** Despite the proficiency tests, the real purpose of assessment should be to assist the teacher in determining how well the student is mastering the concepts being taught. Students' performance should be monitored continually while the lesson is being taught. If the lesson is not working, the teacher should be prepared to determine the cause of students' lack of comprehension and make adjustments to address the problem

Assessment of student performance in constructivist classrooms requires development of a variety of techniques for assessing the process of learning higher-order thinking skills and knowledge construction rather than an assessment of task completion and factual knowledge through standardized tests (Biggs, 1996; Hassard, 1999; Hendry, 1996; Jonassen, 1991; Tynjälä, 1998; Tynjälä, 1999). However, it is essential to identify meaningful and clear criteria for what constitutes an acceptable knowledge construction (Airasian and Walsh, 1997; Reeves and Okey, 1996; Windschitl, 1999).

Constructivist classrooms have totally different characteristics from traditional classrooms with respect to their curriculum, learning activities, students' and teachers' roles and assessment of students' learning. The contrastive characteristics of the constructivist classrooms with the traditional ones are summarized in Table 1.1.

Table 1.1. Constructivist Classrooms Contrasted with Traditional Classrooms (Brooks and Brooks, 1993)

Traditional Classrooms	Constructivist Classrooms
Curriculum is presented part to whole, with emphasis on basic skills.	Curriculum is presented whole to part with emphasis on big concepts.
Strict adherence to fixed curriculum is highly valued.	Pursuit of student questions is highly valued.
Curricular activities rely heavily on textbooks and workbooks.	Curricular activities rely heavily on primary sources of data and manipulative materials.
Students are viewed as "blank slates" on which information is etched by the teacher.	Students are viewed as thinkers with emerging theories about the world.
Teachers generally behave in a didactic manner, disseminating information to students.	Teachers generally behave in an interactive manner, mediating the environment for students.

Table 1.1. (Continued)

Traditional Classrooms	Constructivist Classrooms
Teachers seek the correct answer to validate student learning.	Teachers seek the students' points of view to understand students' present conceptions for use in subsequent lessons.
Assessment of student learning is viewed as separate from teaching and occurs almost entirely through testing.	Assessment of student learning is interwoven with teaching and occurs through teacher observations of students at work and through exhibitions and portfolios.
Students primarily work alone.	Students primarily work in groups.

Constructivism has also significant implications for teacher education. In a constructivist teacher education, the prospective teachers are trained to design and implement learning activities which promote learners' reflective and creative thinking, communication and collaboration skills and serve their diverse learning needs (Bonstetter, 1998; Demirel, Taş, Tüfekçi, Yazçayır and Yurdakul, 2000; Johnson and Johnson 1987, cited in Crowther, 1997; Smerdon et al., 1999; Windschitl, 1999). In order to create constructivist settings for the learners, it is essential to train the preservice and inservice teachers in constructivist settings and to design teacher education programs considering this fact (Airasian and Walsh, 1997; Dana, Campbell and Lunetta, 1997; Symansky, 1992, cited in Henriques, 1997; Zohar, 1999). A constructivist teacher education program designed for this purpose should be based on a view of professional development which emphasizes the importance of prior knowledge and experience about teaching, learning and subject matter in the construction of teacher knowledge (Dewey, 1938, cited in Hassard, 1999). Moreover, it should address the flaws of traditional approaches and include continuous training, practice and feedback (Abdal-Haqq, 1996).

Although constructivism has been a favored approach in education recently, it has also been realized that its direct implementation in the classroom poses some challenges that should be considered and evaluated carefully. In order to overcome the potential difficulties that may arise, being aware of the challenges, a careful analysis of how to resolve them through collaborative efforts and changing the earlier traditional instructional procedures are essential (Abdal-Haqq, 1998; Jenlink and Kinnucan-Welsch, 1999; Prawat, 1992; Windschitl, 1999).

A great deal of the relevant research studies on constructivist teacher education reveal that constructivist instruction contributes to development of higher learning outcomes (Cobb et al., 1991; Thomaz and Gilbert, 1989; Tynjälä, 1998; Tynjälä, 1999), and positive attitudes towards learning and oneself (Hand and Peterson, 1995; Koch, 1992, cited in Hendry, 1996; Simon and Schifter, 1991), increases motivation and achievement, decreases anxiety (Caprio, 1994, cited in Henriques, 1997; Cobb et al., 1991) and enhances collaboration and interaction (Brett, Woodruff and Neson, 1997; Nyikos and Hashimoto, 1997; Thomas and Gilbert, 1989). It has also been found out that the prospective teachers trained in a constructivist setting are able to be effective constructivist teachers (Hassard, 1999; Krol and Black, 1993; Simon and Schifter, 1991) and change their traditional conceptions of learning and teaching with the contemporary ones (Condon, Clyde, Kyle and Hovda, 1993; Hand, Lovejoy and Balaam, 1991; Steele and Widman, 1997; Stofflett, 1993).

On the other hand, there are also a few research studies which reveal that constructivist instruction may not lead to expected positive outcomes because of the difficulty of changing traditional instructional practices and conceptions of learning and teaching (Hewson, Zeichner and Tabachinick, 1999; Klein, 1998). Research on factors affecting the nature of instruction and perception of classroom characteristics reveal contradictory results. However, the research studies usually indicate that teachers' professional and personal characteristics and their beliefs about students' capacities and abilities affect their choices of learning activities and the learning environment they create in the classroom. Moreover, student characteristics affect their perception of the classroom environment (Babad, 1995; Firestone and Herriott, 1992; Kesal, 1996; Lawrence and Jarrard, 1985; Newman, Marks and Gamoran, 1996; Raudenbush, Rowan and Cheong, 1993; Smerdon et al., 1999).

In Turkey, current teacher education has undergone a change in 1998 (Türkiye Cumhuriyeti Yüksek Öğretim Kurulu (YÖK), 1998a; YÖK, 1998b). Some of the major principles of the new program such as early field experience, development of pedagogical skills, classroom environments conducive to learning, increased number of elective courses, interaction between the faculties and the practicum schools and emphasis on use of instructional technologies (YÖK, 1998a; YÖK, 1998b) can be associated with those of constructivist approach; however, the way it is implemented in the classroom is as

important as the major characteristics of the program on paper. In Turkey, there are not many research studies related to constructivist learning or constructivist teacher education since it has just been a contemporary issue. The first empirical study was conducted by Demirel et al. (2000) and the first theoretical study based on literature review was conducted by Yaşar (1988). Therefore, the relevant literature indicates that there is a need for a study which investigates whether constructivist classroom characteristics exist at Turkish Faculties of Education and the factors affecting perception of classroom characteristics.

1.2. Purpose of the Study

The purpose of this study was mainly to investigate the extent to which constructivist classroom characteristics such as constructivist learning activities, evaluation strategies, learning experiences, instructor roles and conceptions of learning and teaching existed in ELT Methodology II courses in ELT departments at Turkish Faculties of Education as perceived by students and instructors and as observed. Secondly, the aim was to investigate the extent to which constructivist learning activities and evaluation strategies were perceived to be useful by the students and the instructors. Thirdly, the study attempted to explore the extent to which the students and the instructors in ELT Departments had constructivist conceptions of learning and teaching. Finally, the study aimed at finding out whether constructivist classroom characteristics differed according to certain variables such as universities, sex, type of high school, expected average score and perceived competency in English.. The research questions of the study are provided below:

1. To what extent are the current classroom characteristics in ELT Methodology II courses constructivist?

1.1. To what extent are the current classroom characteristics in ELT Methodology II courses constructivist as perceived by students?

- 1.1.1. To what extent are the current **learning activities** in ELT Methodology II courses constructivist?
- 1.1.2. To what extent are the current **evaluation strategies** constructivist?
- 1.1.3. To what extent are the ELT Methodology II courses **professionally relevant**

to students' future teaching needs?

- 1.1.4. To what extent do the ELT Methodology II courses develop **reflective thinking**?
- 1.1.5. To what extent does **negotiation** among students exist in ELT Methodology II courses?
- 1.1.6. To what extent do the instructors in ELT Methodology II courses have **leadership** qualities?
- 1.1.7. To what extent are the instructors in ELT Methodology II courses **empathetic**?
- 1.1.8. To what extent are the instructors in ELT Methodology II courses **supportive**?

2. To what extent are the current classroom characteristics in ELT Methodology II courses constructivist as perceived by instructors?

- 2.1.1. To what extent are the current **learning activities** in ELT Methodology II courses constructivist?
- 2.1.2. To what extent are the current **evaluation strategies** constructivist?
- 2.1.3. To what extent are the ELT Methodology II courses **professionally relevant** to students' future teaching needs?
- 2.1.4. To what extent do the ELT Methodology II courses develop **reflective thinking**?
- 2.1.5. To what extent does **negotiation** among students exist in ELT Methodology II courses?
- 2.1.6. To what extent do the instructors in ELT Methodology II courses have **leadership** qualities?
- 2.1.7. To what extent are the instructors in ELT Methodology II courses **empathetic**?
- 2.1.8. To what extent are the instructors in ELT Methodology II courses **supportive**?

1.3. To what extent are the current classroom characteristics in ELT Methodology II courses constructivist as observed?

2. To what extent are the constructivist learning activities and evaluation strategies ELT Methodology II courses useful?

2.1. To what extent are the constructivist learning activities and evaluation strategies in ELT Methodology II courses useful as perceived by students?

2.1.1. To what extent are the **constructivist learning activities** in ELT Methodology courses useful?

2.1.2. To what extent are the **constructivist evaluation strategies** in ELT Methodology II courses useful?

2.2. To what extent are the constructivist learning activities and evaluation strategies in ELT Methodology II courses useful as perceived by instructors?

2.2.1. To what extent are the **constructivist learning activities** in ELT Methodology II courses useful?

2.2.2. To what extent are the **constructivist evaluation strategies** in ELT Methodology II courses useful?

3. To what extent do the students and the instructors in ELT Methodology II courses hold constructivist conceptions of learning and teaching?

3.1. To what extent do the students in ELT Methodology II courses hold constructivist conceptions of learning and teaching?

3.1.1. To what extent do the students in ELT Methodology II courses hold **constructivist conceptions of learning**?

3.1.2. To what extent do the students in ELT Methodology II courses hold **constructivist conceptions of teaching**?

3.2. To what extent do the instructors in ELT Methodology II courses hold constructivist conceptions of learning and teaching?

3.2.1. To what extent do the instructors in ELT Methodology II courses hold **constructivist conceptions of learning**?

3.2.2. To what extent do the instructors in ELT Methodology II courses hold **constructivist conceptions of teaching**?

4. Do the constructivist classroom characteristics perceived by the students in ELT Methodology II courses differ according to certain variables?

4.1. Do the **constructivist classroom characteristics** perceived by the students in

ELT Methodology II courses differ according to **universities**?

- 4.2. Do the **constructivist classroom characteristics** perceived by the students in ELT Methodology II courses differ according to their **sex**?
- 4.3. Do the **constructivist classroom characteristics** perceived by the students in ELT Methodology II courses differ according to **type of high school** the students graduated from?
- 4.4. Do the **constructivist classroom characteristics** perceived by the students in ELT Methodology II courses differ according to **expected average score** in the course?
- 4.5. Do the **constructivist classroom characteristics** perceived by the students in ELT Methodology II courses differ according to **competency in English**?

Based on research question 4 and its subquestions, the following hypotheses were developed:

4. The constructivist classroom characteristics perceived by the students in ELT Methodology II courses do not differ according to certain variables.

- 4.1. The **constructivist classroom characteristics** perceived by the students in ELT Methodology II courses do not differ according to **universities**.
- 4.2. The **constructivist classroom characteristics** perceived by the students in ELT Methodology II courses do not differ according to their **sex**.
- 4.3. The **constructivist classroom characteristics** perceived by the students in ELT Methodology II courses do not differ according to **type of high school** the students graduated from.
- 4.4. The **constructivist classroom characteristics** perceived by the students in ELT Methodology II courses do not differ according to **expected average score** in the course.
- 4.5. The **constructivist classroom characteristics** perceived by the students in ELT Methodology II courses do not differ according to **competency in English**.

1.3. Significance of the Study

Recently, it has been emphasized that the prospective teachers should be trained so that they can engage in the learning process actively, develop higher thinking skills, use

these skills to reflect on their own learning and teaching process, be prepared to respond to students' diverse learning needs, assume the role of a facilitator and a guide to contribute to learning process. It has also been emphasized that in order to train such teachers, it is essential to provide the prospective teachers with constructivist classrooms and challenge their previous conceptions of learning and teaching. Although the need to train the prospective teachers considering the contemporary changes in education in the world has been recognized in Turkey and the teacher education system has been restructured to keep up with the recent changes, the research studies related to constructivist educational practices at Faculties of Education are scarce.

In addition, most of the studies on constructivist teacher education have been carried out in the fields of mathematics, science and primary school teaching. Nonetheless, there are only a few studies carried out in the ELT field. Therefore, it is hoped that this study will provide comprehensive data concerning the presence of constructivist classroom characteristics in ELT departments at Faculties of Education.

Since a surface analysis of current classroom characteristics do not provide sufficient data whether they are really constructivist or not, in the present study, the students and the instructors' perceptions of the usefulness of the current learning activities and evaluation strategies compared to the traditional ones were also analyzed. Since the students and the teachers in constructivist settings hold constructivist conceptions of learning and teaching, the students and the instructors' conceptions participated in the study were also analyzed in order to provide further clues about the nature of students' learning experiences. The suggestions made by the students and the instructors to improve current classroom characteristics revealed implications about the factors that should be considered to make classrooms more constructivist in nature.

The study also revealed whether constructivist classroom characteristics perceived by the students differed according to certain variables including universities, student sex, type of high schools the students graduated from, expected average score in the course and perceived competency in English. Thereby, it is hoped that it could be identified whether student characteristics affect perception of classroom characteristics in ELT Methodology courses and methodology courses could be improved considering students' characteristics. This study also indicated that quantitative and qualitative data collection

and analysis techniques could effectively complement and be reconciled with each other. Finally, it is expected that this study will motivate the future researchers to conduct similar studies including similar or different variables.

1.4. Definition of Terms

This part is devoted to the definitions of the key terms that requires clarification.

Constructivist Classroom Characteristics: Constructivist classroom is a center of intellectual inquiry-a place where teachers and students engage in the in-depth exploration of important ideas together (Prawat, 1992). In such a classroom, knowledge is constructed by learners as a result of their own activities and interaction with the environment rather than being imparted by the instructor (Andrews and Isaacs, 1995, cited in Fardouly, 2001). A constructivist classroom is characterized as a classroom in which constructivist learning activities and evaluation strategies exist, learning experiences are relevant to prospective teachers' future teaching needs, students' reflective thinking skills are developed, the students negotiate with their classmates and the instructors assume leadership, empathetic and supportive qualities to facilitate students' learning (Fisher et al., 1996; Maor, 1997; Taylor and Maor, 2000; Taylor Dawson and Fraser 1995; Taylor and Fraser, 1991). (See Appendix A).

Constructivist Learning Activities: They are the learning activities which facilitate knowledge construction through such activities as problem-solving, inquiry, cooperative learning and reflective and creative thinking rather than those emphasizing knowledge acquisition and fact recall (Bonstetter, 1998; Johnson and Johnson 1987, cited in Crowther, 1997; Smerdon et al., 1999; Windschitl, 1999).

Constructivist Evaluation Strategies: They are the evaluation strategies that are used to promote learning process and to find out the qualitative changes taking place in students through assessing students' physical exhibitions, oral performances, written work and so on (Airasian and Walsh, 1997; Farr, 1992, cited in Mohktari, Yelin, Bull and Montgomery, 1996; Windschitl, 1999).

Professional Relevance: It is the relevance of what has been learnt to teacher candidates' prospective profession, that is their future teaching needs and aspirations (Fisher et al., 1996; Maor, 1997; Taylor, 1995; Taylor and Maor, 2000; Taylor et al., 1995).

Reflective Thinking: It is thinking critically on background knowledge, new ideas and one's own learning experiences (Fisher et al., 1996; Maor, 1997; Taylor, 1995; Taylor and Maor, 2000; Taylor et al., 1995).

Negotiation: It is communicating ideas with the other students through cooperative and collaborative work (Fisher et al., 1996; Maor, 1997; Taylor, 1995; Taylor and Maor, 2000; Taylor et al., 1995).

Leadership: It involves instructors' roles such as managing the classroom, organizing learning activities, setting tasks and holding attention (Fisher et al., 1996).

Empathy: It involves instructors' roles such as understanding, listening attentively, showing confidence in students and being patient (Fisher et al., 1996).

Support: It involves instructors' roles such as assisting in students' learning, showing concern and friendship and inspiring confidence and trust in students (Fisher et al., 1996; Taylor and Maor, 2000).

Constructivist Conception of Learning: It is a conception of learning which favor learning through constructing knowledge as a result of one's own activities and interaction with the environment (Andrews and Isaacs, 1995, cited in Fardouly, 2001; Dana et al., 1997).

Constructivist Conception of Teaching: It is a conception of teaching based on facilitating knowledge construction process and guidance in learning (Andrews and Isaacs, 1995, cited in Fardouly, 2001; Dana et al., 1997).

Further information on constructivist classroom characteristics is presented in Appendix A.

In the following chapter, the review of the literature related to the implications of constructivism for classroom characteristics and teacher education and the relevant research studies are presented.

CHAPTER II

REVIEW OF THE LITERATURE

This part mainly covers historical background of constructivism, characteristics of constructivist classrooms, relevant research studies and teacher education in Turkey.

2.1. Historical Background of Constructivism

Although constructivist theory has reached high popularity in recent years, the idea of constructivism is not new. Aspects of constructivist theory can be found among the works of *Socrates*, *Plato*, *Kant* and *Aristotle* all of which emphasize the formation of knowledge by the individual. Socrates can be considered as the first philosopher who had an important contribution in establishing the foundations of constructivism. According to him, the teacher and the learners should construct and interpret the knowledge deep inside them through talking with and questioning each other (Hilav, 1990, cited in Erdem, 2001). Kant (late 18th to early 19th centuries) explained that “logical analysis of actions and objects lead to the growth of knowledge and the view that one’s individual experiences generate new knowledge” (Brooks and Brooks, 1993, p. 23).

Rousseau is regarded as one of the pioneers of French Revolution in 18th century through his writing. In his work “*Emile*”, he stated that a plan of education should be according to nature rather than art in which impulses of the child are allowed to develop rather than to be forced (Wokler, 1996, cited in Akar, 2001). He believed that education provided during that time prevented students from being active since it involved rote learning and was boring and far beyond the individual’s comprehension. In addition, he believed that the society was corrupted and that the child needed to become self-reliant so that he would not be guided by the corrupted human race. However, his views were rejected and underestimated at that time (Marlowe and Page, 1998). Although the main

philosophy of constructivism is generally credited to Jean Piaget (1896-1980), Heinrich Pestalozzi (1746-1827) from Switzerland also came to similar conclusions over a century earlier (Crowther, 1997).

At the beginning of the 20th century, John Dewey (1902, cited in Smerdon et al., 1999) called for an end to the traditional drill-and-practice method of instruction. He suggested that knowledge and instruction should build on students' experiences, rather than be viewed as fixed and determined. It is ironic that although Dewey asserted his views a century ago, they are still considered to be radical.

Four major philosophies have influenced education so far. These are idealism, realism, pragmatism and existentialism. The first two philosophies are traditional while the other two are contemporary. Perennialism, essentialism, progressivism and reconstructionism are the educational philosophies derived from these four philosophies. Since perennialist and essentialist educational philosophies, which are based on the fundamentals of idealism and realism, favor teacher-centered educational programs, they are not in line with constructivism. Educational philosophies influenced by constructivism are based on progressivism, reconstructionism, pragmatism and existentialism. The philosophies influencing constructivism allege in common that the learner is the problem solver and constructs knowledge through participating in the learning process actively. For this reason, the educational programs are based on the individual's prior experiences and interests and prepare them for their future life (Demirel, 2000).

Caverly and Peterson (1996) explains three philosophical views - rationalism and phenomenologicalism and empiricism - to develop a foundation for a developmental reading instruction at the college level and their psychological and pedagogical interpretations. According to rationalism, knowledge begins, not as a spontaneous subjective idea but as a premise which then takes form through logical thinking. This philosophy argues that we discover new knowledge by logically adding to or changing innate, old ideas. One psychological interpretation of rationalism has been called radical constructivism which was advanced by von Glasersfeld (1990). According to this interpretation, learning occurs when the individual logically constructs viable knowledge from the range of experiences with the world. This interpretation of constructivism is considered to be radical because it emphasizes subjectivity or the absolute impossibility

of being objective. Radical Constructivism has emerged in education in the form of unguided inquiry or discovery learning (Caverly and Peterson, 1996).

In the seventeenth century, rationalism was challenged by Francis Bacon and John Locke, who proposed that source of knowledge must be the observable environment rather than innate ideas or premises. One psychological interpretation of empirical philosophy was behaviorism based on an understanding of learning stimulated by a condition that brings a response and is reinforced when a motive is satisfied or an association strengthened. Recently, this interpretation of empiricism has shifted to the internal processing of information. According to this view, learning occurs as a result of an external agent, such as the instructor, text or computer program transmitting to students a set of rules (i.e. skills) and then giving students practice these skills until mastery is achieved (Caverly and Peterson, 1996).

In contrast to rationalists and empiricists, Kant, who was the advocate of phenomenologicalism, argued that because our minds have the structure of space and time, we impose order and objectivity on experience. In other words, one interacts with reality, uses temporal (categorization, listing, comparison / contrast) or spatial (cause/effect, sequence) dimensions to make meaning of experience and to construct knowledge. Two psychologists in particular have interpreted phenomenologicalism to explain psychological learning and they have called it constructivism: Piaget and Vygotsky. Educational implications of phenomenologicalism / constructivism have been labeled as a whole language approach to reading instruction, process writing and constructivism in math. Only recently have these educational philosophies emerged into practice in developmental education (Caverly and Peterson, 1996).

Among various interpretations of constructivism, *Piagetian* and *Vygotskian* constructivist approaches which derived their roots from phenomenologicalism have been more influential in education (Caverly and Peterson, 1996). Piagetian and Vygotskian constructivist approaches can be contrasted with respect to two major issues that shape their interpretations: (1) education for individual development versus education for social transformation and (2) the degree of influence that social context has on individual cognitive development (Richardson, 1997).

Piaget is regarded as the father of constructivism and provided the foundation of the modern day constructivism (Crowther, 1997). His cognitive / developmental theory maintains that as children mature, they progress through a series of stages, each step representing a qualitatively different set of cognitive structures until they reach the stage when they are able to think abstractly (Posner, Strike, Hewson and Gertzog, 1982). To Piaget, the person's mind is self-organized by a *constant antagonism* between internal subjective states and external reality. The learning occurs because of the reciprocal effects of *assimilation* (fitting a new experience into an existing mental structure or schema) and *accommodation* (revising an existing schema for integrating the new experience into it) constantly forced to attain *equilibrium* between them. (Abdal-Haqq, 1998).

Piagetian constructivists generally regard the purpose of education as educating the individual learner in a fashion that his/her interests and needs are supported. Piagetian constructivism is a learner-centered approach in which the learner is the subject of study and individual cognitive development is the emphasis. Learning is primarily considered to be an individualistic enterprise. (Airasian and Walsh, 1997; Vadeboncoeur, 1997). This approach assumes that students come to classrooms with ideas, beliefs, and opinions that need to be altered or modified by a teacher who facilitates this alteration by devising tasks and questions that create dilemmas for students. Knowledge construction occurs as a result of working through these dilemmas (Abdal-Haqq, 1998; Caverly and Peterson, 1996; Brooks and Brooks, 1993).

Vygotsky is considered to be the founder of social constructivism (Abdal-Haqq, 1998; Airasian and Walsh, 1997; Caverly and Peterson, 1996). In contrast, Vygotsky (1978, cited in Caverly and Peterson, 1996) rejects the individualistic orientation of Piagetian theory and emphasizes education for social transformation and reflects a theory of human development that situates the individual within a sociocultural context. According to this theory, individuals construct knowledge in interaction with the environment, and in the process both the individual and the environment are changed. (Abdal-Haqq, 1998; Airasian and Walsh, 1997; Brooks and Brooks, 1993; Caverly and Peterson, 1996; Richardson, 1997). In this view, schools are considered as the sociocultural settings where teaching and learning take place and where "cultural tools" such as reading, writing, mathematics, and certain modes of discourse are utilized. The emphasis is still student-centered and experiential; however, the teacher is more involved in planning and

guiding social interactions that enable the students to build and test knowledge within a social context (Balakrishnan, 2001, cited in Akar, 2001). Both Piaget and Vygotsky suggest that the teacher should encourage the students to search, solve problems and make their own decisions (Phillips, 1997; 2001 cited in Erdem, 2001).

Both views are considered to be incomplete by themselves and criticized. Critics of Piagetian theory point out that this perspective does not take into consideration the influence of sociocultural context, characteristics of teachers and students and their prior learning histories on learning in the classroom and divorce meaning-making from affect by focusing solely on isolated universal forms of knowledge. Critics of Vygotskian theory assert that while the social constructivists' concern with particular contextual and or cultural factors enhances the recognition of differences across meanings, it limits the recognition of the universal forms that bring order to an infinite variety of meanings (Airasian and Walsh, 1997).

The three philosophical theories (rationalism, empiricism and phenomenologicalism) and their interpretations of learning are summarized in Table 2.1.

Table 2.1. Three Philosophical Perspectives and Their Interpretations of Learning (Caverly and Peterson, 1996)

Philosophical Perspectives	Rationalism (Descartes)	Empiricism (Locke)	Phenomenologicalism (Kant)
Psychological Interpretations	Radical Constructivism (von Glasersfeld)	Behaviorism / Information Processing (Skinner, Gagne)	Guided constructivism (Piaget, Vygotsky)
Pedagogical Interpretations	Discovery / Inquiry (Montessori)	Transmission / Skills (Gagne, Hunter)	Whole Language / Constructivist Approach (Goodman)

2.2. Learning and Instruction in Constructivist Classrooms

Learning and instructional theories can be categorized as either objectivist or constructivist. The traditional instructional theories can be named as objectivist because

according to this approach, knowledge depends on an objective reality and is an absolute entity. While designing an instruction based on an objectivist approach, the first step is to divide the knowledge the learner has to learn into meaningful pieces and teach them in a specified order. Each knowledge piece presented to the students serves as a target behavior that has to be achieved in order to realize the goals of instruction. In other words, learning occurs only if the student receives and retains the knowledge without changing it even a bit. Behaviorist and cognitive learning theories are the reflections of the objectivist approach in instruction (Deryakulu, 2001).

On the other hand, constructivism is defined as an epistemology, a learning or meaning-making theory that offers an explanation of the nature of knowledge and how human beings learn (Bonstetter, 1998; Cannella and Reiff, 1994, cited in Abdal-Haqq, 1998,). Constructivism suggests that knowledge is constructed by learners as a result of their own activities and interaction with the environment (Andrew and Isaacs, 1995, cited in Fardouly, 2001). Unlike the objectivist approach, constructivist approach suggests that learning is the learner's construction of his own reality (knowledge) in his mind concerning an object, event or a conception or at least it is the process of interpretation of the reality (Jonassen, 1994, cited in Deryakulu, 2001).

Conceptualization of the learner as passively responding to the environment and learning through directly internalizing knowledge given by others is rejected. Rather, the learner is seen as an inherently active, self-regulating individual with a will and purpose. Students' prior knowledge and experiences are the starting point for new learning. These prior knowledge structures are considered to act as both filters and facilitators of new ideas and experiences and they themselves may be transformed during learning (Billet, 1996, cited in Kerka, 1997; Cochran et al., 1993; Hannafin and Land, 1997; Henriques, 1997).

Constructivists stress that real understanding can occur only when students participate fully in their own learning. Such full participation is believed to lead to deeper and richer understanding and use of knowledge, thus promoting application of what has been learnt (Clements and Battista, 1990).

Since constructivism emphasizes how the learner constructs knowledge, it is essential to mention what knowledge is according to the constructivist approach. Nature of knowledge and its implications for teachers and students are summarized below (Hendry, 1996):

- 1. Knowledge exists in the mind of people only:** In the classroom, knowledge exists in the mind of students and the teacher only. It does not exist on the blackboard, in books, in teacher or student talk or in the activities that students and teachers devise.
- 2. The meanings or interpretations people give to things depend on their knowledge:** The students and the teacher give meaning to curriculum or instructional materials according to their existing knowledge and beliefs.
- 3. Knowledge is constructed from within in interrelationship with the world:** Students' process of construction which functions in interrelationship with the world outside the classroom also functions in their interrelationship with the curriculum and other students inside the classroom.
- 4. Knowledge can never be certain:** All knowledge, including students' and teachers' knowledge can never be certain because knowledge is open to reexamination and revision.
- 5. Common knowledge derives from a common brain and a body which are part of the same universe:** Students with different backgrounds and teachers share a particular knowledge; fundamentally they can share the same perceptual knowledge which is generated in a specific program.
- 6. Knowledge is constructed through perception and action:** Students construct new knowledge in perceiving and acting on things in the classroom and through perception-action in communicating with the teacher and/or each other.
- 7. Construction of knowledge requires time and energy:** The construction of knowledge is time-consuming and difficult. It requires much effort, but results in

pleasure and satisfaction. Since the teacher is aware of this fact, tries to spend each moment productively to contribute to students' learning (Perkins, 1991; Smerdon et al., 1999).

Constructivism is not considered to be a *theory of learning* or a *prescription for teaching* (Airasian and Walsh, 1997, Bonstetter, 1998; Fosnot 1993, cited in Brooks and Brooks, 1993). It is considered to be a philosophical approach to teaching and an awareness of the learner and the learner's world rather than a given set of particular practices (Marton and Booth, in press, cited in Biggs, 1996). However, the principles of constructivist approach suggest various means to facilitate learning. (Smerdon et al., 1999, Windschitl, 1999). For example, teachers should incorporate students' prior experience into the learning process, they should emphasize higher order thinking, problem-solving, inquiry, active engagement with learning tasks, personal development, cooperative learning and reflective thinking (Bonstetter, 1998; Casey and Howson 1993; Foreman-Peck, 1994, cited in Fardouly, 2001; Johnson and Johnson 1987, cited in Crowther, 1997; Rainier and Guyton, 1994; Smerdon et al., 1999; Windschitl, 1999).

Wilson (1997) reports that simulations, strategy and role-playing games, toolkits and phenomenaria, multimedia learning environments, intentional learning environments, story-telling structures, case studies, Socratic dialogues, coaching and scaffolding, learning by design, learning by teaching, group / cooperative / collaborative learning and holistic psychotechnologies as alternative instructional strategies that could be used in constructivist learning environments.

Journal writing, keeping portfolios, micro-teaching, peer coaching and consultation, dramatization, hands-on and heads-on learning activities, doing assignments and projects, discussions, problem or case-based learning, library research, discovery learning, brainstorming and use of concept maps and vee diagrams are the other instructional strategies that are conducive to constructivist learning (Bonstetter, 1998; Casey and Howson 1993; Demirel et al., 2000; Foreman-Peck, 1994, cited in Fardouly, 2001; Johnson and Johnson 1987, cited in Crowther, 1997; Rainier and Guyton, 1994; Smerdon et al., 1999; Wilson, 1997; Windschitl, 1999).

The growing interest for constructivist approach to learning and teaching stems from the perceived need to alter educational practice from associational / behaviorist approach to the one that emphasizes the higher level knowledge construction needed to cope with the rapid expansion of information (Airasian and Walsh, 1997). Therefore, as an approach to teaching, constructivism may be examined as much for what it is *NOT* as for what it is. Constructivism rejects the empiricist / reductionist approach to teaching and learning in which the teacher fills students with deposits of information considered by the teacher to be true knowledge, and the students store these deposits, intact, until needed. Although some of the cognitive theories which constitutes the foundation of constructivism emerged from these approaches (Cannella and Reiff 1994, cited in Abdal-Haqq, 1998; Feng, 1995), constructivists label these traditional models as didactic, memory-oriented transmission models and maintain that when information is acquired through transmission models, it is not always well-integrated with prior knowledge and is often used only for formal academic occasions such as exams and then forgotten. Moreover, over teacher control on activities are considered to undermine students' individual constructions of knowledge (Caprio, 1994, cited in Henriques, 1997; Duncan, 1999; Richardson, 1997).

Traditional instruction is considered not to promote learning because it is usually driven by *teacher-talk* and depend heavily on textbooks for the structure of the course. There is the idea that there is a fixed world of knowledge that the student must come to know. Information is divided into parts and built into a whole concept. Teachers serve as *pipelines* and transfer their thoughts and meanings to the passive student. There is little room for student-initiated questions, independent thought or interaction between students. (Caprio, 1994, cited in Henriques, 1997).

While constructivist instruction gives importance to the development of students' personal ideas, traditional instruction values only established ideas or concepts. In constructivist instruction, students are encouraged to use their own methods for solving problems. They are not asked to adopt some one else's thinking but encouraged to refine their own. Although the teacher presents tasks that promote invention or adoption of more sophisticated techniques, all methods are valued and supported. Through interaction with the tasks and other students, the students' thinking process gradually becomes more abstract and powerful (Clements and Battista, 1990).

The selection of a particular instructional strategy represents only what is necessary. Selection of a strategy does not necessarily lead to appropriate implementation of constructivist approach. Implementing constructivism calls for a *learn as you go* approach for both students and teachers; it involves many decisions and much trial and error. Constructivist instructional techniques do not necessarily provide the sole means by which students construct meanings. Therefore, no single method leads to constructivist learning (Airasian and Walsh, 1997). Identifying a single objective for all students to achieve can undermine construction of knowledge because each learner is different from each other with respect to their capacities, pace, personalities, needs, interests and readiness level (Varış, 1996).

Traditional direct instruction approaches frequently emphasize instructional strategies such as hierarchical structure of the content to be learnt, objective-related questioning, feedback and assessment which requires a single correct answer (Hannafin and Land, 1997). Fill-in-the-blanks exercises, dictation, the knowledge that were directly taken from textbooks and pictures with captions which prevent students to think creatively are examples of nonconstructivist learning activities (Selley, 1999). They are not inherently good or bad. They are very effective in promoting particular kinds of learning and problematic for others. If learning and performance outcomes are estimated beforehand, efficiency in knowledge acquisition is valued and direct instruction provides a powerful methodology. Constructivists argue that understanding is neither inherently hierarchical nor the product of successive teaching methods, but a natural consequence of curiosity, reflection, insight and personal construction (Hannafin and Land, 1997). Therefore, thoughtful and open-ended questions revealing students' prior knowledge and experiences are asked by the teachers in constructivist classrooms (Jonassen, 1991; Richardson, 1997).

Moreover, traditional methods are considered to have a limited capacity to support higher-order and complex thinking. It is also argued that traditional instruction may engender rigid, oversimplified knowledge which hinders subsequent learning (Spiro and Jengh, 1990, cited in Hannafin and Land, 1997). On the other hand, constructivist instructional methods encourage the students to develop their higher-order thinking skills such as reflection, analysis, comparison and synthesis and so on. Most of these thinking skills are related to affective domain of Bloom's Taxonomy and are neglected in

traditional classrooms (Selley, 1996). According to constructivist learning approach, there is no limit for learning. Learning does not only take place in classrooms. An individual can learn things throughout his life (Martha and Deborah, 2000).

Traditionally teachers are viewed as responsible for managing curriculum, running activities and organizing students. The image of classroom growing out of this view of teaching and learning is considered to be removed from that held by most constructivists who envision the classroom as a center of intellectual inquiry - a place where teachers and students engage in the in-depth exploration of important ideas from the different subject-matter domains (Prawat, 1992).

The philosophy of John Dewey contributed to constructivist education a great deal. Dewey (1938, cited in Rainier and Guyton, 1994) emphasized that the competent educator should view teaching and learning as a continuous process of reconstruction of experience. He developed strict criteria for determining what is an educative experience. He emphasized that an experience must lead to positive growth, have continuity, and provoke change. Dewey differentiated the traditional education from the constructivist one in the way as seen in Table 2.3.

Table 2.3. Differences Between Traditional Education and Constructivist Education (Dewey, 1938, cited in Rainier and Guyton, 1994)

TRADITIONAL EDUCATION	CONSTRUCTIVIST EDUCATION
Imposition from above	Expression and cultivation of individuality
External discipline	Free activity
Learning from texts and teachers	Learning through experience
Acquisition of isolated skills and techniques By drill	Acquisition of skills as means of attaining Ends which make direct vital appeal
Preparation for a more or less remote future	Making the most of opportunities of present life
Static aims and materials	Acquaintance with a changing world

Language teaching has also been affected by the recent changes in education. Nowadays, a student-centered, collaborative language classrooms are favored over traditional teacher-centered classrooms because the former contributes to language learning more. In a teacher-centered classroom, it is the teacher's responsibility to

promote creative and stimulating activity in an environment that is conducive to learning. In a student-centered, collaborative classroom, teachers don't surrender these responsibilities, but rather encourage learners to become partners in the process. Sharing classroom responsibility and learning to work as a team require both the teacher and the learners to modify their stereotypical notions and expectations about what a classroom environment entails (Bassano and Christine, 1995).

For significant learning to occur, students should be provided with a supportive, nonthreatening, safe, free and responsive environment that encourages disclosure of student constructions. (Airasian and Walsh, 1997; Watts and Bentley, 1987, cited in Hendry, 1996). The term *constructivist learning environment* has been used to describe teaching and learning situations which are explicitly based on constructivist epistemology and are designed to support learners' knowledge construction process (Tynjälä, 1999). Wilson (1996, p. 5) defines a constructivist learning environment as "a place where learners may work together and support each other as they use a variety of tools and information resources in their guided pursuit of learning goals and problem-solving activities". It is called to be a *learning environment*, not an *instructional environment* because in constructivist settings, learning, not teaching is emphasized (Wilson, 1997). Wilson (1996) categorized the learning environments as computer microworlds, classroom-based learning environments and open, virtual environments. Designers of constructivist learning environments emphasize the following seven pedagogical goals (Wilson, 1996):

- 1. Provide experience with the knowledge of construction process:** Students take primary responsibility for determining the topics in a domain they pursue, the methods of how to learn and the strategies or methods for solving problems. The role of the teacher is to facilitate this process.
- 2. Provide experience in and appreciation for multiple perspectives:** Problems in the real world rarely have one correct approach or one solution. There are typically multiple ways to think about and solve problems. Therefore, students must engage in activities that enable them to evaluate alternative solutions to problems as a means of testing and enriching their understanding.

3. **Embed learning in realistic and relevant contexts:** Curriculum designers must attempt to maintain the authentic context of the learning task. Educators must ground the problems within the noise and complexity that surrounds them outside the classroom. Students must learn to impose order on the complexity and noise as well as to solve the core problem.
4. **Encourage ownership and voice in the learning process:** This illustrates the student-centeredness of constructivist learning. Rather than the teacher, the students will play a strong role in identifying the issues and directions, as well as their goals and objectives. In this framework, the teacher acts as a consultant who helps students frame their learning objectives.
5. **Embed learning in social experience:** Intellectual development is significantly influenced through social interactions. Bonstetter (1998) state that learning should reflect a collaboration and interdependence between both teachers and students among the students because social interaction facilitates developing a richer meaning from the experience. However, the attention should be placed upon the quality of interactions rather than its amount (Terwel, 1999).
6. **Encourage the use of multiple modes of representation:** Learning should be achieved not only through with oral and written communication, but also through the use of additional media such as video, computer, photographs and so on to provide rich experiences.
7. **Encourage self-awareness of the knowledge construction process:** A key outcome of constructivist learning should be knowing how one knows. It is the students' ability to explain why or how they solved a problem in a certain way; to analyze their construction of knowledge and processes. This is called to be *reflexivity*.

Honebein (1996) also developed some pedagogical goals that should be achieved in constructivist learning environments. These goals are summarized below:

1. Facilitation of knowledge construction process

2. An interactive environment between the students and the teacher as well as among students
3. Engagement of students in activities
4. Collaborative activities such as teamwork, leadership, negotiation and cooperation
5. Encouragement of learners' individual thinking
6. Provision of authentic learning tasks
7. Provision of multiple ways to learn content
8. Students' optimal use of what they know

Martha and Deborah (2000) presents the phases of constructivist learning spiral as following:

- 1) **Engagement:** The teachers tries to arouse students' interest through various ways; such as through relating the learning topic to students' earlier life, inviting a guest, doing an experiment, discussing a social problem, visualization and so on.
- 2) **Investigation:** After attracting students' attention to the learning topic, learning strategies for reaching the resources and using them for discovery should be identified. During the investigation, the students are required to use various research skills while making use of the multiple resources.
- 3) **Sharing:** Students share what they have learnt through any ways such as through drawing, singing, writing, dramatizing and so on.
- 4) **Evaluation:** Both formative and summative evaluation are conducted. Formative evaluation includes teacher observations and evaluation of student products developed during the learning process. It is mainly used for planning the subsequent learning phases. Summative evaluation includes teacher evaluation, feedback and self-evaluation based on the products students develop at the end of their works.

As frequently emphasized in the literature, constructivist learning environments are technology-assisted. In traditional environments, technology serves the function of

transmitting knowledge, that is teaching. On the other hand, in constructivist environments, the function of technology is to support and facilitate learning (Alkan, Deryakulu and Şimşek, 1995). In technology-assisted environments, students have the opportunity to learn through seeing, hearing or doing (Jonassen, Peck and Wilson, 1999). As computers and internet are used more and more frequently in classroom environments, students' construction of knowledge is facilitated (Cognition and Technology Group, 1992).

In constructivist learning, video is also effective in constructing knowledge and evaluation (Cognition and Technology Group, 1992). However, video should be used for facilitating learning, not for teaching. It could be used for encouraging students to be creative, providing feedback about student performance and to analyze and reflect upon what has been learnt (Jonassen et al., 1999).

In addition to technological equipment, the students use various materials (cartoons, texts, graphics, newspapers, documents etc.) to seek answers for their questions and to express their ideas and perspectives (Brooks and Brooks, 1993). If the learners select the materials they will use in their studies rather than being provided by the teachers, they construct knowledge more easily (Varış, 1996). If they construct the multimedia (films, cassettes, slide etc.) themselves, their ability to use technology in their learning is enhanced rather than being controlled by it (Jonassen, Myers, McKillop, 1996).

Marlowe and Page (1998) state that the physical environment in constructivist classrooms is also important and should be designed to motivate the students to learn and to arouse their attention. Students and the teacher decide on how to design it together. It is not important where and how the students are seated, but whether they are participating in learning process or not.

Cooperation and collaboration in constructivist learning environments are highly valued. Anderson (1988) identified three positive outcomes of working cooperatively:

1. Interdependent relationships in which cooperation is rewarded lead to strong motivation to complete a task.
2. Group work develops friendship among group members.

3. Cooperation develops a highly effective communication process which promotes generation of ideas and mutual influence.

He also summarized the instructional effects of cooperative classroom learning environments in the following way:

1. Academic achievement
2. Ensuring students of varying backgrounds and conditions to work together and appreciate each other
3. Learning cooperative problem solving skills

On the other hand, Moos (1974, cited in Moos and Moos, 1978) suggested that students may learn more in the classrooms emphasizing competition and difficulty, but they are more absent from such classes. A competitive environment encourage the cognitive growth of some students. However, such an environment is harmful for insecure students. It is concluded that a learning environment high in competition and support is likely to have a more positive impact than the one high in competition, but low in support.

Teaching large groups of students via formal lectures is not considered to be an ideal way to encourage a deep approach to learning. The following strategies are some of the methods suggested by Gibbs and Habeshaw (1989, cited in Fardouly, 2001) and Newble and Cannon (1989, cited in Fardouly, 2001) to overcome the limitations of formal lectures and to improve the learning environment:

1. Emphasize higher-level intellectual skills
2. Tell students what you are doing by providing good signposts about the structure and direction of lecture
3. Make lectures more interactive
4. Emphasize less memorizing of facts and more construction of meaning
5. Match assessment to objectives
6. Do less lecturing and encourage more active learning
7. Use a resource base such as self-instructional materials, audio, video and computer-based learning to replace lectures

The literature provides us with many examples of effective constructivist learning environments designed for improving learning. An example is Wheatley's (1991) problem-centered learning environment model. The model suggests that in preparation for a class the teacher selects tasks which have a high probability of being problematical for students. Students work on these tasks in small groups. Finally, the class comes together for a time of sharing. Wheatley (1991) explains that the tasks to be selected should be accessible everyone at the start, invite students to make decisions, encourage 'what if' questions, encourage students to use their own methods, promote discussion and communication, be replete with patterns, lead somewhere, have an element of surprise and be enjoyable and extendable.

Another example which provides pedagogical principles for designing an environment specifically for science education is Saunders' (1992) four step approach. His first step is to organize hands-on investigative labs. The second implication is active cognitive involvement made meaningful through activities like thinking aloud, developing alternative explanations, interpreting data, participating in constructive arguing about phenomena under study and development of alternative hypothesis. The third component to Saunderson's (1992) model is student work in small groups. The last implication is higher level assessment. Although the strategies are designed for science classroom, they may be easily adapted to fit any subject area and accommodate different learning styles.

2.3. Characteristics of Teachers in Constructivist Classrooms

In a constructivist classroom the teacher's role is mainly to guide, facilitate, focus, suggest and evaluate the learning process in order to encourage the students to construct knowledge. The teacher is also a co-explorer who encourages learners to question, explain, challenge, discuss, evaluate and formulate their own ideas, opinions, solutions and conclusions. 'Correct' answers, single interpretations, rigid standards and criteria are deemphasized, but diversity in knowledge constructions is accepted. Teachers also function as initiators of activities that will evoke students' interest and lead to new constructions (Airasian and Walsh, 1997; Cochran et al., 1993; Marlowe and Page, 1998) instead of telling them what to know about specific content areas (Spiro and Jengh, 1990, cited in Hannafin and Land, 1997). The effective teachers are considered to be those who

do not believe that students' learning can be controlled absolutely and respect students as human beings (Abdal-Haqq, 1998; Airasian and Walsh, 1997). Moreover, in constructivist terminology, *encouraging* rather than *teaching* is used more frequently because the individual development cannot be forced (Selley, 1999).

It is also essential for the teacher to teach several cognitive strategies to students to help them learn about and gain control over their own activities. These include teaching skills in problem-solving, controlling anger, self-monitoring and assessment, managing stress, cognitive restructuring of students' beliefs about themselves and the world, training for self-instruction and resolving conflicts (Dollard, 1996).

According to constructivist approach, the teachers should follow the contemporary changes and reforms in education closely and be open to new ideas. Since being a constructivist teacher is really challenging, the teachers trust both themselves and their students. They are competent in their field (Selley, 1999). Moreover, the constructivist teachers serve a model for the students as eager learners who continuously construct new understandings of the subject matter and teaching. Teacher learning is similar to student learning in that teachers actively construct knowledge about teaching and learning based on personal experiences and prior knowledge. Knowledge about teaching is personally created and socially mediated by the teacher as they make sense of their teaching worlds in the light of their whole knowledge they already hold about teaching, learning, curricula and the social milieu (Biggs, 1996; Dana et al., 1997; Jenlink and Kinnucan-Welsch, 1999).

Teachers' inferences, judgements and guidance are necessarily indefinite. Teachers' effective use of these strategies depends largely on their willingness to learn and, in turn, on their depth and breadth of knowledge about students' ideas; this knowledge is unnecessarily unfinished and always open to reconstruction through teachers' daily interaction with students (Hendry, 1996).

The teacher's efficiency is measured by his or her contribution to the development of individuals ability to live successfully in a democracy. The goals of education changes from acquisition to growth, therefore, the teacher is in a position to change the work from task to opportunity, shift the responsibility from teacher to children. Under this

framework, the teacher's function is to help children teach themselves. Teachers are seen as assisting performance and the construction of powerful knowledge, rather than explicitly providing knowledge and information. The actual growth, meaning making, is ultimately up to the student (Airasian and Walsh, 1997; Hannafin and Land, 1997; Henriques, 1997).

Major characteristics of a constructivist teacher is summarized by Brooks and Brooks (1993) as follows:

A constructivist teacher...

- 1) encourages and accepts student autonomy and initiative.
- 2) uses raw data and primary sources, along with manipulative, interactive, and physical materials.
- 3) uses cognitive terminology such as "classify," "analyze," "predict," and "create" when framing tasks.
- 4) allows student responses to drive lessons, shift instructional strategies, and alter content.
- 5) inquires about students' understanding of concepts before sharing their own understandings of those concepts.
- 6) encourages students to engage in dialogue, both with the teacher and with one another.
- 7) encourages student inquiry by asking thoughtful, open-ended questions and encouraging students to ask questions of each other.
- 8) seeks elaboration of students' initial responses.
- 9) engages students in experiences that might engender contradictions to their initial hypotheses and then encourage discussion.
- 10) allows wait time after posing questions.
- 11) provides time for students to construct relationships and create metaphors.
- 12) nurtures students' natural curiosity through frequent use of the learning cycle model. (The learning cycle model consists of discovery, concept introduction, and concept application.)

In social constructivist classrooms, the teachers mainly assume three major roles: Leadership, showing empathy and providing support for learning. Leadership involves

such qualities as initiating and organizing classroom activities, setting tasks and holding attention (Fisher et al., 1996). Empathy involves empathizing with students' difficulties, listening to them attentively, showing confidence in them, and be patient and tolerant during the learning process. Teacher support involves showing friendship and concern to the students and helping them with their work (Fisher et al., 1996; Taylor and Maor, 2000).

Constructivist teachers are also effective classroom managers. Classroom management in constructivist classrooms are very important, but different from the one in traditional classrooms. In traditional classrooms the teacher is always on the stage trying to control the classroom. Moreover, traditional views of teacher-student relationships are characterized as distant, with the teacher as an authority figure (Marlowe and Page, 1998; Smerdon et al., 1999).

On the other hand, in constructivist classrooms, the instructor prefers to stand back and let students engage in activities and to be an observer (Marlowe and Page, 1998; Stanbridge 1990, cited in Hendry, 1996, Windschitl, 1999). However, this does not imply passivity or disengagement on a teacher's part. During small group and class discussion, teacher's guidance of the construction of acceptable knowledge involves stating in a nonevaluative way the contradictions between alternative interpretations and implicitly favoring explanations, for example, by restating them in more acceptable terms (Cobb et al., 1991).

In addition, while observing the students, the teacher uses the observation forms and takes detailed notes (Yaşar, 1998). The constructivist teacher is not the sole authority in the classroom, but this does not mean that the learner can do everything s/he wants to do. The teacher does not manage the class through commanding or forcing the students. Management is indirect, emotional and mental (Dewey, 1916, cited in Erdem, 2001). The teacher is aware of everything in the classroom and decides on the nature of the management considering the environment and the students (Marlowe and Page, 1998; Selley, 1999). Constructivist teachers manage the classrooms through engaging students in meaningful and relevant active academic tasks and responding to disrupting student behavior. The more engaged the students are, the less there will be disruptive student behavior (Marlowe and Page, 1998).

2.4. Assessment in Constructivist Classrooms

Moving from the knowledge-transmitting paradigm of learning towards constructivist instruction requires fundamental changes in assessment procedures as well. In constructivist learning environments, assessment is not a separate examination at the end of the course; rather, assessment methods are integrated into the learning process itself. The purpose is not to find out how much of the information studied a student can remember but to promote the learning process and find out what kind of qualitative changes are taking place in students' knowledge. Moreover, educators accept that traditional examinations often lead students to adopt a surface approach to learning and studying, to attempt to memorize the material instead of trying to understand it. Furthermore, the traditional examinations are not able to identify the actual changes in students' knowledge. Standardized testing practices are also considered to be major obstacle to school improvement (Airasian and Walsh, 1997; Farr, 1992, cited in Mohktari et al., 1996).

The paper-and-pencil tests or objective tests in which learners recognize rather than generate answers or give brief responses to questions they have little personal interest are not favored (Windschitl, 1999). Essay exams or term papers are favored over standardized tests in this sense (Gergen, 1994, cited in Akar, 2001). Alternative assessment techniques in constructivist classrooms urge intrinsic motivation, for example through encouraging students to comment on the nature and value of an assessment (Cobb et al., 1991; Reeves and Okey, 1996).

Rather than assessment methods that serve the function of a reinforcement and / or behavior control tool, the ones that emphasize the learning process itself encourage students to engage in self-evaluation, peer evaluation, metacognitive and reflective activities and promote higher-order learning. (Biggs, 1996; Jonassen, 1991; Tynjälä, 1998, Tynjälä, 1999; Yackel et al., 1992, cited in Hendry, 1996). From a constructivist perspective, informal assessment is not less important than formal assessment. Testing cannot take the place of teachers' more fruitful and complex, everyday interaction with students (Hendry, 1996). Informal assessments refer primarily to teacher observations of eye contact, body language, facial expressions, and work performance. These

observations can complement formal assessments as a basis for instructional adjustments (Bednar, 1991).

Informal assessment is conducted through the regular feedback and negotiation on students' performance (Hannafin and Land, 1997; Kerka, 1997). The teacher allows the students to evaluate themselves and makes them feel that s/he trusts them. The feedback involves individual assessment rather than comparing the learners with each other considering the nature of learning and teaching process, difficulties that were experienced, needs and feelings (Marlowe and Page, 1998). Students are also engaged in critical course evaluation and evaluation of the efficacy of the teacher as a promoter of understanding (Crowther, 1997; Tynjälä, 1999).

Jonassen (1991) summarizes some of the evaluation strategies that could be used to assess constructivist learning:

1. **Goal-Free Evaluation:** In constructivist evaluation, evaluation is goal-free because if specific goals are known before the learning process begins, the learning process as well as the evaluation would be biased.
2. **Authentic Assessment:** Ownership of learning is a major factor in increasing the authenticity of an assessment. Another one is the learners' awareness of the importance of assessment and eagerness to take place in evaluation (Reeves and Okey, 1996).
3. **Knowledge Construction:** Evaluators need to focus on learning outcomes that will reflect the intellectual processes of knowledge construction, that is assessment of higher-order thinking. A major criterion for assessing knowledge construction outcomes must be originality. Since learning is considered to be the process of knowledge construction, the constructor is the one who can best evaluate that knowledge construction.
4. **Experiential Construction (Process vs. Product):** It is the process of knowledge acquisition that should be evaluated, rather than a product. Evaluating how learners go about constructing knowledge is more important than the resulting product. The

metacognitive awareness of learning will also improve both the process of learning and the product. The strategies that enables the assessment of the learning process are debriefings, abstracted replays, dramatizations, interviews, observations, group discussions, critical thinking, knowledge telling, co-investigation, and problem-solving activities (Bednar et al., 1992; Colins and Brown, 1987, cited in Bednar, 1991; Erdem, 2001; Selley, 1999).

5. **Context-Driven Evaluation:** Since the instruction must be anchored in some meaningful, real-word context, evaluation should also occur in contexts that are just as rich and complex as those used during instruction.
6. **Context-Dependent Evaluation:** Since constructivist learning is supported by rich contexts, designers and evaluators must consider the context in which learning is taking place.
7. **Multiple Perspectives:** Rather than using a single criterion or a set of criteria for assessing the quality of learning outcomes, a domain of possible outcomes should provide acceptable evidence of learning. Moreover, since evaluation is necessarily subjective to some degree, rather than a single evaluator, a panel of evaluators, each with a meaningful perspective and reasonable characteristics should evaluate the learner.
8. **Multimodal:** Constructivist learning which is multi-faceted and multi-perspectival, and results in multiple outcomes, and therefore, should be evaluated in a somewhat different way.
9. **Socially-constructed (Negotiated) meaning:** If meaning is negotiated, the goals of learning should be negotiated or the negotiation process should be used in the form of argumentation, as evidence of learning. Objectives, if they are useful, can best be used as a negotiating tool for guiding learners during the learning process and for self- evaluation of learning outcomes.

In constructivist classrooms, assessment of learning is performance-based. For assessing performance there are numerous ways such as written exams requiring the

learners to demonstrate their higher order thinking, journals, logs, portfolios, research reports, projects, compositions, physical models or performances in the forms of plays, debates, dances or other artistic representations. Performance assessment also involves critiquing and discussing students' work or performance (Cates, 1992, cited in Bednar, 1991; Marlowe and Page, 1998; Reeves and Okey, 1996; Windschitl, 1999).

The reliability of these assessment techniques may be questionable. For example, the knowledge and skills measured by authentic assessment do not allow easy comparisons among students and these assessments lack generalizability to other contexts. The effectiveness of authentic assessment depends on clarity of the criteria set. Therefore, arbitrary or not clearly defined evaluation strategies may not yield sound results. Portfolio assessment may also indicate low inter-rater reliability (Ediger, 2000, cited in Akar, 2001).

Considering the flexibility in constructivist approach, it cannot be said that *anything goes with constructivism*. On the other hand, there is a need for standards and criteria of judgment for *reasonable* and *acceptable* student knowledge construction. A constructivist teacher must face the relationship between truth and meaning, deciding on how much emphasis to put on the relative *truthfulness* of students' construction or their *meaningfulness* to the student. It is also assumed that knowledge is ego- and context-specific, the likelihood of agreeing on common standards of evaluation is diminished greatly (Airasian and Walsh, 1997).

Lack of one best construction does not mean some constructions may not be better than others. Moreover, sole reliance on personal meaning to justify conclusions lead to potentially biased, self-serving and dishonest constructions. Assessing students' products and performances requires well-designed, flexible doctrines. Designing these doctrines through interaction and negotiation with the students builds consensus about what the purpose is in a learning activity, about the nature of meaningful criteria and about how assessments reflect the efficacy of the teacher as a promoter of understanding (Airasian and Walsh, 1997; Reeves and Okey, 1996; Windschitl, 1999).

2.5. Implications of Constructivist Approach for Teacher Education

Recently, in many countries in the world, the effectiveness of pre-service and in-service training programs to prepare new teachers for the increasingly complex and diverse demands of public school teaching has been questioned and found out that current teacher education programs do not meet the demands of today's schools. It has also been asserted that teacher education is one of the foci of education in 2000 and teachers for the 21st century and an effective teacher education program should consider the recent trends in the world (Tetenbaum and Mulkeen, 1986) and in education and should adopt a constructivist approach to teacher education (Richardson, 1997).

It has been recognized that the twenty-first century will see an increased information flow and the problem solvers will be needed to deal with complex problems. The implication of this trend for teacher education is a change in educational trend from behavioral to a constructivist approach. This implies that in the new century, the prospective teachers will need to acquire critical thinking, the skill to teach the students with diverse learning needs and communicate effectively with an emphasis on the cognitive processes of inquisitiveness, sequential thinking and problem solving rather than knowledge acquisition and fact recall. In the future, it will become as important to teach people the ability to search for information and to evaluate it as to know it (Tetenbaum and Mulkeen, 1986).

The belief that knowledge acquisition is an unproductive educational goal suggests that the role of teacher educators as the source of information and as disseminators of knowledge will have to change to the one as the facilitators of learning. However, this will require a new approach to instruction and curriculum development and transformation of the entire educational system. Ignoring the technological revolution, the information explosion and the dynamic nature of the current world, teacher education becomes static which views learning as finite. Education in the modern world must be a lifelong process and there needs to be an institutional framework that reinforces and directs continuing education of the teachers (Tetenbaum and Mulkeen 1986).

Another critical factor in the new century is the recognition of the individuals' needs for self-determination and ownership in decision-making process. Therefore, an effective

model of teacher education needs to assure that students- whatever their level of experience- are respected and trusted; that they are involved in the decision-making process pertaining to their learning needs and that they are reinforced and supported in their efforts to experiment and take risks. (Tetenbaum and Mulkeen; 1986).

In order to improve the existing programs, reforms which involve establishing cross-disciplinary collaboration or teaming activities, restructuring organizational systems and coursework have been undertaken for the purpose of training future teachers with more comprehensive skills to be effective with diverse student populations, to collaborate more effectively and construct knowledge rooted in their own personal experiences (Kaufman and Brooks, 1996).

Martin (1996) suggests that the teacher education programs should be restructured for enhancing higher order thinking skills. Contemporary teacher education programs that incorporate higher-order thinking skills are suggested to include at least the following (Martin, 1996):

1. Courses in which the knowledge base about cognition and cognitive processes is a fundamental and explicit part.
2. Professors who exemplify and stimulate higher-level thinking themselves in future teachers during class sessions.
3. Methods courses that emphasize and exemplify the specific teaching strategies that will promote higher-level student thinking in any subject matter context.
4. A general reconceptualization of teaching as fundamentally a thinking and reflective activity.
5. Practicum experiences that provide the student teacher with a variety of models for teaching of thinking as well as for opportunities to practice them and receive productive feedback from both a supervisor and a cooperating teacher.
6. Information about and practice with a variety of student assessment tools that will appropriately identify higher-level cognitive functioning.

Effective teacher education involves enabling the prospective teachers to establish a meaningful link between theory and practice. In line with this premise, Cochran et al. (1993) suggest the use of pedagogical content knowing model (PCKg) based on a

constructivist view of learning. This developmental model for teacher preparation includes the four components of understanding pedagogy, subject matter, students and the environmental context. Development of preservice teacher in each area begins with a relatively limited focus and becomes more elaborate through program experiences and reflective activities. These four components become so integrated and so interrelated that they no longer can be considered separate.

Application of PCKg to teacher preparation requires conceptually integrated instruction across several subject areas for these type of knowledge to develop simultaneously. The construction of PCKg results from multiple opportunities to teach, to observe and to reflect on one's own teaching and that of others in a content area. Development of PCKg requires early, continued and authentic field experience with opportunities for real teaching and follow-up reflection feedback. The instructional practices that promote PCKg development are case studies, peer coaching, cooperative classroom methods, hypermedia, microteaching and team teaching (Cochran et al, 1993).

Early and often field experience is considered to be crucial because in this way, preservice teachers reenter the familiar world of teaching no longer as a student but as a prospective teacher and construct understanding in this context. This experience challenges many of the preconceived ideas and adds to the prospective teachers' newly constructed understandings of learning and teaching (Bonstetter, 1998). Moreover, early field experience is seen as a response to charges by policy makers, teachers and teacher education students who perceive that teacher education programs are too abstract and academic. According to this point of view, through early field experiences, the practical and theoretical courses will be brought in closer alignment whereby enabling the prospective teachers relate education courses with teaching practices (Mc Diarmid, 1993).

Bonnstetter et al. (1998) provides some of the key characteristics of effective practicum experiences. These characteristics are summarized below:

- starting with structured observation and progress to a point where the student is cultured into student teaching;
- culminating team teaching phase
- active participation in class activities

- work with individual and small groups
- daily reflective journaling
- visitation and observation of other preservice teachers settings
- peer partnerships, especially during the early experiences
- and regular debriefing sessions held with other practicum students

Zeichner (1983, cited in Hassard, 1999) suggests an inquiry-oriented approach for teacher education which conceptualizes teacher education as an ongoing process of experiencing practical teaching and learning situations, reflecting on them under the guidance of an expert, and developing one's own insights into teaching through the interaction between personal reflection and theoretical notions offered by the expert (Hassard, 1992; Jenlink and Kinnucan-Welsch, 1999; Thomaz and Gilbert 1989).

Imig and Switzer (1996, cited in Hassard, 1999) report that the constructivist paradigms emerging in teacher education like the ones mentioned above decrease the effects of traditional widely implemented *application of theory model* which involves teaching an educational theory and requiring the prospective teacher to implement it in his/her teaching. A constructivist approach to teacher education adopts a process focus which attempts to create an environment enhancing dialogue and meaningful learning through meaningful tasks. These processes are often used by teacher educators to model how they want their students to eventually teach in their own classrooms. The teacher candidates should perceive what has been learnt as connected with teaching experience, and meaningful to be able to use that knowledge flexibly in different contexts (Richardson, 1997).

As Lortie (1975, cited in Hassard, 1999) indicates, teacher education should be *realistic* in the sense that it should take its starting point in real problems encountered by student teachers during field experiences. The student teacher then develops his or her own knowledge in a process of reflection on the practical situations in which a personal need for learning was created.

The literature suggests that a powerful and contemporary teacher training strategy should be based on a view of professional development that emphasizes the importance of prior knowledge and experience about teaching, learning and subject matter in the construction of teacher knowledge (Dewey, 1938, cited in Hassard, 1999). It should also

introduce and practice alternative perspectives to teaching and learning extensively, consider the importance of students' alternative perspectives, be embedded in a definite model of adoption of an innovation which allows for the progressive introduction of new ideas to student teachers over several years, abandon standardized testing and make assessment meaningful for them (Thomaz and Gilbert, 1989, Dana et al., 1997; Brooks and Brooks, 1993).

One of the most significant implication of constructivism for teacher education is that it enhances conceptual change. Conceptual change pedagogy is grounded in the constructivist learning theory and holds that learners must become *dissatisfied* with their existing conceptions as well as find new concepts *intelligible*, *fruitful* and *plausible* before conceptual restructuring occurs (Posner et al., 1982; Tynjälä, 1999). Conceptions are composed of two components- beliefs and knowledge. Beliefs are both affective and cognitive and consists of personal views, assumptions and values. Knowledge, the second component of conceptions, includes both content knowledge and knowledge about teaching. Content knowledge has two components- knowledge of basic concepts and principles and knowledge of the ways to teach them (Shulman, 1986). Knowledge of teaching enables the teacher to choose the tasks, problems, representations and explanations that help students to understand (Steele and Widman, 1997).

One reason that students do not readily transfer concepts learned in education courses into practice is that they can learn theories without altering their existing beliefs (Kagan, 1992, cited in Lundeberg and Fawver, 1994). Unless preservice teachers and teachers change their beliefs, they are unlikely to change practices, since beliefs influence classroom practice (Lundeberg and Fawver, 1994). Since majority of teacher candidates experience only didactic pedagogy in their schools (Tobias, 1990, cited in Stofflett, 1994), their conceptions for teaching are primarily didactic (Stoddardt, Connell, Stoffelt and Peck, 1993). This traditional conception of teaching influences the learning of new pedagogies and as a result learners assimilate new teaching strategies ineffectively or reject the new strategies altogether (Holt-Reynolds, 1992, cited in Stofflett, 1994).

The process of conceptual change involves helping prospective teachers gain a conception of teaching for meaningful understanding and a conception of learners as constructors of knowledge (Dana et al., 1997). Simply telling and showing teacher

candidates conceptual change methodologies will not be sufficient to accommodate their traditional preconceptions. If teachers are to change their views of teaching, they must undergo a process of conceptual change themselves and teacher education courses should be designed to facilitate this development (Stofflett, 1994).

Since according to constructivist approach, the teachers are also seen as learners who continually construct their own knowledge of subject matter and pedagogy, a constructivist teacher education can assist both preservice and inservice teachers building and rebuilding their knowledge structures about teaching and learning. This view is a shift from the position that the purpose of teacher education is to provide advice to new teachers in mastering technical skills such as writing behavioral objectives, using proper lesson plan formats, mastering a particular instructional model and so on.

Constructivist teacher education can also help teachers avoid *canned* lessons that emphasize the recall of trivial facts by helping them to develop a theory-based understanding of how students come to understand the subject matter. After learning what students understand about a particular concept, teachers can be challenged to use that information and their knowledge of pedagogy to provide lessons that result in meaningful learning (Dana et al., 1997).

In general, constructivist teacher education reflects two major traditions whose principles affect what and how the teacher teaches: Piagetian and Vygotskian constructivist traditions (Canella and Reiff, 1994, cited in Abdal-Haqq, 1998). Oldfather, Bonds and Bray (1994, cited in Abdal-Haqq, 1998) assert that the programs influenced by the Piagetian tradition are typically characterized by substantial direct instruction in theory and practice, often without complementary opportunities for inquiry, discovery, or self-examination and therefore this approach can easily become overly prescriptive. Nevertheless, Piagetian approach is usually considered to be a learner-centered approach which encourages the learner to experience spontaneous research and direct instruction is perceived to stifle discovery process of learning (Balakrishnan, 2001, cited in Akar, 2001; Vadoconceur, 1997). Developmental principles of knowledge acquisition are particularly considered to be well-suited for preparing elementary school teachers because they have implications for what and how children are taught, how progress toward expertise in

teaching is conceptualized and how teachers are educated (Black and Ammon, 1992; Dana et al., 1997; Krol and Black, 1993).

Programs influenced by Vygotskian, that is social constructivist tradition, attempt to help teacher education students deconstruct their own prior knowledge and attitudes, comprehend how these understandings evolved, explore the effects they have on actions and behavior, and consider alternative conceptions and premises that may be more useful for teaching. Critical analysis and structured reflection on formal course knowledge and everyday practical experience are incorporated (Abdal-Haqq, 1998). Principles of Vygotskian theory can be applied for teachers' development of higher-order thinking skills and metacognition, that is conscious awareness and regulation of their own thought-processes, as teacher education goals (Manning and Payne, 1993).

Mainly, the implications of constructivist approach for teacher education is that the prospective teachers should be trained as effective problem-solvers, active learners and reflective thinkers on their own learning and teaching. The teacher education programs designed for this purpose should develop critical thinking skills, challenge and change prospective teachers' traditional conceptions of learning and teaching, emphasize early field experience and prepare them for the role of constructivist teachers effectively.

2.6. Challenges of Constructivist Education

The major challenge that constructivism presents to teachers and teacher educators is the difficulty of translating a learning theory into a theory of teaching which in turn raises questions about what teachers need to know and be able to do. For teacher educators, among other tasks, this involves balancing the need to acknowledge the different discipline-specific requirements of teaching with the need to model constructivist methods in teacher education courses and teaching practices (MacKinnon and Scarff-Seatter, 1997, cited in Abdal-Haqq, 1998). Airasian and Walsh (1997) points out that although constructivist approach is currently favored and considered to be a legitimate approach for learning and teaching, the application of constructivism in classrooms is not widespread or systematic. Most applications tend to be recent, narrowly focused pilot studies. Methods of constructivist teaching typically are not identified precisely and moreover, are frequently somewhat ambiguous (Smerdon et al., 1999). There are

suggestions for methods that are likely to foster student construction of knowledge, however, it is not clear how such methods relate to learning in different content areas or whether they will be equally successful across all subject areas (Airasian and Walsh 1997; Windschitl, 1999).

Windschitl (1999) believes that the traditional images and beliefs that are hold of student and teacher roles in the classroom, the high demands that the constructivist instruction places on the teachers and logistical and political challenges presents difficulties for establishing and sustaining a constructivist classroom culture. He also asserts the major principles of constructivism remain too idealized to be actualized.

Richardson (1997) also notes the limits of a perspective on teaching that values students' understandings at the expense of right answers. If nonappropriately applied, constructivist approaches may also lead to the abandonment of teaching (MacKinnon and Scarff-Seatter, 1997, cited in Abdal-Haqq, 1998).

Adoption of constructivist approach requires a change in the existing practices. It has been suggested that change is not a prevalent characteristic of teacher education (Rainer and Guyton 1994). Moreover, teachers can be considered to be major obstacles in change because of their adherence to outmoded methods of instruction and their fixed, traditional views about learning, teaching and curriculum, as well as being important agents of change in the reform efforts for changing schools and classrooms (Prawat, 1992). Vadeboncoeur (1997) asserts that teacher educators should analyze factors that affect current practice in teacher education and alerts to the fact that without such an analysis, traditional educational approaches may perpetuate in supposedly constructivist classrooms. These views suggest a more personal rather than an organizational approach to change and implies that organizations do not change unless the individuals within them do (Rainer and Guyton 1994). Moreover, diversity of understandings which was suggested to be supported in constructivist classrooms may not be compatible with state and local standards (Windschitl, 1999).

Another challenge faced by educators is regarding constructivism as the only feasible theoretical framework for teaching and learning. It is one way of thinking about how knowledge and understanding are formed, but it is not the only way. It is also argued that

from a constructivist point of view, it is a misunderstanding to consider teaching methods such as memorization and rote learning useless, since some matters can and possibly must be learned in a purely mechanical way (Airasian and Walsh, 1997).

Although most of the educators regard constructivism as an approach which enhances meaningful learning, they point out their reservations with regard to its use in several contexts. For example, Feng (1995) asserts that many constructivist theories are inappropriate for entry-level learning because at entry-level, students do not have the preparation for decision making on what and how they should learn. The educational goals, objectives, contents, and even learning methods have to be decided under close supervision of the teachers and concrete teaching is necessary for the students to attain basic knowledge and skills to make free exploration. The teacher's control may be gradually reduced at higher grade levels. This does not mean, however, that students can take the entire responsibility for what and how to learn from the very beginning (Perkins, 1991; Winn, 1991, cited in Feng, 1991).

Perkins (1991) thinks that instruction is not totally unnecessary even at higher-levels of learning. For instance, it is unrealistic to require a first-year student in a teacher education program to choose a pedagogic philosophy to guide his or her future professional engagement before s/he knows what the other alternatives are. Feng also (1995) points out that it is unnecessary for students to go through a trial process to assemble knowledge in well-structured domains such as mathematics, physics, and chemistry, especially at elementary and secondary levels of learning and it is impossible for any individual to experiment all the knowledge s/he needs to learn that has been accumulated throughout history.

Constructivist instruction, especially the one based on designing tasks for problem-solving places high demands on the subject matter understanding. In addition to the necessity for flexible subject matter knowledge, constructivism places greater demands on teachers' pedagogical skill. Assuming the role of a constructivist teacher requires critical reflection. Teachers must struggle to develop a new, well-articulated rationale for instructional decisions and cannot depend on their previous teaching and learning experiences for help in shaping their choice of methods (Smerdon et al., 1999; Windschitl, 1999).

Time is also extremely important in implementing constructivist education because it is needed for teachers and students to learn and practice how to perform in a constructivist classroom. Finding a balance between teacher involvement or noninvolvement in the process of learning poses a challenge. The problem of guiding and evaluating the students without undermining their constructivist activities is a difficult one. Development of standards and criteria that are clear but allow variance in evaluation also takes time and creates another challenge. Moreover, to review, understand and respond to unique student constructions of knowledge will require substantial teacher time and perhaps involvement of parents and community members (Airasian and Walsh 1997).

Quality of students' constructions will likely to depend in part on the time they are given to construct. Therefore, the schools will face whether to cover a large amount of content at a rather shallow level or less in great depth. (Airasian and Walsh, 1997; Windschitl, 1999).

Moreover, constructivist teaching does not consist of a finished repertoire of behaviors that, once achieved, will become routine. There is no point of arrival, but a path that leads to further growth and change. Creating a teaching practice guided by constructivist principles requires a qualitative transformation of virtually every aspect of teaching (Schifter, 1996).

Such difficulties in the implementation of constructivist approach does not imply that the teachers had better avoid using constructivist teaching strategies in the classroom, but makes them more conscious of the challenges that may arise to be able to cope with them effectively. In order to overcome these challenges, a core group of committed instructors must systematically investigate on constructivism in order to understand its principles and limitations, workshops should be conducted on the constructivist implementation of several instructional and assessment techniques. The faculty members should openly discuss their beliefs about learners and about their roles as instructors for challenging them through activity, reflection and inquiry and rethink about classroom organization, schooling, the organization of power and authority in schools. Administrators must also support the instructors in their efforts to implement constructivist approach in their

classrooms. Moreover, challenges in beliefs must be accompanied by construction of pedagogy that will contrast with the older, more traditionally held views and implementation of practice (Abdal-Haqq, 1998; Jenlink and Kinnucan-Welsch, 1999; Prawat, 1992; Windschitl, 1999).

In sum, although constructivist approach is highly favored and yielded positive learning outcomes, it poses some challenges for the educators. For example, it is difficult to implement, time-consuming and not appropriate for every level. Moreover, it requires challenging and totally changing traditional practices, may lead to abandonment of teaching totally, may misdirect people thinking that it is the only way to learn and teach and puts higher demands on teachers. However, such challenges should not discourage the educators, but should lead to a critical thinking over its effective implementation.

2.7. Research Studies

Although constructivism is not a new educational approach, the studies on constructivist teacher education are conducted in the last two decades more frequently. Especially in the 90s, studies on constructivist teacher education increased while the studies conducted before 80s reflected the traditional approach, behaviorist/transmission model, to teacher education. Therefore, the present literature will focus on the studies conducted in the last decade because they are built upon the earlier research related to constructivist education.

2.7.1. Methods for Assessing Constructivist Classroom Characteristics

The research studies conducted on constructivist teacher education usually consist of survey studies that search for the various effects of a particular innovative constructivist program or course. There are also intervention studies which investigate the effect of particular constructivist teaching practices. Only a few studies involve the experimental research designed to compare the effect of a constructivist practice with the traditional one. Windschitl (1999) asserts that research on constructivism should focus on how to refine the existing constructivist practices rather than on artificial and biased comparison of constructivist practices with the traditional in which the constructivist practices will supposedly be proved to be more productive and effective.

Methods of data collection and analysis in research studies conducted on constructivism are more qualitative in nature rather than quantitative. Most of the studies analyze the findings of the study through examining journal writings, portfolios, audio or video recordings of discussions or teaching, interviews and class observations (Cobb et al., 1991; Hand and Peterson, 1995; Hashwesh, 1996; Hewson, 1999; Tynjälä, 1998, Tynjälä, 1999).

Smerdon et al. (1999) asserts that learning about classroom instruction through survey data may have some limitations. For example, they pointed out that the students' judgments about the instruction in their class may probably be influenced by their liking of the subject, their performance in the class, their relationships with the teacher and their classroom peers. They stated that studying instruction in the classroom can best be accomplished by trained observers visiting the same classroom several times over an extended period in a modest number of schools.

There are also quantitative measures developed to assess the classroom-based learning in constructivist learning environments. Such measures have usually parallel actual and preferred forms which assess actual and preferred characteristics of the classrooms. One of these measures was developed by Taylor and Fraser (1991) in order to assess the degree to which a particular classroom environment is consistent with a constructivist epistemology, and to assist teachers to reflect on their epistemological assumptions and reshape their teaching practice. The instrument was named as Classroom Learning Environment Survey. (CLES) and has four scales: Autonomy, Prior Knowledge, Negotiation and Student-Centeredness. Another instrument was developed by Taylor et al. (1995) through revising the original student perceived form of CLES. This instrument has five scales: Personal Relevance, Uncertainty, Critical Voice, Shared Control and Student Negotiation. Taylor (1995) also developed The University Constructivist Learning Environment Survey to assess the effectiveness of portfolio use in postgraduate teaching.

The questionnaire intended to be used in the present study through adaptation is the University Social Constructivist Learning Environment Survey (USCLES) developed by Fisher, Taylor and Fraser (1996). USCLES has emerged from recent developments in the

combined fields of learning environment research and constructivist research on teaching. It is different from most similar surveys in that its scales have been designed, from a social constructivist perspective on learning, to highlight important psycho-social dimensions of a university classroom environment in which communicative and reflective learning are valued activities. The first three scales - **Relevance, Reflection, Negotiation** - are concerned with opportunities provided by the university teacher to engage students in communicative activity and reflective thinking leading to their development of deep conceptual understandings within the discipline. The second three scales - **Leadership, Empathy, Support** - are concerned with important interpersonal qualities that need to be displayed by a university teacher interested in persuading students to transform their established epistemologies and approaches to learning.

Since the world technology has been developing a great deal, constructivist learning environments are usually technology-supported and the relevant instruments have been developed to assess technology supported environments. Among these, there are Constructivist Multimedia Learning Environment Survey by Maor (1997), Constructivist Virtual Learning Environment Survey by Maor (1998) and Constructivist On-Line Learning Environment Survey by Taylor and Maor (2000). These surveys are the adaptations of the earlier ones with a few alterations.

A striking point related to the relevant literature is that although principles of constructivism is implemented in many fields, most of the research studies are conducted in the fields of science and math being the only fields to which constructivism is widely applied. This attracts the future researchers' attention to the point that that more research studies are needed in other fields.

2.7.2. Research Studies Related to the Impact of Constructivist Classrooms on Students' Learning Outcomes

The relevant research studies usually investigate the effect of constructivist instructional practices or programs on development of cognitive and affective learning outcomes. A few research studies investigate the effect of constructivist instructional practices as compared by traditional ones. These studies reveal that the students instructed

by constructivist methods demonstrate more positive cognitive and affective learning outcomes compared to those instructed by traditional methods.

For example, Tynjälä (1998, 1999) conducted an experimental study in an educational psychology course at the university in order to compare students' learning outcomes in a constructivist and a traditional learning environment. The results of the study revealed that both groups described their learning in terms of knowledge acquisition. However, while most of the students in the constructivist group emphasized that the course helped to develop their thinking skills, just a few students in the traditional group felt the same. Moreover, the constructivist group students described their learning in a greater variety of ways while the traditional ones characterized their learning mainly in terms of knowledge accumulation. Furthermore, most of the constructivist group students mentioned that they acquired communication and cooperation skills such as teamwork and writing skills.

In the study the constructivist group did not receive a final exam for grading purposes unlike the traditional group, but they were asked to answer the questions in order to provide data for the study. Although responses of the traditional group to the exam questions were longer, the constructivist group's responses included more classifications, comparisons, evaluations and generalizations which were the indicators of attainment of higher thinking skills.

Other experimental studies revealed the similar results in favor of constructivist approach. For example, in his experimental study, Koch (1992, cited in Hendry, 1996) evaluated the effectiveness of constructivist teaching strategies in teaching a remedial tertiary arithmetic course and found out that students in the constructivist group showed less anxiety and more positive self-perceptions than those in the control group and outperformed them in the mathematics test. In Caprio's study (1994, cited in Henriques, 1997) the astronomy students getting constructivist instruction received better exam grades, seemed more confident of their learning, liked the class better, had more energy and took more responsibility for their learning. The teacher gave more material for independent learning to the students in the experimental group. This was necessary because constructivist teaching methods were more time-consuming than the traditional ones.

In a year-long research project, Cobb et al. (1991) evaluated the effectiveness of a constructivist approach to teaching mathematics compared to traditional approach and found out that project students demonstrated higher levels of arithmetical thinking than non-project students on both standardized and project-based tests of mathematical achievement and proficiency. With respect to students' beliefs and motivations both groups believed that reasons for their success were working hard and being interested; however, project students believed that their success resulted from developing their own mathematical procedures, whereas non-project students commonly thought that their success resulted from copying the teacher's procedures and demonstrating superiority over others. With regard to students' motivations, project students were less ego-involved, less extrinsically motivated or less desirous of being more successful than others in mathematics than non-project students. A finding which seemed to be inconsistent was that both groups of students were motivated to try to understand mathematics and collaborate with peers. With respect to teachers' pedagogical beliefs, it was found out that project teachers' ideologies were more consistent with the socioconstructivist philosophy and differed significantly from non-project teachers'.

In their study, Christianson and Fisher (1999) found out that the students in traditional biology classes could not achieve deep approach to learning through comparing three different biology classes in three different classes. In the first two groups, classes were overcrowded, the lessons were teacher-centered and there were a lot of laboratory work taking a little time. In the constructivist group, there were laboratory work and discussions based on constructivist approach in a class with 30 students. The results revealed a significant difference in the post-test scores in favor of constructivist group. There were no significant differences between the other two groups. The students' learning in the constructivist group were deeper and more meaningful. The results of the study indicated three major differences between constructivist instruction and the traditional one in favor of the former: More time devoted to tasks, student-centeredness and less crowded classes.

Cooperative learning as being one of constructivist learning activities promotes collaboration. However, cooperative learning does not promote learning by itself; the nature of interaction affects learning and collaboration. Nyikos and Hashimoto (1997) examined written statements of the students working collaboratively in a graduate level of

class on cooperative learning. They found out that interactions were generally social in nature but often tempered with solitary, reflective problem-solving. It was also found out that each group showed varying degrees in active construction of knowledge. One primary observation arising from this study was that without a strongly supportive social component, the potential for learning for both the individual and the group was undermined.

Dowell (1980) conducted a research on the comparative effect of a competitive and cooperative learning environment (LE) on the comprehension of a task. Subjects of the study were the children in the five suburban elementary schools with a predominantly white, middle-class and upper-middle-class pupil population. The study indicated that a cooperative LE was not more conducive to the learning than a competitive LE. He attributed the results to two factors: Individual competitive motivation stimulated the competitive group and students in the cooperative group were unable to accept each other and to work co-operatively.

2.7.3. Research Studies Related to the Impact of Constructivist Teacher Education on Teacher Candidates' Learning Outcomes

The research studies conducted to identify the impact of a current constructivist program, course or instructional practices reveal that constructivist approach is usually effectively implemented effectively in teacher education and contribute to positive learning outcomes and attitudes of preservice and inservice teachers. For example, a study conducted by Hand and Peterson (1995) investigated the use of a constructivist teaching-learning approach to improve first year pre-service primary teachers' confidence in and attitude to teaching science. The results of the study revealed that students reported many benefits including ownership of knowledge, the development of pedagogic skills and the use of group work to develop ideas. A number of concerns such as uncertainty of knowing what to do when exploring knowledge for themselves and the lack of note-taking were also reported.

Condon et al. (1993) conducted a study in order to evaluate an alternative Master of Arts teacher education program based on constructivist view. The results of the study revealed that students attending the program viewed learner-centeredness as an essential

quality of their teaching and felt that they grew in informed decision-making and efficacy while the idea of professional leadership in leading one's peers was rare. Implications of the program for teacher education involve redefining learners' and teachers' role, changing the traditional institutional structure and need for participant networking and collaborative support from the university and school system.

One of the major concerns of the constructivist teacher education is that the prospective teacher should be able to implement what they have been taught in their teaching practices. Kroll and Black (1993) conducted a pilot study to evaluate a Developmental Teacher Education (DTE) program in Graduate School of Education at the University of California in order to find out whether the graduates actually employed teaching methods that were compatible with what they were exposed to in the DTE program. The results indicated that in contrast to more traditional teachers, DTE teachers took the role of a coordinator or orchestrator of activities rather than a direct imparter of information, were consciously involved in attempts to link theory with practice, encouraged cooperation and collaboration between their students through the use of heterogeneous grouping and attempted in cognitive conflict-resolution techniques that were conducive to both intellectual and social development.

A shift away from traditional approach to teacher education has started with systematic reform efforts in education achieved through the collaboration between the state governments and the universities. Roychoudhury and Kahle (1999) mentions such a reform attempt in inservice middle school mathematics and science program involved learning science content through open-ended and guided discovery. Investigation of the impact of the program revealed that how individual teachers interpreted inquiry and translated it into practice was a function of their prior knowledge, their beliefs about teaching and learning and the school's context. The results imply that there is a need for developing a curriculum which encourages teachers to acquire a depth understanding by engaging in authentic problem solving and applying their understanding to new contexts. Since this study was limited in its scope and focus, it was not clarified whether the teachers gained these skills.

Another reform effort in teacher education was a policy decision-making process which involved a committee consisted of consultants, elementary teachers and faculty

members for an early childhood education department to develop a new master's degree program based on constructivist theories and principles (Rainier and Guyton, 1994). Analysis of the data received from the committee members with regard to their perceptions about the new program revealed that although at first the faculty members had reservations with regard to the use of constructivist principles in the program, after each meeting they seemed to hold more positive attitudes and feelings towards it. The results of the study imply that the process of getting ready to change is an integral component of curriculum development and change in teacher education and any attempt to an innovative change in the curriculum should consider the faculty members' concerns and attitudes.

The literature suggests that teachers become more proficient and critical of their practices as they gain experience in constructivist teaching practices. For example, Liu, Baker, Shaka, Banks and Norgren (1998) assessed the impact of a elementary/middle school teacher preparation project on prospective teachers and compared the graduate first year teachers' thoughts about their classes with the actual taped observations of them in the classroom. The results showed that most new teachers thought that they were very student-centered, but tape recordings proved that they were teacher-centered. After a couple of years, these same teachers thought that they were much more teacher-centered than before, while the tapes showed them to be less so.

A great deal of research related to constructivist teacher education examines the effect of constructivist practices on prospective teachers' conceptual change. For example, Hewson et al. (1999) explored whether the use of two specific strategies in preservice teacher education programs (action research and a methods course modeling a conceptual change approach for teaching science) contributed to the development of appropriate conceptions of teaching science. The analyses revealed that the process of action research facilitated a shift in the focus of preservice teachers away from subject matter and toward their students. However, development of conceptual change teaching methods on the part of the preservice teachers was inhibited by their own nonconstructivist views of knowledge. The results suggest that the prospective teachers could achieve the conceptual change if the science courses they are currently taking would adopt a constructivist orientation to teaching and learning.

The relevant studies support that a course based on constructivist principles enhance the change in preservice and inservice teachers' traditional conceptions of learning and teaching. For example, Stofflett (1994) found out that although the elementary teacher candidates taking a conceptual change methods course at first held didactic pedagogical conceptions and resisted the conceptual change strategies, at the end of the course they reported that they found the new strategies to be intelligible, plausible and fruitful. They also expressed implicit dissatisfaction with their earlier concepts. The research study carried out by McGinnis, Kramer, Roth-McDuffie and Watanabe (1998) investigated the impact of a program whose goal was to promote the development of professional teachers confident in teaching mathematics and science using technology, who could make connections within and among the disciplines, and who could provide an exciting and challenging learning environment for students of diverse backgrounds. The study revealed that the teacher candidates' attitudes and beliefs changed in the desired way.

Hand et al. (1991) investigated transformations in two secondary science teachers' thinking during their implementation of a constructivist approach. The teachers agreed at the outset that their teaching was definitely teacher-centered and expressed concerns about the new approach. Following the teachers' implementation of a constructivist approach to teaching a unit, several changes were identified in their thinking and behavior. The benefits of the new approach were identified by the teachers as gaining a better understanding of the diversity of students' ideas, more appropriate use of equipment by the students and an increase in students' self-confidence and enjoyment of lessons. The teachers recognized that their initial concerns about the new approach were not supported and implementation of constructivist principles proved less problematic than anticipated.

Field experiences proved to be effective in changing the teacher candidates existing beliefs about teaching and learning if they are arranged effectively. McDiarmid (1993) analyzed beginning teacher education students' beliefs about teaching and found out that most of the students believed that teaching subject matter involved telling or showing and learning meant remembering at least in mathematics. McDiarmid (1993) designed a field experience in a course that forced students to challenge prospective teachers' existing beliefs. Prospective teachers were expected to observe, as a group, an experienced teacher who teaches in ways that were likely to challenge their traditional beliefs and discuss her

practices. Although McDiarmid did not conduct a formal assessment of the effect of field experience on prospective teachers, through the discussions and his observations in class, he found out that the prospective teachers reconsidered their earlier beliefs about the learners and teaching: They thought that participation, discussion and communication in classes facilitated learning. Their earlier conceptions about teachers' role to teach, to praise and correct students were also challenged. They also realized that the coverage of content was less important than learning the use of thinking skills in understanding mathematics. Students also started to hold more positive views about the young learners' capability to learn mathematics.

In some research studies, students were asked to describe their conception of learning and on the basis of their descriptions, conceptions of learning were categorized. For example, Tynjälä (1997) conducted a study in order to examine 31 educational psychology students in a constructivist and a traditional learning environment. The focus of the study was the analysis of the students' descriptions of the learning process, how learning takes place and what it is like. As a result of the analysis of student descriptions, seven different categories of learning were identified:

- 1) Learning as an externally determined event/process
- 2) Learning as a developmental process
- 3) Learning as student activity
- 4) Learning as information processing
- 5) Learning as an interactive process
- 6) Learning as a creative process

Overall, the results of the study revealed that the students' conceptions appeared to change similarly in both groups with the exception that at the end of the course students in the constructivist learning group emphasized more often the role of critical thinking and student activity in learning.

In another study, Lonka and Lindblom-Ylänne (1996) investigated freshmen and fifth year psychology and medicine students' modes of studying and conceptions of learning. Factor analyses yielded four qualitatively different approaches to learning and knowledge: externally regulated and reproduction -oriented learning, self-regulated,

meaning-directed, and goal-oriented learning, constructivist epistemology and active professional orientation. It was found out that constructivist conceptions of learning were the most typical of (advanced) psychology students whereas learning was more often seen as intake of knowledge by the medical students.

The relevant literature emphasizes that one way for teachers to learn how to teach in a constructivist manner is for them to learn in a constructivist setting (Airasian and Walsh, 1997; Symansky, 1992, cited in Henriques, 1997). Steele and Widman, (1997) conducted a study in a elementary mathematics methods course based on constructivist learning principles and taught by the former researcher. The researcher wanted prospective teachers firstly to learn mathematics by actively constructing their own knowledge of mathematical concepts and then to learn to teach mathematics using constructivist learning theory. Results of the study indicated that at the end of the course, many of the prospective teachers understood the underlying meanings of rules and procedures, became willing to take risks and defend their own solutions to challenging problems. Moreover, when the prospective teachers strengthened their own understanding of mathematics, they also better understood how children learn mathematics. Preservice teachers used this information when planning, implementing and assessing their instruction successfully.

Hassard (1999) conducted a research study to describe the impact of a constructivist teacher education program on prospective secondary science teachers before and after their internships. Research results indicated that although many of the concepts taught in education courses were not usually applied during internship and/or student teaching experiences (Sprinthall et al, 1996, cited in Hassard, 1999), prospective teachers participated in this study developed a depth understanding of constructivism even after their internships. Hassard (1999) maintained that continuous dialog and reflection on constructivism for teaching contributed to knowledge growth. Moreover, most interns participated in the study were able to implement constructivism in their classrooms. Interns reported that cooperative learning, alternative assessments and internet activities worked best in their internship experiences.

In an effort to help prospective teachers translate theory into practice through reflective teaching, students enrolled in a social studies methods course were linked with

masters teachers through a cooperative teaching practicum. The first part of the course designed for this purpose, conducted in the methods classroom in which the knowledge base was introduced and the demonstration lessons were taught. At the practicum schools, students observed the class they would be teaching, met and planned the lesson with the master teacher, taught the lesson and discussed the outcomes of the lesson with the teacher. Interviews and student documents revealed that all of the students succeeded in designing and conducting lessons, made effective transfer from methods course to student teaching and achieved reflective thinking. An unanticipated but important outcome was that the master teachers, most of whom also serve as supervising teachers for student teachers, were able to gain knowledge about what their prospective student teachers were learning in methods course (Ferguson, 1999).

Another study which emphasizes the importance of training prospective teachers in constructivist settings was conducted by Thomaz and Gilbert (1989). In their study, they found out that the prospective teachers could not develop the appropriate conceptions related to physics and science, their interest in physics gradually decreased as their grade level increased because they perceived that the subject matter lacked relevance and relation to their prior experiences and they were being taught by didactic exposition of the content and demonstration of the experiments. It was also realized that although student teachers were dissatisfied with how they had been taught at school and wished to be more effective teachers, they needed structured help to move away from the traditional patterns of teaching. An analysis investigating the effectiveness of the program developed and implemented considering these outcomes revealed that the program established a good rapport between the students teachers and the teacher educator, improved students teachers' attitudes and higher thinking skills, and increased their performance during microteaching and class teaching and understanding of basic physics concepts.

Simon and Schifter's study (1991) investigated the effect of a constructivist-oriented inservice program on mathematics teachers' ideas about teaching and learning mathematics and their instructional practices. Analysis of the results revealed changes in teachers' beliefs and practices in the desired direction. For example, the teachers reported that they reflected more on the effect of the learning environment, how people learn mathematics, their own processes of learning and teaching and their changing role in the classroom. A follow-up stage including a full year of applying the ideas in the classroom

indicated that many teachers integrated teaching strategies they learned, were listening more to students, focusing on the students' ideas and understandings, became more committed to the development of understanding and thinking and encouraged a new view of learning in which the students were more active and responsible. Moreover, teachers enjoyed teaching mathematics more and felt more comfortable with mathematics.

Simon and Schifter (1993) also examined the program's impact on students. The results revealed that the teachers observed the following cognitive, affective and social changes in the students the most frequently:

- showing greater ability to express mathematical ideas and to defend their point of views
- expressing more interest and/or enjoyment in mathematics
- listening to and respecting others' ideas
- showing greater cooperation among themselves
- taking risks/sharing strategies with the class
- depending more on each other and less on the teacher
- participating more in class
- probing for understanding
- being more confident and competent problems solvers
- experiencing more frustration

Another study by Brett et al. (1997) investigated the conditions which supported mathematics preservice teachers' development of collaboration skills. This is an on-going study in which a learning environment was designed for the preservice teachers to promote a sense of community through small group discussions, workshops on cooperative learning techniques and experiences using a shared database. The present results point out that the use of electronic database enhances maintaining a collaborative community, social support and ideas for lessons as well as a forum to pose questions about pedagogical and content issues.

Another study conducted by Mannikkö and Fahraeus (1997) reveals the contribution of technology to the constructivist learning environment. In this study a constructivist teaching and learning environment was created that allowed teachers from different

geographical distances to participate in a course which aimed to give the participants an opportunity to learn about internet and how it could be used for pedagogical purposes in high schools. The results of the study indicated that although the participants of the study were confused and insecure in such a new learning environment, they started to interact after they overcame the initial difficulties. Flexible strategies for collaborative learning were enhanced by the conferencing system.

Although most related research studies investigate the collective contribution of the constructivist approaches to learning and teaching skills, there are also a few research studies which investigate the contribution of particular instructional and assessment techniques. The literature cites the positive effect of constructivist assessment techniques on prospective teachers' learning. Mohktari et al. (1996) conducted a study in order to identify the impact of portfolio assessment on preservice teachers and found out that that the exposure to portfolios in education courses positively enhanced preservice teachers' knowledge and attitudes toward portfolio assessment. Their willingness to use portfolios to evaluate their own learning implied that they were critical of traditional assessment techniques and that they could also be persuaded to use portfolios in their own classrooms.

Lundeberg and Scheurman (1997) conducted a study with undergraduate preservice teachers in an Educational Psychology course in order to find out the value of analyzing a dilemma-based case and when to do that. Assessment of preservice teachers' performance during the discussion of the cases revealed that using a case as an anchor for understanding in the beginning of a unit produced more learning than using a case as a performance measure at the end of a unit. In addition, repeated discussion of complex cases containing classroom dilemmas enabled preservice teachers to find new problems, rethink ideas, consider others' viewpoints and understand theoretical concepts better.

Another study was conducted to identify the effect of case analysis on prospective teachers' cognitive growth in Educational Psychology course by Lundeberg and Fawver (1994). The results indicated that case analysis improved the connection between what had been learnt and the teaching and the ability to use the knowledge in varied and flexible contexts. Moreover, preservice teachers changed their beliefs significantly about

learning and instruction and their new beliefs tended to be more consistent with the constructivist perspective.

Journal writing is also considered to be a useful writing practice for teacher education students. In their study, Ho and Richards (1993) found out that journal writing promoted the ELT inservice teachers' of the critical reflection over learning and teaching.

Although the literature generally suggests that constructivist instruction yield positive learning outcomes, there is still a need to be cautious with regard to its effect and ready for its unanticipated outcomes. Klein (1998) state that teacher educators often tend to place enormous faith in constructivist approaches to teaching. With regard to her own experiences in teaching preservice teachers, Klein (1998) argue that constructivist practice reproduce rather than change the status quo in the classroom. The action research she conducted in her class revealed that students felt there was a 'truth' which was favored by the instructor and they had to achieve that truth for assessment purposes although Klein reported that she encouraged autonomous learning and the preservice teachers to come up with different ideas for lessons. The preservice teachers were conscious of the instructors' position as an authoritative transmitter of 'correct' knowledge and acted accordingly.

Although group discussions were used to serve the purpose for collaborative interaction, some students were more superior and dominant in the discussions while some others remained passive. With regard to assessment, the students were asked to construct a folder of activities for classroom use. Each year the students asked their need for much more structure in assessment tasks. The students reflected that although they were told to construct their own meaning, and that there was no right or wrong answer or one way to do anything, they knew that at the end, the instructor would assign a mark showing that there were better or worse ways of doing things. Therefore, the students couldn't take risks with the fear of deviating from the teacher expectations.

Students also stated that they were unable and unwilling to make their own decisions and to think for themselves because of the preconceptions they gained in their previous schooling. Klein (1997) suggests that preservice teachers and teacher educators can come and work together to re-vision and design an alternative mathematics class to be able to

challenge and disrupt the status quo. In fact, the outcomes emerged in Klein's class with regard to the effect of constructivist instruction may be attributed to the difficulty to move away from traditional conceptions of teaching and learning on the part of the learners rather than the effect of constructivist instruction.

2.7.4. Research Studies Related to the Impact of Some Factors on the Nature of Instruction and Perception of Classroom Environment

In order to design a constructivist classroom, it is essential to find out to what extent the existing conceptions of learning and teaching and instructional practices are consistent with the constructivist ones and the factors influencing that. Hashweh (1996) found out that only a small percentage of teachers held views in line with the recent views of learning and scientific knowledge. With regard to the views of learning, this was considered to be mainly due to very few teachers believing or realizing that students held alternative preconceptions and that science learning involved conceptual change. It was also found out that the results were not related to the teachers' years of schooling, years of experience, level at which they taught or teacher specialization.

Smerdon et al.'s study (1999) investigated which type of instruction in U.S. high school science classrooms were dominant and teacher and student characteristics influencing the choice of instruction. The results indicated that didactic instruction was more common among higher socioeconomic status and female students, while constructivist instruction was practiced more often with among students of lower ability. Constructivist teaching was common in both higher-level science courses and lower-level courses. The students with average social and academic status were the ones who received the least constructivist instruction. It was also found out that teachers with less experience and with no science degree taught more didactively.

Research on the student characteristics affecting the nature of instruction has yielded inconsistent results and usually implies that teachers' beliefs about students' characteristics affect instructional choices. For example, teachers believe that didactic instruction, including drill and practice, may be more effective for students with lower intellectual abilities (Talbert and McLaughlin, 1993, cited in Smerdon et al., 1999). The level of classes also affect instructional choices. In lower-level classes, instruction is

often characterized by rote memorization, drill and practice. By contrast, teachers of upper-level courses emphasize higher-order thinking and present more interesting materials. Academically and socially disadvantaged students (i.e., low-achieving, minority, and low-SES students) are often found in lower-level classes and instruction in such classes are found to be more didactic (Oakes, 1990, cited in Smerdon et al., 1999). In contrast, a study that focused primarily on science courses reported that teachers of higher level-courses were more likely to use a strong lecture format (Herr, 1992, cited in Smerdon et al., 1999). Teachers used didactic methods to cover more material in less time in order to prepare the students to take the placement exam.

Raudenbush et al. (1993) found out that teachers differentiated their objectives according to the class; they held higher-order objectives for their college-bound students while they deemphasized these goals for their nonacademic classes. Furthermore, the language status of the students also influenced teachers' pedagogical choices; teachers report that they teach basics to students who are not fluent in English. By contrast, Newman et al. (1996) found out that the exposure to authentic instruction was equal in the 24 schools they studied; i.e. it was unrelated to race/ethnicity, SES or gender. Students of high ability were, however, more likely to receive authentic instruction. School level and subject area, systematic structural and organizational variations among different school levels also influence instructional goals and practices. For example, teachers', parents' and students' educational goals may be very different for young children compared to adolescents or young adults (Firestone and Herriott; 1982).

Kesal's study (1996) about the effect of some student characteristics on the perception of classroom characteristics in English courses at the secondary level revealed that achievers perceived the classroom characteristics more positively compared to nonachievers. The classroom characteristics they perceived more positively were interaction among students, physical environment and materials, satisfaction with the class activities, order and organization in class activities, teacher support, task orientation, the use of innovative teaching strategies and participation in class activities. There was also significant differences in students' perceptions according to type and level of schools. However, perceptions did not differ significantly according to student sex.

The relevant research also indicate that teachers' personal and professional characteristics are related to how they teach. For example, teachers who have limited subject matter knowledge are reported to be less flexible in the type of instruction they use and thus are more likely to employ didactic teaching (McLaughlin and Talbert, 1993, cited in Smerdon et al., 1999).

The research findings also reveal that the teacher's treatment of students affect their perception of classroom environment. For example, Lawrence and Jarrard (1985) investigated teachers' nonegalitarianism on student perception of learning environment and found out that nonegalitarian teacher behavior (unfair treatment by the teacher) influenced students' attitudes toward the teacher, classroom interactions and the evaluation of the particular class. Babad (1995) also investigated whether students' perceptions of teachers' differential behavior were related to aspects of classroom climate particularly to students' satisfaction and their affective reactions to their teachers. The results indicated that the perceptions of teachers' differential and nonequitable treatment could irritate the students, resulting in a more negative climate. Differentiability in affective behavior also caused lower student morale and more negative reactions to the teacher.

2. 8. Teacher Education in Turkey

In Turkish history, the first teachers were "*muallim*"s teaching at "*mektep*"s (schools) and "*müderis*"s (instructors) teaching at "*medrese*"s (universities) during the period of the Ottoman Empire. These teachers used to teach only theological sciences and religious courses. At schools, the teachers mainly used to make students memorize lessons, take notes and explain the ancient scripts and books. In the schools, the education used to be based on discipline and punishment, the respect for the teachers and the school and passing the exams. Dating from 18th and 19th century, the Ottoman Empire started a period of modernization and westernization and in line with these changes new schools were needed. In 1848, a system for training teachers was established for the first time and in İstanbul a teaching institute with the name of *Darülmualimin* was opened. In 1877 a teaching institute called *Büyük Darül-muallimin* having both secondary and higher levels was opened. However, these institutes have not been long-lasting because of a lack of systematic studies on them. Nevertheless, after 1870, teaching methods and some

educational science courses were included in the curriculum and schools for teaching practice were arranged. Especially, in the history of the Ottoman Empire, the period of *Birinci Meşrutiyet* (1908-1920) became the time in which the teachers gained a great deal of prestige and the changes in the world educational system were followed closely (Binbaşioğlu, 1998; Ergün, 1987; Tekişik, 1994; Tekişik, 1996).

During the period of Republic, Atatürk attached great importance to teachers and teaching. Gazi Educational Institute and Technical Teaching Schools were opened during his time. The teacher candidates were selected among the best students. In 1940, Village Institutes (Köy Enstitüleri) were opened to train graduates of primary school who were born in villages. The main goal was to train teachers to teach in villages. In 1954, Village Institutes were changed into Teacher Institutes. In 1959, Ankara Higher Teaching Institute was established and students for this institute were selected among the best senior students at Teacher Institutes. In 1974, some teacher institutes were changed into two year-educational institutes or teacher training high schools; however, the quality of teacher candidates decreased. In 1982, Educational Institutes were changed into Faculties of Education and years of education increased and became four years. Moreover, students at Faculties of Science and Arts gained the right to become teachers through attending pedagogical certificate programs at Faculties of Education (Binbaşioğlu, 1998; Ergün, 1987; Tekişik, 1994; Tekişik, 1996; YÖK, 1998a).

In 1998, the teacher education system was reformed because of the recognition of the inadequacy of Faculties of Education in training qualified and sufficient number of teachers. Within this context, the teacher education programs were decided to be reconstructed because of the following reasons (YÖK, 1998a):

1. The Faculties of Education have moved away from their major goals of training teachers to teach in preschools, primary schools and middle schools; rather, they focused on prestigious fields, but not needed such as social sciences, science and educational sciences. In turn, the need for preschool, primary school and middle school teachers was served by the teachers who did not have the required qualifications.
2. There has been no effective interaction between the Faculties of Education and the Faculties of Science and Arts which resulted in duplication with regard to the duties.

3. Recently, research assistants at Faculties of Education have emphasized conducting research in science or social sciences rather than in education. Therefore, in the last fifteen years, there has been no improvement in specialization in teacher training and the number of relevant research in education decreased.

4. There has been no productive interaction between the Council of Higher Education and the Ministry of National Education and between the Faculties of Education and the schools. Therefore, the balance between theory and practice in teacher training was disrupted and the period of time assigned for field experiences was found out to be insufficient.

5. The teacher training certification programs have been inadequate with regard to their time and content. Moreover, Faculties of Education designed such programs for the sake of financial benefits.

6. With the reconstruction in teacher education in 1982, training teachers for high schools was emphasized. As a result of that, the teachers who were specialized in just one branch were employed and these teachers had difficulty in teaching social science and science courses.

7. The graduates of the departments of educational sciences could not find jobs or had to work in a job unrelated to their fields. In fact, it was realized that such departments should be opened at the graduate level. Therefore, such departments at the undergraduate level were abolished.

8. There was a need for instructors who were specialized in teaching methods courses because such courses were currently being taught by field specialists rather than educational specialists.

9. The limited financial resources were not used productively and wasted for research in specific fields rather than in education.

The innovations brought by the new system are summarized below (YÖK, 1998a):

- In faculties, the departments at all levels of education (preschool, primary and secondary levels of education) have been opened.
- The faculties have been restructured to train teachers in the needed fields.
- In the new system, the teacher candidates are going to be trained in a minor field (yandal) as well as in their major fields so that they can teach in a second field when the need arises.
- A new system, non-thesis graduate program (tezsiz lisans programı) for the purpose of training teachers to teach at secondary level of education have been developed.

The structure of the new teacher education program is presented in Appendix E.

The new program seems to be in line with the constructivist principles with respect to some of its aspects although its philosophical backgrounds are not explicitly stated. For example, emphasizing early field experience, improvement of pedagogical skills creating environments conducive to learning while deemphasizing transmission of theoretical knowledge, increasing the number of elective courses for students with diverse learning needs and interests, enhancing the interaction between the faculties and the schools where students observe the classrooms and practice teaching and offering a course for using instructional technologies display the desire to update the teacher education considering the contemporary changes in education in the world (YÖK, 1998a, and 1998b). The way these changes are implemented at the faculties are also the indicators of whether the traditional teacher education approaches are challenged or not.

The new program has initiated discussions on its potential effects and productivity. According to Kavcar (1999) the positive aspects of the new system are that it attaches importance to special teaching methods, field experience, cooperation between the Faculties of Education and the schools chosen for field experience; primary school, Turkish, social sciences and science teacher education, training teacher candidates in a minor field and standardization in teaching programs. However, he also mentions that the new system has not been approved by some instructors because the program lacks courses for enhancing teacher candidates' educational culture, the nonthesis graduate practice can pose some problems and has some inadequacies, there is some uncertainty

with regard to the implementation of the programs of secondary level of education and the standards for admission to the Faculties of Education are not mentioned. In addition to these, Bülbul (1999) mentions the potential problems the new system may cause with regard to years of education, the coordination and the labor of division in different departments and adds that the new system neglects to equip the prospective secondary school teachers with the sufficient level of subject matter knowledge. He also attracts the attention to the point that special teaching methods should be taken by the students after they have taken the basic educational courses.

Çepni, Ayas and Baki (1999) searched for some instructors', teachers' and administrators' views about the project of Faculty-School cooperation and found out that it might pose some problems with regard to its implementation and adoption by the faculties, schools, the Ministry of National Education and Turkish governments. However, participants of the study emphasized the need for such a program and an effort to solve the anticipated problems.

In Turkey, the educators and researchers have frequently mentioned the problems experienced in teacher education. Among these, unpopularity of teaching profession and low percentile ranks of the Faculties of Education at the university entrance exam, lack of appropriate instructional technology, low quality of inservice and preservice teaching programs, low motivation level of teacher candidates, problems caused by the structure of the educational system, inadequacy of the programs in providing the teacher candidates with sufficient information in pedagogy and content knowledge and the need to increase the quality of instructors have been major problems. It has also been realized that in order to increase the quality of students at Faculties of Education, it is essential to improve working and financial conditions of teachers and the prestige of teaching profession (Ataünal 1994; Oktay, 1998; Tekişik, 1994; Tekişik, 1996). The need to restructure the teacher education programs in line with the contemporary developments in the world, to create student-centered programs, to emphasize learning rather than teaching, to redefine the roles of the students as active learners, critical thinkers, good problem-solvers, creative and self-confident individuals and the teachers as facilitators, guides of learning, but not providers of information have also been realized (Aksu, 1996; Demirtaş, 1999; Gözütok, 1998; Öztop, 1994; Sezal and Erkan, 1996).

Aksu (1996) states that there are some barriers to change. These are: 1. Teachers' and administrators' beliefs and values 2. Student expectations 3. Unavailability of appropriate teaching materials. 4. Restrictions that the budget, the bureaucracy and the regulations pose. 5. Society's beliefs and values. Ataklı (1999) also asserts that before adopting a new educational system, the culture of the society and whether the new system fits into that should be examined because the society's culture affects the school culture immensely. It should also be recognized that every change will cause resistance from the people, but the culture of the society and the school should be changed in accordance with the changes in the world. Therefore, there is a need for time to see the effect of the new system on the quality of teacher education.

Although there are a great deal of research studies on constructivist learning and constructivist teacher education in the world literature, such studies in Turkey are very new and few as far as the researcher could reach them. In Turkey, the first empirical study on constructivist learning was conducted by Demirel et al. (2000) and the first theoretical study based on literature review was Yaşar's study (1988). There are also two studies based on literature review: Program Geliştirmede Yapılandırmacılık Yaklaşımı (The Constructivist Approach in Curriculum Development) by Erdem (2001) and Yapısalcılık ve Fen Öğretimi (Constructivism and Science Education) by Kaptan and Korkmaz (2000, cited in Erdem, 2001).

Moreover, an experimental study conducted by Akar (2001) for the purpose of analyzing the impact of constructivist teaching and learning process on preservice teacher education students' performance and attitudes in Classroom Management course is still continuing. In her study, she plans to compare the students exposed to constructivist learning environment with the ones receiving traditional instruction with regard to their achievement, attitudes and classroom management skills.

Demirel et al. (2000) conducted a study during 1999-2000 academic year in Beytepe Primary School. The study investigated the effect of constructivist approach on seventh grade students' attitudes towards *Human Rights and Citizen Education* course and learning process. The following results were found out:

1. Construction of knowledge improved complex learning skills.

2. Constructivist activities affected students' attitudes towards the course positively.
3. Constructivist classroom characteristics can be created in present educational environments.
4. Students think that
 - a) a constructivist classroom is a classroom in which the learner enjoys group work, develops a sense of responsibility, feels himself valuable, produces and shares ideas, applies what he learns in relevant contexts, participates in lessons actively, and is eager to do extra classwork.
 - b) a constructivist classroom is a classroom in which the teacher values students' learning experiences, facilitates learning, avoids memorization, emphasizes cognitive development and organizes diverse learning activities.
 - c) constructivist activities facilitate remembering, emphasize the relationship among the concepts, facilitate construction of knowledge, encourage brainstorming, develop critical and creative thinking, are relevant to daily life, emphasize problem-solving and facilitate permanence in learning.

In their studies, Erdem (2001) and Yaşar (1988) review the studies related to constructivist learning and suggest that the educational programs should be redesigned in line with constructivist approach considering learners' interests and needs, learners should be provided with a rich learning environment in which diverse learning activities exist, the teachers should be provided with theoretical information on and experience in constructivist teaching through pre-service and in-service training programs and experimental studies should be conducted to test the applicability and the effectiveness of the constructivist activities in the classrooms.

Apart from the studies mentioned above, there are also studies which investigated one or two aspects of constructivist approach rather than its collective contribution or effect. For example, Şahin, Savcı, Özkaya and Koca (1999) conducted a study in order to find out the effects of Field Experience I and II, Practice Teaching Seminar and Chemistry Teaching Methods I and II courses which were designed in line with the recent changes in educational system in 1998. The results revealed that as time went by, the chemistry teacher candidates perceived themselves more competent in chemistry, their interaction with the classmates was promoted and problem-solving skills were enhanced. Moreover, most of the teacher candidates reported that the experiences of observing real classes and

teaching increased their interest in teaching profession they started to like teaching and expressed the problems encountered at the faculty and the school frankly.

Another study conducted by Kavcar, Silay, Çakır and Aygün (1999) in order to identify the effect of School Experience courses revealed that the prospective teachers felt that they gained experience in interaction with the students, classroom management and basic teaching skills and understood the importance of encouraging active student participation in classroom activities. The instructors also reported that although this was the first experience, it could be considered as successful.

Constructivist approach supports the use of technology in facilitating learning. Tuluk and Baki (1999) investigated the prospective teachers' attitudes towards computer-assisted instruction and found out that the prospective teachers developed positive attitudes towards using computers in teaching and had the tendency to use computers in their classrooms as teaching and learning instruments. In a similar study McIsaac (1987) found out that the instructors and the prospective teachers do not know the different technologies and computers well and the instructors resist using them in class. The implication of the study is that the teacher candidates should be trained on how to use instructional technology in class and informed about advantages and disadvantages of using them.

Being able to relate what one has learnt to real life experiences has been considered to be an important learning outcome of constructivist education. Pınarbaşı, Doymuş, Canbolat and Bayrakçıken (1999) conducted a study in different chemistry departments in order to find out to what extent the students can relate what they learn in class to the real life. The results of the study revealed that students' general level of success was low implying that meaningful learning was not achieved. Students at Faculties of Education were among those who could relate what they learn in chemistry to real life better than the others. The study implies that in general the university students receive traditional education which is insufficient in providing the students with learning experiences relevant to their real life experiences.

2.9. Summary of Review of Literature

The review of literature reveals that contemporary changes in educational system require a shift from the traditional approaches in which the teacher is the transmitter of information and the learner is the receiver of that information towards a constructivist approach in which the learner is the active constructor of knowledge and the teacher is the facilitator and the guide in this process. The implication of this for teacher education is that the prospective teachers should be trained to meet students' diverse learning needs and contribute to their process of learning. A teacher education program designed for this purpose should mainly develop the prospective teachers' higher-order and reflective thinking skills, change their traditional conceptions of learning and teaching and promote application of theoretical knowledge of learning and teaching through effective field experience.

The relevant research studies reveal that constructivist classrooms improve prospective teachers' motivation, confidence and competence in teaching, social and communicative skills, and cognitive growth. The challenges of implementing the constructivist principles in the classrooms can be overcome, if appropriate adaptations are made. Although constructivist teacher education is a hot issue in the world, the related studies in Turkey are scarce because the traditional teacher education approaches have been dominant at Faculties of Education up to the present time. It has been expected the new educational system initiated in 1998 to have an important effect on the current classroom characteristics and instructional practices. Within this context, the present study whose method was defined in the subsequent part in detail was conducted in order to contribute to the relevant research in Turkey.

CHAPTER III

METHOD

This section is devoted to the presentation of overall research design, subjects of the study, description of ELT Methodology course, data collection and instrumentation, data analysis and limitations of the study.

3.1. Overall Research Design

Throughout the study, a survey research design was followed in order to investigate whether constructivist classroom characteristics existed in ELT Methodology II courses at Faculties of Education and to identify the implications for improving the current classroom characteristics. The research design mainly involved five steps, namely, planning, development of a sampling plan, data collection, data analysis and reporting and interpreting the conclusions. These steps were summarized in a flowchart in Figure 3.1. adapted from Wiersma (1985)

3.2. Description of ELT Methodology Course

ELT Methodology (Özel Öğretim Yöntemleri) is a compulsory course that the ELT students take at the third year for two semesters (ELT Methodology I and II). The course covers teaching methods in the field, learning and teaching processes, implementation of general teaching methods to the field, critical examination of course books and relating them with the teaching methods and strategies, microteaching practices and evaluation of teaching (YÖK, 1998b). The course design changes from one university to the other although its general characteristics are preserved.

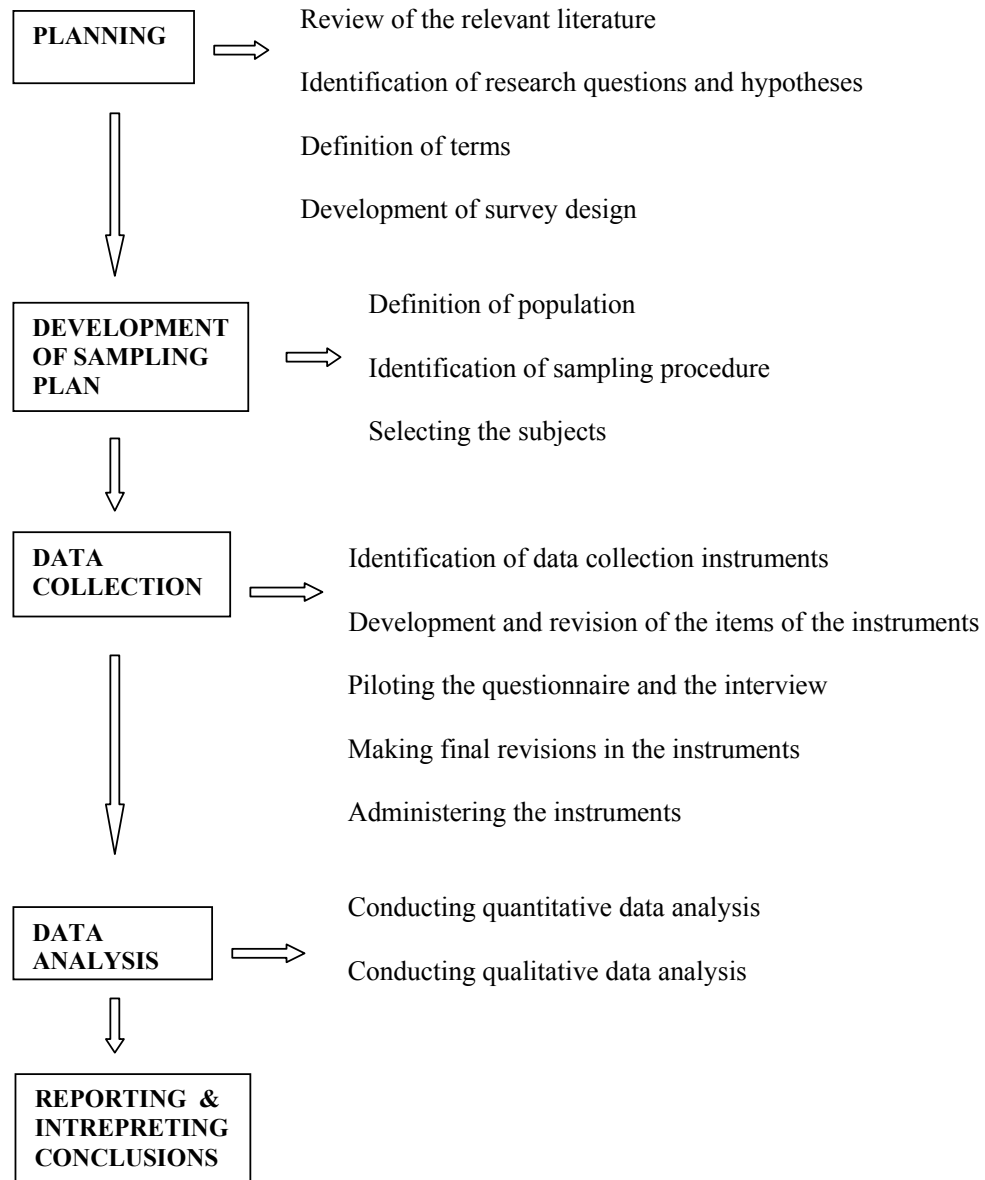


Figure 3.1. Flowchart of the Design of the Study
(Adapted from Wiersma, 1985)

In the four universities participated in the study, the students were mainly provided with theoretical and practical knowledge on teaching listening, speaking, reading and writing and expected to prepare and present a mini-lesson called microteaching in which they practice using the teaching techniques that were introduced in the course.

In this study, only the characteristics of ELT Methodology II classrooms were explored because of the necessity of limiting the focus of the study. Moreover, ELT Methodology is one of the most basic teacher education courses in ELT departments in which the students practice microteaching extensively through implementing what they have learnt in previous courses and get prepared for the subsequent ELT courses, especially *Teaching Practice* course. In this sense, this course could be considered as a bridge between the previous and the subsequent ELT courses for the students to get prepared for teaching profession.

3.3. Subjects

For determining the subjects of the study, the following procedure was used: Stratified cluster sampling procedure was used for selecting the subjects. The selection criterion was the percentile rank of the ELT departments in 2001 university entrance examination. First, the universities which have ELT departments were determined. Next, these universities were ranked from the one with the highest percentile rank to the one with the lowest. Table 3.2. presents a list of the universities with ELT departments.

Table 3. 2. The Universities with ELT Departments

No.	Name of the University	Percentile Rank	City
1	Middle East Technical University	01	Ankara
2	Boğaziçi University	01	İstanbul
3	Hacettepe University	02	Ankara
4	9 Eylül University	03	İzmir
5	İstanbul University	03	İstanbul
6	Marmara University	05	İstanbul
7	Gazi University	07	Ankara
8	Uludağ University	07	Bursa

Table 3. 2. (Continued)

No.	Name of the University	Percentile Rank	City
9	Anadolu University	08	Eskişehir
10	Çanakkale 18 Mart University	09	Çanakkale
11	Çukurova University	10	Adana
12	Trakya University	11	Edirne
13	19 Mayıs University	11	Samsun
14	Selçuk University	13	Konya
15	Mustafa Kemal University	15	Hatay
16	Atatürk University	17	Erzurum
17	Dicle University	19	Diyarbakır
18	Abant İzzet Baysal University	–	Bolu

Next, the universities were grouped around four percentile intervals and one university was selected from each interval purposefully. In other words, while selecting the universities, the formal consent that was received from each university and transportation facilities were considered as well as the percentile ranks of the departments in the latest university entrance exam. The universities in each percentile interval were assumed to be equal with each other with respect to their structure and the facilities they provide the students with. As seen in Table 3.3. at the end of these procedures, the following universities were selected to be involved in the present study

Table 3. 3. The Universities Involved in the Present Study

Percentile Interval	Number of Universities	University	City
01-03	5	Middle East Technical U. (METU)	Ankara
04-08	4	Gazi University	Ankara
09-11	4	Çukurova University	Adana
13-19	4	Dicle University	Diyarbakır

The subjects of the study consisted of the students taking ELT Methodology II course at the sixth semester during 2001-2002 academic year and the ELT instructors teaching

this course at the four universities mentioned above. Only ELT departments were included in the study because the researcher was specialized in ELT; therefore, she could design and carry out the study in ELT effectively. Another reason was to facilitate the feasibility of the study by limiting it to one department. Table 3.4. presents the subjects of the study including the total number of the students and the instructors from each university.

Table 3.4. Subjects of the Study

UNIVERSITY	STUDENTS			INSTRUCTORS		
	Female	Male	Total	Female	Male	TOTAL
METU	75 (70,1 %)	32 (29,9 %)	107 (26,1 %)	2 (66.7 %)	1 (33.3 %)	3 (20 %)
Gazi University	104 (81,3 %)	24 (18,8 %)	128 (31 %)	6 (75 %)	2 (25 %)	8 (53.3 %)
Çukurova University	55 (61,1 %)	35 (38,9 %)	90 (22,2 %)	1 (33.3 %)	2 (66.7 %)	3 (20 %)
Dicle University	57 (67,1 %)	28 (32,9 %)	85 (20,7 %)	1 (100 %)	–	1 (6.7 %)
TOTAL	284 (69,3 %)	126 (30,7 %)	410 (100 %)	10 (66.7 %)	5 (33.3 %)	15 (100 %)

As a whole, 410 students participated in the study. As seen in Table 3.2.3., majority of the students (69.3 %) and the instructors (66.7 %) participated in the study were females. Moreover, about one-third of the students (31 %) and the majority of the instructors (53.3 %) were from Gazi University.

In the following parts, characteristics of the students and the instructors participated in the study are described in detail.

Characteristics of the Students Participated in the Study

In this part, characteristics of the students participated in the study including the average score they expected to attain in ELT Methodology II course, the type of high

school they graduated from and their perception of competency in English are summarized. Table 3.5. summarizes the average scores the students expected to get in the course.

Table 3.5. Expected Average Scores in Terms of Frequencies and Percentages

AVERAGE SCORE				
UNIVERSITY	0-69	70 –79	80-100	TOTAL
METU	6 (5.8 %)	26 (25 %)	72 (69.2 %)	104 (26.1 %)
Gazi University	15 (11.7 %)	56 (43.8 %)	57 (44.5 %)	128 (31.6 %)
Çukurova University	27 (31.8 %)	28 (32.9 %)	30 (35.3 %)	85 (21.4 %)
Dicle University	64 (77.1 %)	14 (16.9 %)	5 (6 %)	83 (20.9 %)
TOTAL	112 (28 %)	124 (31 %)	164 (41.4 %)	400 (100 %)

As seen in Table 3.5., about half of the students (41.4 %) expected to attain an average score between 80-100. METU students' expected scores were the highest while students from Dicle University expected to attain the lowest average scores. Majority of the students at METU expected to attain between either 80-100 (69.2 %) whereas most of the students at Dicle University expected to attain between 0-69 (77.1 %). Next, the type of high school the students graduated from are summarized in Table 3.6.

As Table 3.6. indicates, the percentage of the students who were graduates of Anatolian Teacher High Schools (43.9 %) was a bit lower than the percentages of the graduates of other high schools (56.1 %) including Anatolian High Schools, private schools and public high schools. The percentage of the graduates of Anatolian Teacher High Schools at METU were higher (86.9 %) compared to the other universities.

Table 3.6. Type of High School in Terms of Frequencies and Percentages

TYPE OF HIGH SCHOOL			
UNIVERSITY	Anatolian Teacher H.S.	Other High Schools	TOTAL
METU	93 (86.9 %)	14 (13.5 %)	107 (26,1 %)
Gazi University	37 (28.9 %)	91 (71.9 %)	128 (31 %)
Çukurova University	22 (24.4 %)	68 (75.6 %)	90 (22,2 %)
Dicle University	28 (32.9 %)	57 (67.7 %)	85 (20,7 %)
TOTAL	180 (43.9 %)	230 (56.1 %)	410 (100 %)

Next, students' perceived competency in English are summarized in Table 3.7.

Table 3.7. Perceived Competency in English in Terms of Frequencies and Percentages

UNIVERSITY	COMPETENCY IN ENGLISH				
	Not Good	Average	Good	Very Good	TOTAL
METU	-	4 (3.7 %)	53 (49.5 %)	50 (46.7 %)	107 (26,1 %)
Gazi University	-	19 (14.8 %)	83 (64.8 %)	26 (20.3 %)	128 (31 %)
Çukurova University	-	15 (16.7 %)	66 (73.3 %)	9 (10 %)	90 (22,2 %)
Dicle University	-	46 (54.1 %)	36 (42.4 %)	3 (3.5 %)	85 (20,7 %)
TOTAL	-	84 (20.5 %)	238 (58 %)	88 (21.5 %)	410 (100 %)

As seen in Table 3.7., majority of the students perceived their English to be good enough (58 %) while none of the students perceived it to be ‘not good’. METU students perceived their English more positively while the students from Dicle University perceived it the less positively compared to the students from other universities.

Educational Background of the Instructors Participated in the Study

The educational background of the instructors participated in the study including the university they are teaching currently, the departments they graduated from, their overall teaching experience are summarized in Table 3.8.

As seen in Table 3.8., majority of the instructors participated in the study received their B.A, M.A. and Ph. D. degrees in English Language Teaching (ELT) or Teaching English as a Foreign Language (TEFL). An instructor at Gazi University had two B.A.s (ELT and English Language and Literature) while another instructor at Gazi University had two M.A. degrees (ELT and English Literature). Moreover, most instructors’ teaching experiences were between 16-20 years.

3.4. Data Collection Instruments

The data collection instruments were a questionnaire for students, an interview schedule for students and instructors and an observation form for observing classes. In the following sections, further information on the instruments is provided.

3.4.1. Questionnaire

This part is devoted to the description of the questionnaire and the procedures followed for developing it. The questionnaire used in the study (Constructivist Classroom Characteristics Questionnaire) was designed to assess the current classroom characteristics and administered to the third year students taking ELT Methodology II course.

Table 3.8. Educational Background of the Instructors

	B.A.		M.A.			Ph. D.				Teaching Experience		
UNIVERSITY	ELT	English Lang. & Literature	ELT/ TEFL	Linguistics	English Theatre	ELT	Linguistics	Educational Sciences	Reading	9-15 yrs.	16-20 yrs.	20-35 yrs.
METU (n = 3)	2	1	2	1	-	2	-	1	-	1	2	-
Gazi U. (n = 8)	7	2	8	-	1	6	2	-	-	2	4	2
Çukurova U. (n = 3)	3	-	3	-	-	2	-	-	1	1	2	-
Dicle U. (n = 1)	1	-	1	-	-	1	-	-	-	1	-	-
TOTAL (n = 15)	13	3	14	1	1	11	2	1	1	5	8	2

Development of the Questionnaire

For developing the questionnaire, the following steps were taken: First of all, an extensive literature review was conducted for identifying the subdimensions to include in the questionnaire. The first two subdimensions (*Learning Activities* and *Evaluation*) were developed by the researcher through reviewing the constructivist learning activities and evaluation strategies frequently mentioned in the relevant literature and including them in the questionnaire.

Next, the relevant instruments assessing characteristics of constructivist classrooms were reviewed. Among these instruments, *The University Social Constructivist Learning Environment Survey* (USCLES) by Fisher, Taylor and Fraser (1996) seemed to be appropriate to use in the present study because it was designed to measure characteristics of the learning environments from a social constructivist perspective at the university level. The next six subdimensions of the questionnaire (*Professional Relevance, Reflective Thinking, Negotiation, Leadership, Empathy* and *Support*) were adapted from UCLES through translating it into Turkish. The translation was conducted by the researcher through trying to convey the exact meaning of the statements into Turkish translation as much as possible. The Turkish translation of the instrument was back translated into English by two instructors at METU who were specialized in ELT in order to check the consistency of the Turkish translation with the original one. Finally, the instrument was back translated into Turkish by the researcher through making appropriate changes in it.

The subdimensions 9-10 (*Conception of Learning* and *Conception of Teaching*) were developed through reviewing the definitions of conceptions of learning and teaching cited in the relevant literature. Finally, four definitions of conceptions for both learning and teaching (Behaviorist, Cognitivist, Humanistic and Constructivist) were identified and included in the questionnaire.

For obtaining evidence for the validity of the instrument, the questionnaire was examined by 6 instructors who were specialized in Educational Sciences and ELT. On the basis of the recommendations, the items and the instructions which were identified to be unclear, awkward, too long or too general were reworded. The format of the

questionnaire was also improved to facilitate the students to read the items and provide the answers. Moreover, some items included in the previous questionnaire were deleted, some new items were added and some other items which were treated to be one item in the previous form were separated in the final form.

The next step was piloting the questionnaire. First, the questionnaire was piloted during May 2001 with 50 students at METU who took ELT Methodology II course the previous year in order to check the clarity and understandability of the items in the questionnaire. On the basis of the piloting, some statements in the questionnaire were clarified further. The questionnaire was piloted for the second time with 322 students at Gazi University and METU who were taking ELT Methodology II currently in order to conduct factor analysis and to assess the reliability of the questionnaire.

The dimensionality of the 65 items of Constructivist Classroom Characteristics Questionnaire (CCCQ) was analyzed using maximum likelihood factor analysis. Three criteria were considered while evaluating the number of factors to extract. The scree test indicated 3 to 5 factors and the eigen-value-greater-than-one criteria suggested that up to 15 factors were appropriate. The interpretability of the factor structure was used to make the final decision. Eight-factor-solution indicated the most interpretable factor structure. The results are summarized in Table 3.9.

As seen in Table 3.9., the first factor is composed of 12 items and seems to assess empathy and support. The second factor is composed of 16 items and assesses learning activities. The third factor is composed of 6 items and assesses reflective thinking, the fourth factor is composed of 6 items and assesses negotiation, the fifth factor is composed of 8 items and assesses evaluation, the sixth factor is composed of 5 items and is uninterpretable and the seventh factor is composed of 6 items and assesses professional relevance. Only one item, Item 2 in Learning Activities (“We keep journals to write about our learning experiences”) was almost equally loaded on two factors, that it is loaded on both Factor 2 and Factor 8. Internal consistency coefficient for the whole questionnaire was found to be .95. Although the questionnaire had a few weak items, it was used in the present study since its internal consistency was high.

Table 3.9. The Results of Factor Analysis with Varimax Rotation for Constructivist Classroom Characteristics Questionnaire

Learning Activities	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
1.	.01	.30	-.05	.03	.04	.07	.09	.05
2.	.05	.23	.02	-.02	.14	.25	-.06	-.24
3.	.11	.60	.04	.09	.13	-.09	.18	.14
4.	-.01	.46	-.05	.03	.32	-.16	.12	.03
5.	.18	.61	.10	.20	.17	-.07	.12	-.06
6.	.15	.27	-.29	-.11	-.18	.36	.09	.04
7.	-.01	.61	.13	.08	.16	-.24	.03	.03
8.	.04	.57	.20	.08	.15	-.29	-.09	-.01
9.	.11	.58	-.01	.05	.02	.16	.09	.10
10.	.15	.46	.06	.03	.11	.23	-.01	.05
11.	-.04	.44	.26	.13	.05	.16	.11	.08
12.	-.04	.57	.15	.04	.16	.08	.05	.04
13.	.13	.50	.29	.04	.17	.02	-.16	.02
14.	.23	.55	.19	.05	.26	-.06	-.16	.02
15.	.01	.62	.07	-.02	-.04	-.05	-.05	.09
16.	-.03	.49	.14	.14	-.19	.24	.09	-.03
17.	.07	.39	.17	.10	.19	-.08	.11	-.09
18.	.11	.49	.15	.14	.15	.07	.04	.09
Evaluation	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
1.	.09	.03	-.08	-.09	.36	-.03	-.01	.03
2.	.17	.11	-.03	.03	.41	.07	.21	-.03
3.	.17	.26	.03	.08	.40	-.10	.11	.09
4.	.25	.30	.10	.08	.44	.02	-.03	.17
5.	.23	.36	.13	.15	.48	.09	.16	.19
6.	.08	.26	.12	.07	.63	.13	.04	.14
7.	.16	.22	.04	.01	.76	.02	.06	-.08
8.	.03	.32	.23	.15	.56	.19	.11	-.02
9.	.03	.13	.25	.09	.11	.54	.03	.09
10.	.24	-.07	-.07	-.05	-.01	.87	.10	-.06
11.	.15	.03	.17	.06	.15	.70	-.04	.02

Table 3.9. (Continued)

Professional Relevance	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
1.	.22	.16	.15	.06	.13	.02	.64	-.06
2.	.16	.05	.22	.13	.12	.09	.54	.11
3.	.24	.14	.12	.04	.01	.07	.75	-.03
4.	.23	.16	.18	.12	.09	.11	.59	-.09
5.	.25	.19	.27	.21	-.04	.13	.52	.01
6.	.25	.18	.09	-.3	.13	.17	.22	-.17
Reflective Thinking	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
1.	.10	.21	.76	.01	-.03	.03	.02	.08
2.	.12	.14	.84	.11	.12	.03	.05	.06
3.	.14	.24	.70	.08	.03	.14	.08	.08
4.	.08	.19	.71	.27	.08	.03	.16	.13
5.	.08	.15	.69	.24	.20	-.06	.09	.11
6.	.09	.15	.66	.32	.17	.04	.13	-.06
Negotiation	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
1.	.31	.11	.29	.61	.15	-.01	.13	-.06
2.	.26	.14	.26	.67	.11	.09	.17	.03
3.	.19	.12	.16	.84	.03	-.06	.16	.04
4.	.23	.08	.24	.72	.04	.01	.06	.07
5.	.19	.13	.09	.83	-.03	.04	-.02	.09
6.	.21	.16	.13	.76	.11	.04	.07	-.02
Leadership	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
1.	.43	-.03	.04	-.03	.06	-.10	.02	.51
2.	.56	.05	.17	.04	.06	-.18	.05	.61
3.	.53	.03	.14	.03	.09	-.16	.06	.62
4.	.49	.07	.17	-.06	.15	-.09	.03	.55
5.	.43	-.03	.14	.09	.18	-.26	-.09	.54
6.	.45	.04	.22	.07	.07	.09	.03	.51
Empathy	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
1.	.67	.13	.04	.05	.18	.14	.17	.14
2.	.64	.12	.07	.07	.15	-.03	-.15	.09
3.	.73	.12	.08	.10	.03	.14	-.07	.06
5.	.59	.19	.18	.13	.05	.13	.03	.07
6.	.74	.03	.10	.05	-.04	.01	-.08	-.07

Table 3.9. (Continued)

Support	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
1.	.69	.08	.08	.18	.10	.09	-.02	.05
2.	.76	.09	.09	.01	.16	.12	.08	.10
3.	.81	.14	.05	.08	.20	.02	.08	-.03
4.	.74	.05	.03	.03	.08	-.07	.08	-.03
5.	.63	.17	-.03	-.09	.11	.05	.11	.16
6.	.66	.27	.09	.12	.19	.23	.09	.07

Description of the Questionnaire

The questionnaire consisted of three parts. The first part was designed for collecting information about student background characteristics including gender, the university the students were attending, expected average score from the course, the type of high school they graduated from and perceived competency in English.

The second part of the questionnaire was a five-point Likert scale including 8 subdimensions (*Learning Activities, Evaluation, Professional Relevance, Reflective Thinking, Negotiation, Leadership, Empathy and Support*). In this part the scale ranged from Always (5) to Never (1) and assessed the extent to which a particular trait or characteristic existed. In the third part, there were two subdimensions (*Conception of Learning and Conception of Teaching*). In these subdimensions, the respondents were asked to select a definition of learning and teaching they agreed with the most. A list of the names and the characteristics of the subdimensions in the questionnaire were provided below:

1. **Learning Activities:** It measures the constructivist learning activities used in the classroom. It consists of 18 items.
2. **Evaluation:** It measures the constructivist evaluation strategies used to assess students' achievement level, the instructor and the course. It consists of 11 items.
3. **Professional Relevance:** It measures the perceived relevance of what has been learnt to the prospective teachers' future teaching needs and aspirations. It consists of 6 items.

4. **Reflective Thinking:** It measures the perceived need for thinking critically on background knowledge, new ideas and one's own learning experiences. It consists of 6 items.
5. **Negotiation:** It measures perceived need for communicating ideas to other students. It consists of 6 items.
6. **Leadership:** It measures perceived instructor roles such as managing the classroom, organizing learning activities, setting tasks and holding attention. It consists of 6 items.
7. **Empathy:** It measures perceived instructor roles such as understanding, listening attentively, showing confidence in students and being patient. It consists of 6 items.
8. **Support:** It measures perceived instructor roles such as assisting in student learning, showing concern and inspiring confidence and trust in students. It consists of 6 items.
9. **Conception of Learning:** It measures ideas and beliefs about the nature of learning. It is based on four definitions of learning.
10. **Conception of Teaching:** It measures ideas and beliefs about the nature of teaching. It is based on four definitions of teaching.

(See Appendix B for the copy of the questionnaire. For further information on the description of the subdimensions of the questionnaire, see Appendix A).

3.4.2. Interview Schedule

The interview schedule mainly aimed at collecting further and complementary data on the current characteristics of the classrooms and providing suggestions about how to improve them. It was parallel to the questionnaire with respect to the subdimensions it involved. These subdimensions were *Learning Activities*, *Evaluation*, *Professional*

Relevance, Reflective Thinking, Negotiation, Instructor Role and Conception of Learning and Teaching. It had parallel student and instructor versions. It was semi-structured considering the follow-up questions that could arise during the interviews. The instructor version also included a question for getting information on the educational backgrounds of the instructors including the degrees they had and their overall teaching experiences. Before conducting the interviews, the interview schedule was piloted with one of the students at Ankara University, who was also a teacher candidate, in order to check the clarity and understandability of the questions and examined by six experts in Educational Sciences and ELT. The schedule was revised through clarifying the questions further considering the piloting and the judgments of the experts (See Appendix C).

3.4.3. Observation Form

The observation form developed by the researcher mainly aimed at identifying observable constructivist classroom characteristics including *learning activities and learning aids* used by the students during microteaching, *feedback procedures* and *cooperation and negotiation among the students*. The form has a part for providing information about the name of the university, the instructor teaching the class and the section and the date of observation. It is consisted of five columns for noting down the time of each observation, the task or the activity that was being done, what the instructor and the students were doing and the learning aids that were being used at that time. The format of the observation form was designed and revised considering the opinions of the six experts in Educational Sciences and ELT (See Appendix D).

3.5. Data Collection Procedures

For collecting data, the formal consent was requested and received between March and May 2002 from each Faculty of Education involved in the study. Administration of the instruments started during May 2002 and was completed at the beginning of July 2002. As mentioned before, the data were collected from all the sixth-semester ELT students taking ELT Methodology II course during 2001-2002 academic year and the instructors teaching this course. The whole data collection procedure was summarized in Table 3.10.

Table 3.10. Data Collection Procedure

		S U B J E C T S							
RESEARCH QUESTIONS	TYPE OF DATA COLLECTION	METU		Gazi University		Çukurova University		Dicle University	
		Student	Instructor	Student	Instructor	Student	Instructor	Student	Instructor
1, 3, 4	Questionnaire (May – June 2002)	107	–	128	–	90	–	85	–
1, 2, 3	Interview (May – June 2002)	8 (2 x 4)*	3	16 (2 x 8)*	8	8 (2 x 4)*	3	8 (4 x 2)*	3
1	Observation (May – June 2002)	26 (12 hrs.)	–	47 (24 hrs.)	–	–	–	–	–

* interviews conducted in pairs

** interviews conducted in fours

A triangulation method which consisted of a combination of quantitative and qualitative evaluation strategies including questionnaires, interviews and observations was used for data analysis. The triangulation method was preferred because collecting diverse kinds of data enables the researcher to check the accuracy of the research findings through various means, increases the confidence in the study and decreases bias. Moreover, qualitative and quantitative approaches may be effectively combined to complement, enrich and be reconciled with each other (Jick, 1979; Mathison, 1988).

Administration of the questionnaire started at the beginning of May 2002 and was completed in the middle of June 2002. Questionnaires were administered by the researcher at METU while they were administered by the course instructors at the other universities. As indicated in Table 3.10., 107 students from METU and 128 students from Gazi University, 90 students from Çukurova University and 85 students from Dicle University were administered questionnaires.

Interviews started in May 2002 and was completed at the beginning of July 2002. The researcher both audio-recorded the interviews and took short notes while interviewing in order not to miss any valuable data. The permission for recording was requested from the students and the instructors before starting the interviews. The interviews took half an hour at least and 1.5 hour at most and were conducted in Turkish in order to prevent any kind of misunderstandings.

The students in the same class were interviewed together because this way it was easier to bring the students together. As seen in Table 3.10., the students were interviewed in pairs at METU, Gazi and Çukurova Universities while they were interviewed in fours at Dicle University. The interviews were conducted through asking the questions to the students and getting the answers one by one. At any period of time, the students were allowed to interrupt and make additional comments. As indicated in Table 3.10., eight students (2 students from each section) were participated in the interviews while 16 students (2 students from each section) were interviewed at Gazi University. As a whole, 40 students were interviewed. For instructor interviews, the instructors teaching ELT Methodology II course were interviewed individually except two instructors at Gazi University who were interviewed together since they were roommates. As a whole, 15 instructors were interviewed.

Observation of ELT Methodology II classes started during May 2002 and was completed at the beginning of June 2002. Observations were conducted by the researcher at METU and Gazi University because it was feasible to conduct intensive observations only in the universities in Ankara since the researcher lived here. Observations were made through noting down every 5 minutes the task or the activity that was being done, what the instructor and the students were doing and the learning aids that were being used. Only one session of each class (3 hours) was observed because of time limitations. At METU, 4 classes were observed 12 hours ($4 \times 3 = 12$ hours) and at Gazi University 8 classes were observed 24 hours ($8 \times 3 = 24$). Totally, 12 classes were observed 36 hours ($12 \times 3 = 36$).

The researcher observed students' microteaching in both universities because when she started observations, students were doing microteaching. In addition, microteaching was reported to be one of the most important and useful activities by the majority of the students and the instructors participated in the interviews. Four classes at METU and 8 classes at Gazi University were observed. As a whole, 73 students (26 students from METU and 47 students from Gazi University) were observed during their microteaching practices.

3.6. Data Analysis Procedures

Data were analyzed through triangulation of quantitative and qualitative data. Quantitative data involving questionnaires were analyzed through SPSS PC software program using descriptive statistics to find out an answer for Research Questions 1,3 and their subquestions and one-way ANOVA to find out an answer for Research Question 4. Qualitative data involved interviews and observations. For analyzing the interviews, the following steps were followed:

- 1) Preparing the data in transcript form:** First, the raw data were analyzed through transcribing the recording and writing the transcriptions.
- 2) Formatting the transcript for analysis:** Secondly, the transcript was formatted by leaving a wide space in the right margin in order to facilitate reading it and to write comments next to the transcriptions.

- 4) **Identifying meaningful data units:** Thirdly, the general themes and issues in each interview were identified keeping the research questions in mind.
- 5) **Organizing the relevant categories under the research questions:** Relevant categories related to the dimensions of the interviews were organized under Research Questions 1, 2, 3, and their subquestions.
- 6) **Interpreting the data:** The data obtained through the interviews were reported using the frequencies and percentages calculated by SPSS PC software program and interpreted together with the quantitative data results.

For analyzing the observations, similar steps were followed excluding the first step. In other words, notes that were taken during observations were rewritten for preparing them for the analysis, meaningful data units were identified, relevant categories related to the dimension of the observation were organized under Research Question 1.3. and the data were reported using frequencies and percentages and interpreted.

3.7. Limitations

The present study involved only the students taking ELT Methodology II in ELT departments at four universities and their instructors teaching this course. The instructors were not administered a questionnaire since the number of the instructors involved in the study was a few. Therefore, the results obtained through questionnaires did not involve the comparison of the students' and the instructors' perceptions. The results of the questionnaire and the interviews might also be subjective to some degree because they reflected the students' and the instructors' perceptions and personal judgments concerning the classroom characteristics.

Observations were also limited because they only included METU and Gazi University and each classroom was observed only once. Moreover, the researcher was only able to observe the students' microteaching. Therefore, the observations focused on the characteristics of the classrooms the students created rather than the instructors'. More extensive observations including the four universities participated in the study could reveal a more complete picture of the classroom characteristics. Furthermore, it could be

possible to compare the observed classroom characteristics with the students' and the instructors' perceptions of classroom characteristics to check their consistency with each other. Another limitation with the observations was the lack of another observer other than the researcher to double-check the accuracy of the observations although the researcher was scrupulous in making objective and accurate observations. Observations by multiple observers could enhance interrater reliability of the observations.

In the following part, the results of the study obtained through the analysis of quantitative and qualitative data are presented in detail.

CHAPTER IV

RESULTS

This chapter presents the results related to the research questions of the study. As it was stated before, the purpose of this study was mainly to investigate the constructivist classroom characteristics in ELT Methodology II courses in English Language Teaching (ELT) departments at Faculties of Education and to find out whether constructivist classroom characteristics differed according to certain variables.

The overall results of the data analysis related to each research question in the study; that is, constructivist classroom characteristics and its subdimensions including learning activities, evaluation, professional relevance, reflective thinking, negotiation, leadership, empathy and support, students' and instructors' conceptions of learning and teaching and the difference in students' perception of constructivist classroom characteristics are presented in the following parts. *While reporting the results in tables, the highest and the lowest scores were shown in bold. While reporting the results of the interviews, the activities or procedures that were mentioned by at least 50 % of the participants were considered to be the most frequent.*

4.1. Constructivist Classroom Characteristics as Perceived by Students

In order to give an answer to research question 1.1. "To what extent are the current **classroom characteristics** in ELT Methodology II courses constructivist as perceived **by students?**" the questionnaire was administered to 410 students at ELT departments (107 from METU, 128 from Gazi University, 90 from Çukurova University and 85 from Dicle University). The items were scored in the following way: *Always is 4.5 - 5.00, Often is 3.51- 4.50, Sometimes is 2.51 - 3.50, Seldom is 1.51 - 2.50 and Never is 0 -1.5.*

First, the total scores obtained from the whole questionnaire and its mean and standard deviation were presented. The first item of the Learning Activities subdimension, "The

instructor lectures” and in the Evaluation subdimension “Students are evaluated through written exams or tests” were reversed before the assessment because higher scores on these items represent characteristics of a traditional classroom rather than a constructivist one. The questionnaire had 65 items. The mean of the total score of the questionnaire was **234.91** ($x = 3.61$ out of 5 / **close to Often**) while its standard deviation was **30.13** ($Sd = .46$). The results suggested that the students perceived the current classroom characteristics to be **often** constructivist. The lowest score obtained was 132 ($x = 2$ out of 5) while the highest score was 297 ($x = 4.57$ out of 5).

Table 4.1. Students’ Total Scores as Obtained Through Questionnaires

TOTAL SCORE	FREQUENCIES	PERCENTAGES (%)
Always	9	2.4
Often	235	63
Sometimes	123	33
Seldom	6	1.6
Never	-	-
TOTAL	373	100

As seen in Table 4.1. more than half of the students (63 %) perceived the classroom characteristics to be **often** constructivist while only 1.6 % of them perceived them to be **seldom** constructivist. On the other hand, none of the students perceived the classroom characteristics to be **never** constructivist.

Next, the means, standard deviations, frequencies and percentages of the subdimensions of the classroom including learning activities, evaluation, professional relevance, reflective thinking, negotiation, leadership, empathy and support were calculated.

As seen in Table 4.2., analysis of the mean scores revealed that the learning activities and the evaluation strategies in the classrooms were perceived to be **sometimes** constructivist by the students while other subdimensions were perceived to be **often** constructivist. The subdimension with the highest mean score was Leadership ($x = 4.35$). More than half of the students perceived that learning activities and evaluation strategies

in the classrooms were **sometimes** constructivist (58.5 % and 53.6 % respectively). On the other hand, when the percentages of Always and Often were added up, it was found out that 91.2 % of the students perceived that the course was professionally relevant while 87.4 % of the students perceived that the instructors had leadership qualities.

Table 4.2. Students' Responses Related to the Subdimensions of the Questionnaire (Means out of 5)

DIMENSIONS	x	Sd	PERCENTAGES				
			Always %	Often %	Sometimes %	Seldom %	Never %
Learning Activities (<i>n</i> = 395)	3.11	.55	–	30.6	58.5	10.5	-
Evaluation (<i>n</i> = 403)	2.94	.65	1.5	23.6	53.6	21.3	-
Professional Relevance (<i>n</i> = 409)	4.19	.67	42.3	48.9	6.8	1.7	0.3
Reflective Thinking (<i>n</i> = 407)	3.80	.81	22.6	53.3	18.4	4.7	1
Negotiation (<i>n</i> = 410)	3.82	.77	22.7	48.9	24.1	4.1	0.2
Leadership (<i>n</i> = 405)	4.35	.74	58.8	28.6	10.4	1.7	0.5
Empathy (<i>n</i> = 403)	4.09	.78	41.9	40.4	14.2	2.7	0.8
Support (<i>n</i> = 402)	4.09	.81	39.6	42.3	14.2	2.9	1
TOTAL (<i>n</i> = 373)	3.61	.46	2.4	63	33	1.6	-

In the following parts, constructivist characteristics of the subdimensions of the classrooms obtained through the analysis of the questionnaires administered to the students and the interviews with the students and the instructors are presented.

4.1.1. Constructivist Learning Activities as Perceived by Students

In order to find an answer for research question 1.1.1. “To what extent are the current learning activities in ELT Methodology II courses are constructivist?, first, the questionnaires administered to the students were analyzed.

Table 4.3. Students’ Responses Related to Learning Activities as Obtained Through Questionnaires (Means out of 5)

ITEMS	x	Sd	PERCENTAGES				
			Always %	Often %	Sometimes %	Seldom %	Never %
1) Lecturing (n = 404)	3.79	.95	24.8	39.9	27	6.7	1.7
2) Keeping journals (n = 410)	2.39	1.43	12.4	13.7	13.4	21.7	38.8
3) Cooperative work (group or pair work) (n = 410)	3.44	1.18	19.5	33.7	26.8	11.2	8.8
4) Microteaching presentations (n = 409)	4.09	.76	31.1	49.6	17.1	2	0.2
5) Peer tutoring (n = 403)	3.74	.98	24.1	38.7	26.1	9.4	1.7
6) Preparing portfolios (n = 410)	1.36	.73	0.7	1.5	6.1	16.8	74.9
7) Different teaching techniques (role playing, drama, simulation, etc.) (n = 410)	3.78	1.24	37.1	26.3	21.7	7.1	7.8
8) Individual projects (n = 410)	3.65	1.23	31.5	27.6	22.2	12	6.8
9) Group projects (n = 410)	2.92	1.33	13.2	24.4	25.4	15.9	21.2
10) Discussions (n = 410)	3.55	.99	18.5	34.4	31.7	14.1	1.2

Table 4.3. (Continued)

ITEMS	x	Sd	PERCENTAGES				
			Always %	Often %	Sometimes %	Seldom %	Never %
11) Case analysis (<i>n</i> = 410)	2.86	1.20	10.2	20.2	29	26.1	14.4
12) Doing research (<i>n</i> = 410)	3.25	1.07	12.2	31.5	30	21.7	4.6
13) Discovery learning (<i>n</i> = 410)	2.72	1.07	6.6	14.6	36.1	30	12.7
14) Activities developing creative thinking (<i>n</i> = 407)	3.45	1.16	19.7	34.4	24.3	14.5	7.1
15) Diagrams or concept maps (<i>n</i> = 410)	2.61	1.23	8.3	17.3	23.4	29	22
16) Use of a variety of equipment (<i>n</i> = 409)	3.52	1.20	26.9	24.9	27.9	14.2	6.1
17) Use of a variety of materials (<i>n</i> = 410)	3.84	1.20	38.3	28	18.3	9.8	5.6
18) Negotiation in identification and planning of learning activities (<i>n</i> = 403)	3.00	1.24	11.9	26.3	28.5	18.6	14.6
TOTAL (<i>n</i> = 395)	3.11	.55	-	30.6	58.5	10.5	-

As seen in Table 4.3., analysis of the mean scores revealed that majority of the learning activities used in the classroom were either **sometimes** or **often** present, while keeping journals and preparing portfolios were either **never** or **seldom** used.

Next, the interviews with the students were analyzed in order to find out the learning activities used in the classroom. The results are summarized in Table 4.4.

Table 4.4. Students' Responses Related to Learning Activities as Obtained Through Interviews

LEARNING ACTIVITIES	STUDENTS (<i>n</i> = 40)		LEARNING AIDS	STUDENTS (<i>n</i> = 40)	
	F	%		F	%
		F	%	Coursebooks	40
Lecturing	37	92.5	Articles	24	60
Group / pair work	29	72.5	OHP	20	50
Discussions	27	67.5	Tape-recorder	30	75
Microteaching	40	100	Handouts	12	30
Sample demos by the instructors	24	60	Video	8	20
Research assignments	13	32.5	Slides	4	10
Article presentations	6	15	Diagrams	4	10
Observation of peers' microteaching	6	15			
Observation tasks in the coursebook	2	5			
Drama	4	10			
Brainstorming	2	5			
Journal writing	4	10			
Case studies on teaching problems	4	10			
Question & answer	8	20			
Dictation	2	5			
Communicative activities	4	10			

First, the students were asked “Which learning activities are present in the classroom?” As seen in Table 4.4., all the interviewed students mentioned that they had a microteaching practice for teaching a specific topic in the class. Other learning activities the most frequently mentioned by the students were lecturing, group or pair work, discussions and sample demos given by the instructors for showing the use of various teaching techniques or strategies in teaching. All the students that were interviewed stated that they were encouraged to use any techniques during their microteaching. Among these, they mentioned role-playing, simulation, drills, games and communicative activities.

40 % of the students (*n* = 16) mentioned that their class was not dominated by lecturing, but student-centered activities were more present while a student stated that the

classroom activities were usually teacher-centered. Lecturing was usually made interactive through discussions, group or pair work activities and article presentations. 20 % of the students (n = 8) reported that their instructors provided them with some exercises following lecturing such as question-answer, fill-in-the-blanks and so on.

The least frequently mentioned activities were doing observation tasks in the coursebook, brainstorming and dictation done by the instructor for summarizing the lecture.

Secondly, the students were asked **“Which materials and equipment are used in the classroom to support learning activities?”** All the interviewed students mentioned that the coursebooks were used the most frequently as the main materials. The students also mentioned the most frequently that tape-recorders, articles and OHP were used. Tape-recorders were used by the students during microteaching. 30 % of the students (n = 12) stated that their instructors used OHP during lecturing while 20 % of the students (n = 8) pointed out that they used OHP in their microteaching. The least frequently mentioned learning aids were slides and diagrams that were used by an instructor during lecturing. 20 % of the students (n = 8) stated that video was used for recording and providing feedback for the students’ microteaching. Majority of the students (n = 28, P = 70 %) also emphasized that they were encouraged to search for the activities from different resources and to use a variety of materials and audio visuals during microteaching.

Finally, the students were asked **“Are the learning activities designed as a result of a negotiation between the students and the instructor?”** Majority of the students (n = 30, P = 75 %) reported that their suggestions were considered although they did not take part in designing the course.

4.1.2. Constructivist Evaluation Strategies as Perceived by Students

In order to provide an answer for research question 1.1.2. “To what extent are the current evaluation strategies in ELT Methodology II courses constructivist?”, first, students’ responses to the questionnaire were analyzed.

Table 4.5. Students' Responses Related to Evaluation as Obtained Through Questionnaires (Means out of 5)

ITEMS	x	Sd	PERCENTAGES				
			Always %	Often %	Sometimes %	Seldom %	Never %
1) Written exams or tests (<i>n</i> = 410)	4.20	.88	44.6	35.9	15.6	2.9	1
2) Evaluation of written work (<i>n</i> = 410)	4.09	.99	41.7	34.6	18	2.4	3.2
3) Evaluation of oral performance (<i>n</i> = 409)	4.15	.90	42.8	34.5	18.3	3.4	1
4) Regular instructor feedback (<i>n</i> = 409)	3.66	1.23	31.1	30.6	17.8	14.2	6.4
5) Evaluation of improvement in learning process (<i>n</i> = 409)	2.83	1.16	23.5	33	24.4	13.2	5.9
6) Self-evaluation by sts. (<i>n</i> = 410)	3.63	1.37	14.1	20.5	23.7	18	23.7
7) Peer evaluation by sts. (<i>n</i> = 410)	3.02	1.27	21.5	29.5	24.6	12.7	11.7
8) Course evaluation by sts. (<i>n</i> = 409)	2.43	1.26	14.9	22.7	24.7	25.2	12.5
9) Evaluation of the instructor by sts. (<i>n</i> = 408)	1.94	1.34	11	11	20.3	25	32.6
10) Negotiation on the time of exams (<i>n</i> = 410)	1.72	1.40	8.5	11.5	8.5	8	63.4
11) Negotiation on the type of exams (<i>n</i> = 408)	1.64	1.15	4.9	4.9	11.5	15	63.7
TOTAL (<i>n</i> = 403)	2.94	.65	1.5	23.6	53.6	21.3	-

As seen Table 4.5., analysis of the mean scores revealed that five of the evaluation strategies used by the instructors (written exams or tests, evaluation of written work, evaluation of oral performance, regular instructor feedback and self-evaluation) were **often** present, whereas evaluation of the instructor by the students, negotiation on the time and type of the exams were **seldom** present in the classroom.

Next, the interviews with the students were analyzed. The evaluation strategies and feedback procedures used for evaluating students are summarized in Table 4.6.

Table 4.6. Students' Responses Related to Evaluation Strategies as Obtained Through Interviews

EVALUATION STRATEGIES	STUDENTS (<i>n</i> = 40)		FEEDBACK PROCEDURES	STUDENTS (<i>n</i> = 40)	
	F	%		F	%
Mid-term / final exams	40	100	Instructor feedback	40	100
Evaluation of microteaching and lesson plans	40	100	Peer evaluation	39	97.5
Quizzes	8	20	Self- evaluation	40	100
Evaluation of observation reports	8	20	Observation reports	8	20
Evaluation of attendance	4	10	Journal writing	2	5
Evaluation of participation / interest	10	25	Video recording & analysis of microteaching	2	5
Evaluation of assignments	23	57.5			
Evaluation of article summaries & presentations	4	10			

First, the students were asked “**Which evaluation strategies are used for evaluating the students?**” As seen in Table 4.6., all the interviewed students mentioned that their performance in written exams (mid-terms and final exams), their microteaching and sample lesson plans were evaluated. 57.5 % of the students also reported that their assignments were evaluated. Evaluation of attendance and evaluation of article summaries and presentations were the least frequently mentioned evaluation strategies.

Secondly, the students were asked **“How do you receive feedback on your achievement level?”**. All the participant students explained that they received feedback on their performance in microteaching and on their lesson plans. 20 % of the students pointed out that they received feedback on their lesson plan before microteaching and the instructors devoted time to feedback after microteaching in their offices. The rest of the students (80 %) stated that they usually got feedback in the classroom, but they could get feedback from the instructor any time if they wished.

Majority of the students (n = 32, P = 80 %) stated that they evaluated their own and their classmates' performance in microteaching in addition to receiving feedback from their instructors. 20 % of the students (n = 8) stated that self-evaluation usually occurred outside the class in the individual feedback sessions with their instructors. A student stated that during these sessions, their instructor mentioned other students' comments about the presenter's performance in microteaching and asked his or her opinion of these comments. 15 % of the students (n = 6) said that the instructors and the students evaluated the presenters on an observation form prepared by the instructors.

Observation reports mentioned by 20 % of the students served the function of peer evaluation in which the students wrote their observations about their classmates' weaknesses and strengths in microteaching. In addition, video recording and analysis of students' microteaching and journals used as a source for instructor feedback, self-evaluation and peer evaluation were the least frequent feedback techniques.

Thirdly, the students were asked **“Do you evaluate the course and your instructor in this classroom? If yes, how?”**. More than half of the students (n = 25, P = 62.5 %) stated that they evaluated the course and the instructor informally through stating their expectations, problems and suggestions for improving the course in the classroom. There were also students (n = 15, P = 37.5 %) who stated that they sometimes evaluated the course, but not the instructor. 5 % of the students (n = 2) stated that this was because lack of time while 10 % of the students pointed out that they avoided evaluating the instructor because her reaction towards being evaluated might not be positive. 20 % of the students (n = 8) mentioned that they evaluated the course and the instructor through an official form.

Finally, the students were asked “**Are the evaluation strategies designed as a result of a negotiation between the students and the instructor?**” All the interviewed students stated that they did not decide on the time and type of the evaluation strategies, but they could express their ideas on the improvement of the evaluation strategies.

4.1.3. Professional Relevance as Perceived by Students

In order to answer research question 1.1.3. “To what extent are ELT Methodology II courses **professionally relevant** to students’ future teaching needs?”, first, students’ responses to each item in the Professional Relevance subdimension of the questionnaire were analyzed.

Table 4.7. Students’ Responses Related to Professional Relevance as Obtained Through Questionnaires (Means out of 5)

ITEMS	x	Sd	PERCENTAGES				
			Always %	Often %	Sometimes %	Seldom %	Never %
1) Learning about teaching profession (n = 410)	4.64	.68	71.5	23.2	3.9	0.5	1
2) Learning interesting things (n = 410)	3.99	.99	38	30	27.1	2.2	2.7
3) Learning about future profession (n = 410)	4.57	.74	68.8	22.7	5.9	2.2	0.5
4) Learning to solve problems related to teaching (n = 410)	4.18	.96	45.9	35.4	12.4	3.9	2.4
5) Learning interesting things about teaching profession (n = 409)	3.95	1.01	36.2	33	22	7.1	1.7

Table 4.7. (Continued)

ITEMS	x	Sd	PERCENTAGES				
			Always %	Often %	Sometimes %	Seldom %	Never %
6) Connectedness between what has been learnt in the course & previous courses (<i>n</i> = 410)	3.90	1.00	32	36.6	22.4	7.1	2
TOTAL (<i>n</i> = 409)	4.19	.67	42.3	48.9	6.8	1.7	0.3

As seen Table 4.7., analysis of the mean scores revealed that the students **always** learned about teaching profession ($x = 4.64$) and their future profession in this course ($x = 3.90$), whereas they **often** solved problems related to teaching, learned interesting things about teaching profession and were able to connect what they learnt in this course with the previous courses.

Next, the interviews with the students were analyzed. First, the students were asked “Is what you have learnt in ELT Methodology II course relevant to teaching profession? Why or why not?”.

As seen in Table 4.8., all the interviewed students, except one, thought that the course was relevant to teaching profession. Almost all the students reported that the course was relevant because they learnt about basic teaching tips such as the teaching methods, activities and materials that could be used during teaching, lesson planning, material development, classroom management and creating an effective learning environment. Half of the students thought that they could apply what they learnt in their microteaching or teaching career and microteaching helped them criticize and prepare themselves for teaching in the future. A student who thought that the course was not so relevant pointed out that he might not be able to use what he learnt in this course in his teaching because of the conditions in real teaching contexts. He emphasized that, for example, it would be difficult to establish an eye contact with the students or to conduct a group work in a crowded class.

Table 4.8. Students' Responses Related to Professional Relevance as Obtained Through Interviews

This course is relevant to teaching profession because...	STUDENTS (n = 40)	
	F	%
You can apply what you have learnt in microteaching / teaching career.	20	50
You compare the earlier learning experiences with the present ones and criticize the former.	6	15
You learn about basic teaching tips.	39	97.5
Microteaching helps criticizing & preparing oneself for real teaching.	20	50
Article reviews help evaluate various teaching methods.	2	5
I want to be an effective teacher.	1	2.5
You learn about how to recognize & teach to students with diverse learning styles.	1	2.5
This course is not so relevant to teaching profession because...	STUDENTS (n = 40)	
	F	%
Teaching conditions in real classrooms may not allow the direct application of what has been learnt.	1	2.5

Secondly, the students were asked “**Are the previous courses relevant to ELT Methodology II? If yes, which ones?**” Majority of the students reported that *Teaching English to Young Learners* (n = 36, P = 90 %) and *Approaches in ELT* (n = 32, P = 80 %) courses were relevant while a student reported that educational courses such as *Classroom Management* and *Instructional Planning and Evaluation* were relevant because they could apply what they learnt in these courses in ELT Methodology courses. On the other hand, a student thought that the literature courses were irrelevant to teaching profession and ELT courses.

4.1.4. Reflective Thinking as Perceived by Students

In order to answer research question 1.1.4. “To what extent do the ELT Methodology II courses develop reflective thinking?”, first, the students' responses to each item in Reflective Thinking subdimension of the questionnaire were analyzed.

Table 4.9. Students' Responses Related to Reflective Thinking as Obtained Through Questionnaires (Mean out of 5)

ITEMS	x	Sd	PERCENTAGES				
			Always %	Often %	Sometimes %	Seldom %	Never %
1) Thinking carefully about how one learns (<i>n</i> = 410)	3.60	.99	17.8	40.5	28.3	10.5	2.9
2) Thinking critically about one's own ideas (<i>n</i> = 410)	3.76	.99	23.2	42.2	25.1	6.1	3.4
3) Learning to be sceptical (<i>n</i> = 410)	3.73	.99	22	41.7	27.1	5.6	3.7
4) Learning how to become a better learner (<i>n</i> = 410)	3.93	.98	30.5	43.4	18	4.9	3.2
5) Thinking critically about one's understanding (<i>n</i> = 410)	3.74	.98	22.9	40.2	27.3	6.6	2.9
6) Learning to be open to new ideas (<i>n</i> = 407)	4.17	.89	41.8	40.3	12.8	3.7	1.5
TOTAL (<i>n</i> = 407)	3.80	.81	22.6	53.3	18.4	4.7	1

As indicated in Table 4.9., analysis of the mean scores revealed that the students **often** ($x = 3.60 - 4.17$) reflected upon what learnt and others' ideas. The students learnt to be open to new ideas the most frequently ($x = 4.17$) while they thought carefully how they learnt the least frequently ($x = 3.60$).

Next, the interviews with the students were analyzed. and the results are summarized in Table 4.10. In the interviews the students were asked **“Does this course contribute to reflecting upon what you have learnt?”**. Secondly, they were asked **“Does this course contribute to critically thinking about your own and your classmates’**

performance?”. 95 % of the interviewed students (n = 38) reported that the course contributed to developing reflective thinking in these two respects. A student said that the course did not develop reflective thinking because there was lack of time for doing activities developing reflective thinking. Another student reported that she already had the reflective thinking skill and did not essentially gain it in this course.

Table 4.10. Students’ Responses Related to Reflective Thinking as Obtained Through Interviews

Learning Activities / Practices Contributing to Reflective Thinking	STUDENTS (n = 40)	
	F	%
Discussions	23	57.5
Microteaching	29	72.5
Group or pair work	15	37.5
Self-evaluation	27	67.5
Peer evaluation	17	42.5
Comparison of earlier school experiences with the present ones	6	15
A democratic learning environment	1	2.5
Questioning different points of view towards teaching	2	5
Thinking over how to use what has been learnt in real classroom contexts	1	2.5
Material and activity development & adaptation	10	25

Thirdly, the students were asked **“Which learning activities or practices contribute to development of reflective thinking?”** As seen in Table 4.10., the students mentioned the most frequently microteaching, discussion and self-evaluation as the activities or practices contributing to reflective thinking.

Finally, the students were asked **“Do you have any suggestions for enhancing reflective thinking skills in this course?”** Majority of the students did not provide any suggestions while 30 % of the students (n = 12) made the following suggestions:

- One hour should be devoted to feedback on students’ microteaching.

- Students should have the opportunity to look for and discover their own teaching methods
- Learning activities should be more student-centered.
- Students should feel free and shouldn't be forced to think and act as the instructor wanted them to do.
- There should be more variety in activities.
- There should be social activities outside the class such as an English Club.
- Students should be encouraged to participate in class activities more.
- Students should be assigned homework developing their thinking skills.
- There should be more microteaching practices.
- More teaching techniques should be learned and implemented in the class.
- There should be more discussions.
- Learning activities should be more student-centered.

4.1.5. Negotiation as Perceived by Students

In order to answer research question 1.1.5. "To what extent does **negotiation** among students in ELT Methodology II courses exist?, first, the students' responses to each item in the Negotiation subdimension of the questionnaire were analyzed.

Table 4.11. Students' Responses Related to Negotiation as Obtained Through Questionnaires (Means out of 5)

ITEMS	x	Sd	PERCENTAGES				
			Always %	Often %	Sometimes %	Seldom %	Never %
1) Getting chance to talk to other sts. (n = 410)	4.25	.92	51.2	27.1	18	2.4	1.2
2) Sharing learning experiences with other sts. (n = 410)	3.93	1.00	35.9	31	24.9	6.8	1.5
3) Explaining ideas to other sts. (n = 410)	3.90	.97	31	37.8	22.4	7.6	1.2

Table 11. (Continued)

ITEMS	x	Sd	PERCENTAGES				
			Always %	Often %	Sometimes %	Seldom %	Never %
4) Asking other students to explain their ideas (<i>n</i> = 410)	3.85	.97	28.5	38	24.6	7.3	1.5
5) Other students ask their friends to explain their ideas (<i>n</i> = 410)	3.48	1.03	17.3	33.2	32.2	14.4	2.9
6) Other students explain their ideas (<i>n</i> = 410)	3.52	1.01	18.3	33.2	33.7	12.4	2.4
TOTAL (<i>n</i> = 410)	3.82	.77	22.7	48.9	24.1	4.1	0.2

As seen in Table 4.11., the mean scores of all the items except Item 5 were close to **Often** ($x = 4.25 - 3.52$) indicating that the students **often** negotiated with each other. Other students asked their friends to explain their ideas the least frequently ($x = 3.48$) while the students got a chance to talk to other students the most frequently ($x = 4.25$).

Next, the interviews with the students were analyzed and the results are summarized in Table 4.12.

First, in the interviews the students were asked “**Are you able to negotiate with your classmates in this classroom?**” Almost all interviewed students ($n = 37$, $P = 92.5\%$) reported that they could negotiate with their classmates in or outside the classroom. 5 % of the students ($n = 2$) who thought that there was not always negotiation stated that the students negotiated more just before the exams and each student preferred to act on his or her own rather than cooperating with his or her classmates. A student who said that there was no negotiation explained that this may be because she herself did not prefer to negotiate with her classmates.

Table 4.12. Students' Responses Related to Negotiation as Obtained Through Interviews

Learning Activities & Practices Promoting Negotiation	STUDENTS (<i>n</i> = 40)	
	F	%
Discussions	25	62.5
Microteaching (During preparation & presentation phases)	29	72.5
Group or pair work	31	77.5
Peer teaching	1	2.5
Communicative activities	1	2.5

Secondly, the students were asked **“Which learning activities or practices in the classroom promote negotiation among the students?”** As seen in Table 4.12., group or pair work, microteaching and discussions were the most frequently mentioned. The students who thought that microteaching promoted negotiation explained that they negotiated about what they could do during microteaching, relaxed and encouraged each other, rehearsed their presentations in front of their friends, provided the presenters with the suggestions, guided and gave sources to them. Moreover, the classmates participated in and contributed to their friends' microteaching in the class.

Finally, the students were asked **“Do you have any suggestions for enhancing negotiation among the students?”** 25 % of the students (*n* = 10) provided suggestions. They suggested that there should be more group work in the class and the students should have more opportunity to criticize their peers' microteaching. The students also emphasized the importance of developing friendship among themselves and suggested that they should come together more, be close to each other, like and respect each other and there should be no competition among them to promote negotiation. They also suggested that group projects should be assigned for increasing communication, there should be more discussions and the class size should be decreased.

4.1.6. Leadership as Perceived by Students

In order to answer research question 1.1.6. “To what extent do the instructors in ELT Methodology II courses have **leadership qualities**?, first, students’ responses to each item in the Leadership subdimension of the questionnaire was analyzed.

Table 4.13. Students’ Responses Related to Leadership as Obtained Through Questionnaires (Means out of 5)

ITEMS	x	Sd	PERCENTAGES				
			Always %	Often %	Sometimes %	Seldom %	Never %
1) Being enthusiastic about teaching (n = 410)	4.36	.97	60.2	23.9	10.5	2.4	2.9
2) Holding students’ attention (n = 410)	4.24	.93	50.2	30.2	14.9	2.9	1.7
3) Being a good leader (n = 407)	4.24	.93	50.4	30.2	14.5	3.2	1.7
4) Knowing everything that goes on in the classroom (n = 410)	4.34	.93	57.8	24.6	13.2	2.7	1.7
5) Acting confidently (n = 408)	4.60	.73	69.9	22.8	5.1	1.2	1.0
6) Explaining things clearly (n = 410)	4.32	.92	56.1	26.8	11.7	4.1	1.2
TOTAL (n = 405)	4.35	.74	58.8	28.6	10.4	1.7	0.5

As seen in Table 4.13., in this subdimension, the mean scores of all the items except Item 5 were close to **Often** (x = 4.36 – 4.24) indicating that the instructors **often** had leadership qualities.

Next, the interviews with the students were analyzed. First, the students were asked “What is the role of your instructor in the classroom as a leader?” The instructors’ leadership roles in the classroom were summarized in Table 4.14.

Table 4.14. Students’ Responses Related to Leadership as Obtained Through Interviews

INSTRUCTORS’ LEADERSHIP ROLES	STUDENTS (<i>n</i> = 40)	
	F	%
Leader	35	87.5
Classroom manager	39	97.5
Observer during microteaching	40	100
Telling students what to do	1	2.5
Being enthusiastic about teaching	1	2.5
Motivating / holding sts’ attention	14	35
Being a professional & personal model for sts.	4	10
Assigning grades	1	2.5
Being competent in subject matter / teaching	4	10
Acting confidently	1	2.5
Knowledge dispenser / teacher	3	7.5

All the interviewed students stated that the instructors were not active during microteaching and assumed the role of an observer. The students also reported the most frequently that the instructors were good classroom managers and effective leaders. 20 % of the students (*n* = 8) said that their instructors were not rigid classroom managers, that is they were flexible and encouraged student participant. A student stated that the instructor was not oppressive, commanding and prescriptive in her classroom management. 20 % of the students (*n* = 8) pointed out that their instructors effectively planned and organized classroom activities. 7.5 % of the students (*n* = 3) said that their instructor had a full control over the class, the students and the activities. They also stated that the instructor was aware of everything going on in the class.

4.1.7. Empathy as Perceived by Students

In order to answer research question 1.7. “To what extent are the instructors in ELT Methodology II courses empathetic?, first, the students’ responses related to each item in the Empathy subdimension of the questionnaire were analyzed.

Table 4.15. Students’ Responses Related to Empathy as Obtained Through Questionnaires (Means out of 5)

ITEMS	x	Sd	PERCENTAGES				
			Always %	Often %	Sometimes %	Seldom %	Never %
1) Trusting students (<i>n</i> = 409)	4.03	.96	35.2	41.6	15.6	5.6	2
2) Accepting students’ ideas if students don’t agree with them. (<i>n</i> = 409)	3.90	1.15	40.8	25.4	21.3	8.1	4.4
3) Being willing to explain things again (<i>n</i> = 409)	4.12	1.02	45.2	32.3	13.9	6.1	2.4
4) Listening to students if they have something to say (<i>n</i> = 408)	4.34	.90	55.4	29.4	10	3.9	1.2
5) Realizing when students don’t understand (<i>n</i> = 409)	4.01	.96	35	39.9	18.6	4.2	2.4
6) Being patient (<i>n</i> = 409)	4.16	.98	47.4	30.1	15.6	5.1	1.7
TOTAL (<i>n</i> = 403)	4.10	.74	41.9	40.4	14.2	2.7	0.8

As seen in Table 4.15., the mean scores of all the items in this subdimension were close to **Often** (*x* = 4.34 - 3.90) indicating that the instructors were **often** empathetic towards students. The instructors listened to the students who had something to say the

most frequently ($x = 4.34$) while they accepted students' ideas if students didn't agree with them ($x = 3.90$) the least frequently.

Next, the interviews with the students were analyzed. First, the students were asked **“Does your instructor show you empathy in this classroom? If yes, how?”** The instructors empathetic roles were summarized in Table 4.16.

Table 4.16. Students' Responses Related to Empathy as Obtained Through Interviews

INSTRUCTORS' EMPATHETIC ROLES	STUDENTS ($n = 40$)	
	F	%
Being understanding	25	62.5
Respecting / being open to sts.' ideas	15	37.5
Being tolerant	15	37.5
Listening to sts.' problems	2	5
Developing sts.' empathy through putting Them into role of a teacher	1	2.5
Answering sts.' questions & listening to them patiently	2	5
Paying attention to whether sts. understands	2	5

All the interviewed students, except one, thought that their instructors showed them empathy. A student thought that the instructor could not be empathetic because she thought like a teacher and could not put herself in place of her students. As seen in Table 4.16., the students reported the most frequently that the instructors were understanding, in other words, they tried to understand students' feelings and expectations. A student reported that the instructor established empathy through trying to understand what she could do if she were a student and sometimes tried to guess how the students might be thinking.

4.1.8. Support as Perceived by Students

In order to answer research question 1.1.8. “To what extent are the instructors in ELT Methodology II courses **supportive**?, the students’ responses related to each item in the Support subdimension of the questionnaire were analyzed.

Table 4.17. Students’ Responses Related to Support as Obtained Through Questionnaires (Means out of 5)

ITEMS	x	Sd	PERCENTAGES				
			Always %	Often %	Sometimes %	Seldom %	Never %
1) Helping students with their work (n = 409)	4.15	.92	42.5	36.2	16.4	3.4	1.5
2) Being friendly (n = 409)	4.14	1.00	45.5	33.3	13.7	5.1	2.4
3) Being someone students can depend on (n = 408)	4.12	.99	53.2	27.9	12.3	4.2	2.5
4) Being able to tell the instructor when students don’t understand (n = 408)	4.32	.94	55.9	27.7	11.3	3.2	2
5) Taking a personal interest in students (n = 409)	3.61	1.23	30.1	27.4	22.2	13.7	6.6
6) a learning environment facilitating learning (n = 402)	4.03	.98	37.4	38.4	16.9	4.9	2.4
TOTAL (n = 405)	4.09	.81	39.6	42.3	14.2	2.9	1

As seen in Table 4.17., the mean scores of all the items in this subdimension were close to **Often** (x = 4.32 - 3.61) indicating that the instructors were **often** supportive. The

students were able to tell the instructors when they did not understand the most frequently ($x = 4.32$) while the instructors took a personal interest in students the least frequently ($x = 3.61$).

Next, the interviews with the students were analyzed. First, the students were asked **“Does your instructor provide support for your learning? If yes, how?”** All the interviewed students, except two of them, said that their instructors provided support for their learning. One of the students pointed out that their instructor was not supportive because her relationship with the students were distant and “mechanical”. Another student said that their instructor seemed to care about some students more although she was usually warm and affectionate. Table 4.18. summarizes supportive roles of the instructors.

Table 4.18. Students’ Responses Related to Support as Obtained Through Interviews

INSTRUCTORS’ SUPPORTIVE ROLES	STUDENTS (<i>n</i> = 40)	
	F	%
Facilitator	20	50
Guide	26	65
Being a friend	14	35
Providing feedback about performance	14	35
Being encouraging	18	45
Negotiating with students	1	2.5
Making sts. feel both relaxed & responsible for learning	2	5
Providing a positive environment for learning	4	10
Having good relationship with sts.	12	30
Helping sts. with their work	1	2.5

The students mentioned the most frequently instructors’ roles as guides and facilitators. 27.5 % of the students ($n = 11$) stated that their instructors provided the guidance when the students really needed it, they did not impart knowledge directly, but guided the students to search for and to discover it by themselves. On the other hand, a student stated that their instructor guided the students in the way she desired. About half

of the students (45 %) mentioned that their instructors were encouraging and they encouraged the students to produce ideas, be creative and effective teachers, participate in class activities, think over what they learnt and use them in their teaching career. A student also emphasized that their instructor provided courage during microteaching and helped the students overcome their excitement.

Moreover, majority of the students who reported that the instructors provided feedback thought that the instructors made constructive and useful criticism about their performance while 5 % of the students said that their instructors were too critical of their performance and their expectations from the students were too high.

Finally, the students were asked **“What kind of roles do you think the instructors should assume in the classroom?”** All the interviewed students emphasized that the instructors should be good leaders, classroom managers, facilitators and guides. They also mentioned that they should empathize with the students and support them in their learning. 25 % of the students (n = 10) provided the following additional suggestions:

An instructor...

- should not interfere with students' work and let the students free.
- should encourage the students to participate in class activities more.
- should be both a teacher and an educator.
- should teach the knowledge that could be used in life, not the one that only could be used in the exams.
- should pay equal attention to each student.
- should teach well and impart knowledge to students.
- should take students' suggestions into consideration.
- should establish a balance among his / her roles, for example s/he should be neither too friendly nor too authoritative and s/he should be democratic.

4.2. Constructivist Classroom Characteristics as Perceived by Instructors

In this part, in order to find an answer for research question 1.2. “To what extent are the current **classroom characteristics** in ELT Methodology II courses constructivist as perceived **by instructors**?” and its subquestions, constructivist classroom characteristics

including learning activities, evaluation, professional relevance, reflective thinking, negotiation, leadership, empathy and support as perceived by instructors are presented. The results were obtained through interviews with 15 instructors (3 from METU, 8 from Gazi, 3 from Çukurova and 1 from Dicle Universities) teaching ELT Methodology II course.

4.2.1. Constructivist Learning Activities as Perceived by Instructors

In order to find an answer for research question 1.2.1. “To what extent are the current **learning activities** in ELT Methodology II courses constructivist?, the interviews with the instructors were analyzed. First, the instructors were asked “**Which learning activities are present in this class?**”

Table 4.19. Instructors’ Responses Related to Learning Activities as Obtained Through Interviews

LEARNING ACTIVITIES	INSTRUCTORS (n = 15)		LEARNING AIDS	INSTRUCTORS (n = 15)	
	F	%		F	%
Lecturing	15	100	Coursebooks	15	100
Group / pair work	15	100	Articles	13	86.7
Discussions	14	93.3	OHP	12	80
Microteaching	15	100	Tape-recorder	15	100
Sample demos by the instructors	8	53.3	Handouts	7	46.7
Research assignments	8	53.3	Video	2	13.3
Article presentations	1	6.7	Slides	1	6.7
Observation of peers’ Microteaching & reporting them	3	20	Diagrams	1	6.7
Observation tasks in the coursebook	6	40			
Drama / role-playing	6	40			
Brainstorming	1	6.7			
Journal writing	2	13.3			
Case studies on teaching problems	9	60			
Question & answer	3	20			
Communicative activities	1	6.7			
Inviting a guest speaker	1	6.7			
Activities based on NLP	6	40			

As seen in Table 4.19., the most frequently reported learning activities by the instructors were lecturing, microteaching, group work or pair work, discussions, case studies on teaching problems, sample demos by the instructors and research assignments. On the other hand, article presentations, brainstorming, communicative activities and inviting a guest speaker were the least frequently mentioned activities. All the interviewed instructors emphasized that their lecturing was interactive and encouraged the students to participate. About half of the instructors did sample demos in order to prepare students for microteaching and reinforcing lecturing while an instructor told that she did not always do sample demos because she did not want her students to imitate her directly. Moreover, 13.3 % of the instructors (n = 2) reported that they used the question-answer technique for assessing students' readiness level for the new topic before lecturing or for making them think on a particular language teaching issue while an instructor said that she used it for encouraging student participation during lecturing.

The instructors reported that the discussions in the classroom were either group or whole class discussions. About half of the instructors (n = 8, P = 53.3 %) said that the discussion topics were usually selected from the coursebook while the rest of the instructors told that the discussions were on the articles the students read, various teaching techniques and activities, how to prepare lesson plans and how to do microteaching and so on.

With respect to journal writing, 20 % of the instructors (n = 3) said that there was no journal writing this term because students' workload was already heavy. 13.3 % of the instructors (n = 2) reported that the students wrote journals for expressing their learning experiences and providing feedback on their classmates' microteaching.

Secondly, the instructors were asked **“Which materials and equipment are used in the classroom to support learning activities?”** The instructors reported the most frequently that coursebooks, tape-recorders, articles and OHP were used as learning aids. 20 % of the instructors (n = 3) said that they skipped, shortened, combined or supplemented some activities in the coursebook. An instructor also said that additional textbooks were used when needed. The instructors in one of the universities (n = 3, P = 20 %) mentioned that the course pack included articles for the students to read in addition to the main coursebooks. In another university, the instructors (n = 8, P = 53.3 %) used

one main coursebook and supplemented it with additional articles and handouts to reinforce the theoretical background of the students. 26.7 % of the instructors (n = 4) provided the students with theoretical information on the topic through lecturing and the students were also responsible for reading the assigned chapters in the main coursebooks. An instructor also assigned the students to read two articles about the following course topic, summarize and write down their views about them.

Tape-recorders were used by the students as an aid during microteaching. Majority of the instructors (n = 11, 73.3 %) reported that OHP was usually used by the students while the rest of the instructors mentioned that they used OHP in lecturing. 13.3 % of the instructors (n = 2) mentioned that they used video for recording and analyzing students' microteaching. Slides and diagrams mentioned only by an instructor were also used by the instructor herself.

Finally, the instructors were asked **“Do you negotiate with the students while designing the learning activities?”** The instructors said that since the content of the course was prespecified, negotiation during course design was not possible, but they were open to suggestions in this respect. An instructor emphasized that the instructors teaching the course came together from time to time in order to discuss how the course was going and which topics were covered up to that time. About half of the instructors (n = 8, P = 53.3 %) also came together at the end of the semester to discuss what was missing in the course and how it could be improved.

4.2.2. Constructivist Evaluation Strategies as Perceived by Instructors

In order to find an answer for research question 1.2.2. “To what extent are the current evaluation strategies in ELT Methodology II courses constructivist?, the interviews with the instructors were analyzed.

First, the instructors were asked **“Which evaluation strategies are used for evaluating students' learning?”** As seen in Table 4.20., mid-term and final exams and evaluation of microteaching and lesson plans were the most common evaluation strategies for evaluating student performance in all the universities. All the interviewed instructors stated that in the exams, the number of questions assessing students' ability to use the knowledge they learned in developing and evaluating learning activities were

more compared to the ones assessing theoretical or memorized knowledge. They also added that there was no single right answer in the exams and the evaluation was flexible.

Table 4.20. Instructors' Responses Related to Evaluation Strategies as Obtained Through Interviews

EVALUATION STRATEGIES	INSTRUCTORS (n = 15)	
	F	%
Mid-term / final exams	15	100
Evaluation of microteaching and lesson plans	15	100
Pop quizzes	3	20
Evaluation of observation reports	3	20
Evaluation of attendance	3	20
Evaluation of participation	6	40
Evaluation of assignments	4	26.7
FEEDBACK PROCEDURES	INSTRUCTORS (n = 15)	
	F	%
Instructor feedback	15	100
Peer evaluation	15	100
Self- evaluation	15	100
Observation reports	3	20
Journal writing	2	13.3
Video recording & analysis of sts.' microteaching	2	13.3
Instructor feedback on exam results	1	6.7

Secondly, the instructors were asked “**How do the students get feedback about their achievement level?**” The interviews revealed that the instructors usually provided feedback on students' microteaching and lesson plans. Majority of the instructors (n = 12, P = 80 %) reported that they had feedback sessions in the classroom for evaluating students' microteaching. All the instructors reported that feedback sessions involved instructor feedback, self-evaluation and peer evaluation. 20 % of the instructors (n = 3) said that they devoted additional time to feedback on students' microteaching outside the class and also required the students to get feedback about their lesson plans before

microteaching. The rest of the instructors reported that the students could get help from them before and after microteaching whenever they needed.

13.3 % of the instructors (n = 2) mentioned that they met students before microteaching. One of these instructors reported that she had 'pre-demo meetings' with 7-8 students and discussed her expectations about the demos with them. She also said that she held a meeting with the students after they had their first demos. 20 % of the instructors said that they had private meetings when a student's performance in the demo was really bad in order not to offend him or her in front of the class; otherwise they preferred giving feedback in the classroom through sharing it with the other students. An instructor said that her feedback sessions were like therapy because she provided feedback on students confidence in teaching and encouraged them to act like a teacher during microteaching. 13.3 % of the instructors (n = 2) emphasized that they valued process evaluation rather than the product and therefore, they attached great importance to feedback sessions.

Majority of the instructors stated that their feedback was constructive and aimed at improving students' teaching skills rather than discouraging them. 13.3 % of the instructors (n = 2) also said that they were more tolerant, positive and encouraging in previous demos, but this term they were more critical in their feedback. An instructor said that she preferred to use an authentic language rather than an artificial one while giving feedback such as "Really!" and "I like this!" Another instructor stated that she tried to encourage the students through clapping her hands after their demos and asked for the classmates to support them through clapping their hands, too. She also encouraged the students to establish a link with the authentic teaching contexts through reminding them that in real classrooms the students would not be so understanding.

All the interviewed instructors told that they took detailed notes during students' microteaching. 13.3 % of the instructors (n = 2) stated that they gave the notes they took to the students who did microteaching so that they could get feedback about their performance through reading them. About half of the instructors (n = 8, 53.3 %) used the checklists they developed for evaluating the students. An instructor also used the checklists for the students to evaluate their peers.

In addition to these, journal writing and video recordings mentioned by 13.3 % of the instructors (n = 2) provided a source for instructor feedback, self- evaluation, peer evaluation while in one of the universities the students reported their views about their peers' performance in microteaching through observation reports.

Thirdly, the instructors were asked **“Do the students evaluate the course and you in this class? If yes, how?”** All the instructors stated that the students had the opportunity to evaluate the course and the instructor orally during or at the end of the course through providing feedback about the effectiveness of the course and what could be done to improve it. An instructor said that she got feedback on the course and teaching methods in the informal meetings with the students outside the class and made appropriate changes in the course considering them. 66.7 % of the instructors (n = 10) said that they got written feedback from the students at the end of the course.

An instructor asked the students to write to her 'personal letters' for course evaluation through addressing her with her nickname in order to remove artificial barriers among them. Another instructor said that there was no time for course evaluation although she usually preferred to get a written course and instructor evaluation from the students. Majority of the instructors (n = 11, P = 73.3 %) stated that there was an official course and instructor evaluation while about half of the instructors (n = 8, P = 53.3 %) stated that it was optional to administer the form. An instructor also said that the feedback they received from practicum students on the effectiveness of their teaching practice was used to improve method courses, too.

Finally, the instructors were asked **“Do you negotiate with the students while designing the evaluation strategies?”** All the interviewed instructors stated that they asked the students' suggestions for evaluating the effectiveness of the exams and tried to make alternative changes, but did not ask students' opinion while designing the evaluation strategies. 80 % of the instructors (n = 12) stated that evaluation strategies and criteria were identified through negotiation among the instructors teaching ELT Methodology course.

4.2.3. Professional Relevance as Perceived by Instructors

In order to find an answer for research question 1.2.3. “To what extent are ELT Methodology II courses **professionally relevant** to students’ future teaching needs?”, the interviews with the instructors were analyzed. First the instructors were asked **“Do the students find ELT Methodology II course relevant to teaching profession? Why or why not?”** Majority of the instructors (n = 11, P = 73.3 %) said that the students found the course relevant to teaching profession. The reasons for its relevance as reported by the instructors are summarized below:

The course was relevant to teaching profession because ...

- it motivated the students to be a teacher.
- it was the most basic, popular and difficult method course to which the students devoted most of their time.
- in this course the students learned a variety of teaching activities and techniques they could use as teachers in the future.
- the students learned how to teach a language with its various aspects to a group of students effectively and in a planned way.
- the course was aimed at both preparing students for teaching at the thought level and guiding them to act flexibly in diverse teaching contexts.
- in this course, the students started to think and feel like teachers and understand teachers’ point of view.
- in this course, the students started to realize and analyze each stage of instructional process.

Moreover, the instructors stated similarly that the students were interested in the course because they were willing to participate in class, attached more importance to the course compared to the other courses and endeavored a lot to improve their teaching skills.

26.7 % of the instructors (n = 4) stated that the students might not be able to relate ELT Methodology courses to teaching profession. An instructor emphasized that the students might not be able to use what they learnt in this course at the beginning of their

teaching career, but they could use them effectively as they gained experience in teaching. Another instructor stated that the students might not be able to use what they learned in real classrooms because there might not be ready materials to use. He also added that such limitations may lead the students to disappointment and discouragement. He suggested that in each school there should be a resource center containing the relevant materials for the teachers to use.

Another instructor said that at first her students found the course irrelevant to teaching, but in time they changed their ideas. This instructor advised her students to be as creative as possible in this course, but to be aware of the fact that they might not be able to use what they learnt in this course directly. She also noted that such activities as drama might not be used in the schools because for example, one could not expect a teacher to teach with a queen costume. She suggested the students to use drama in their teaching in the future through casting the students in their classroom some roles. An instructor who emphasized drama in her class said that the students were conscious that the techniques they used in the classroom were new and drama might be received with resistance by some teachers. Regarding this possibility, the instructor taught the students ‘down-to-earth’ drama and to modify it according to the conditions of the particular classrooms.

Secondly, the instructors were asked **“Are the other teacher education courses relevant to ELT Methodology II course? If yes, which ones?”**. The instructors reported that previous courses such as *Approaches to ELT* and *School Experience I* contributed to students’ success in ELT Methodology courses while the skills the students gained in ELT Methodology increased their performance in the subsequent courses such as *Materials Adaptation and Evaluation*, *School Experience II* and *Practice Teaching* courses. In addition, the instructors stated that *Teaching English to Young Learners* and *ELT Methodology II*, both of which were sixth semester courses, were interrelated and therefore, the students could use what they learned in one course in the other.

4.2.4. Reflective Thinking as Perceived by Instructors

In order to find an answer for research question 1.2.4. “To what extent do ELT Methodology II courses develop **reflective thinking**?”, the interviews with the instructors were analyzed. First, the instructors were asked **“Does this course contribute to**

development of students' reflective thinking skills?" Majority of the interviewed instructors (n = 13, P = 86.7 %) thought that the course developed reflective thinking. The instructors who thought that reflective thinking did not develop in this course (n = 3, P = 13.3 %) reported that this was because the students were 'spoonfed', received traditional education in their earlier school life and therefore, they expected everything related to the course from their instructor. One of these instructors added that the students could not answer the questions which required them to think. The other instructor reported that peer evaluation did not encourage critical thinking because the students avoided it since criticism was not approved in Turkish culture.

Table 4.21. Instructors' Responses Related to Reflective Thinking as Obtained Through Interviews

Learning Activities / Practices	INSTRUCTORS	
	(n = 15)	
Contributing to Reflective Thinking	F	%
Discussions	11	73.3
Group or pair work	6	40
Microteaching	12	80
Self-evaluation	12	80
Peer evaluation	8	53.3
Informal course evaluation	8	53.3
Observation reports	2	13.3
Thought provoking questions	1	6.7
Case studies & problem solving tasks	1	6.7
Tasks encouraging reflection in the coursebook	3	20
Journal writing	2	13.3
Article reviews	5	33.3
All activities	12	80

Secondly, the instructors were asked **"Which learning activities or practices contribute to development of reflective thinking skills more? Why?"** As seen in Table 4.21., 80 % of the instructors participated in the study stated that all learning activities in the classroom encouraged reflective thinking. In addition, discussions, microteaching, self-evaluation and peer evaluation strategies after microteaching and course evaluation

were reported the most frequently while thought provoking questions and case studies or problem solving tasks were mentioned the least frequently as useful activities or practices for developing reflective thinking.

The instructors (n = 13, P = 86.7 %) reported that the learning activities or practices improved the following reflective thinking skills:

- evaluating one's own performance critically.
- evaluating peers' performance critically.
- analyzing and criticizing the course sincerely.
- analyzing and criticizing language teaching techniques and materials.
- analyzing critically the previous learning and school experiences and comparing them with the present ones.
- thinking over one's own learning / reflexivity
- realizing and thinking over one's own ideas on language teaching and questioning them.
- being aware of and thinking over article writers' views on language teaching.
- developing higher order thinking skills such as analysis, synthesis, interpretation and supporting or refuting ideas.

Finally, instructors were asked **“Do you have any suggestions for enhancing students' reflective thinking skills in this class?”** 20 % of the instructors (n = 3) provided suggestions while the other instructors stated that the current learning activities and practices were sufficient to develop reflective thinking. The suggestions are summarized below:

- A sample class should be shown on the video and analyzed with the students.
- The students should sometimes be taken to the real classrooms and given the opportunity to analyze them in detail.
- The students could fill in an evaluation form or evaluate the course and their performance orally.
- The students should be encouraged to ask more questions not only for getting factual information. but also for analyzing things critically.

- The students should be encouraged to explain their views and to read on language teaching more.

On the other hand, an instructor thought that reflective thinking could not be developed only in this course, but it should be developed in the whole educational process. He added that there was nothing much to do about it because it was difficult to change the present traditional educational system.

4.2.5. Negotiation as Perceived by Instructors

In order to find an answer for research question 1.2.5. “To what extent does **negotiation** among students exist in ELT Methodology II courses?”, interviews with the instructors were analyzed. First, the instructors were asked “**Do the students in your classroom negotiate with each other?**” Majority of the instructors (n = 9, P = 60 %) thought that there was negotiation among the students in the classroom. Half of the instructors in one of the universities stated that there was not negotiation among the students because some students formed groups or cliques among themselves. The instructors pointed out further that these students did not share ideas or materials and did not study together with the students in the other groups because they were ambitious to get higher grades than the others and jealous of each other. An instructor stated that the grading system based on curve might have caused competition among the students while another one thought that the competition in her class affected the students’ performance positively and encouraged them to do better demos than their friends’.

An instructor reported that the amount of negotiation among the students differed in each classroom. Another instructor pointed out that the students did not negotiate with their classmates they only met in this classroom, but there was negotiation among the students who had been together for three years. He also reported that students’ personality affected their negotiation. For example, dominant students negotiated more while shy students negotiated less. He added that the students were usually not social and this affected negotiation among them negatively.

Table 4.22. Instructors' Responses Related to Negotiation as Obtained Through Interviews

Learning Activities & Practices Promoting Negotiation	INSTRUCTORS (n = 15)	
	F	%
Discussions	5	33.3
Microteaching (During its Preparation & presentation phases)	7	46.7
Group or pair work	7	46.7
Article reviews	4	26.7
Case studies & problem solving tasks	1	6.7
Thought-provoking questions	1	6.7
All activities	5	33.3

Secondly, the instructors were asked **“Which learning activities or practices enhance negotiation among the students more?”** As seen in Table 4.22., about half of the instructors (46.7 %) mentioned that microteaching and group or pair work enhanced negotiation among the students while only 6.7 % of the instructors mentioned that thought provoking questions and case studies or problem solving tasks encouraged the students to negotiate. 26.7 % of the instructors said that the students negotiated outside the class as well as in the class.

Finally, the instructors were asked **“Do you have any suggestions for enhancing negotiation among the students?”** 26.7 % of the instructors (n = 4) provided suggestions while the other instructors reported that the current learning activities were satisfactory for enhancing negotiation. 13.3 % of the instructors (n = 2) suggested that the students should be provided with more opportunities to come together and know each other and should spend more time together outside the class. An instructor emphasized that she always criticized forming groups in the classroom and made such statements as “We are a family! We should share everything!” Another instructor suggested that on-line communication among the students could be encouraged through forming e-mail lists for the students to discuss their ideas with each other on the internet.

4.2.6. Leadership as Perceived by Instructors

In order to find an answer for research question 1.2.6. “To what extent do the instructors in ELT Methodology II courses have **leadership** qualities?”, the interviews with the instructors were analyzed.

Table 4.23. Instructors’ Responses Related to Leadership as Obtained Through Interviews

INSTRUCTORS’ LEADERSHIP ROLES	INSTRUCTORS (<i>n</i> = 15)	
	F	%
Leader	9	60
Classroom manager	9	60
Observer during microteaching	14	93.3
Giving sts. responsibility by standing back	3	20
Syllabus designer	1	6.7
Telling topics to be covered	1	6.7
Being a professional & personal model for sts.	5	33.3
Instructor / lecturer	2	13.3
Arranging the lesson considering sts. moods	1	6.7
Monitor of st. performance & attendance	1	6.7
Traffic police (telling sts. what to do)	1	6.7
Sharing knowledge with sts.	1	6.7
Holding sts.’ attention	2	13.3
Knowledge dispenser	2	13.3
Initiator and organizer of classroom activities	2	13.3

First, the instructors were asked “**What is your role in the classroom as a leader?**” As seen Table 4.23., almost all instructors (93.3 %) reported that they were observers during microteaching. The instructors also mentioned the most frequently their roles as leaders and classroom managers. 20 % of the instructors (*n* = 3) stated that they tried to establish a balance between friendliness and control over the classroom and avoided overlatency. 13.3 % of the instructors (*n* = 2) also stated that they were not the sole authorities in the classroom although they were the leaders. An instructor said that

although he attached importance to classroom management, during microteaching he delegated the whole control to the students. He also reminded the students that they were responsible for everything in the classroom including noise and latecomers and therefore, they had to cope with them.

4.2.7. Empathy as Perceived by Instructors

In order to find an answer for research question 1.2.7. “To what extent are the instructors in ELT Methodology II courses **empathetic**?”, the interviews with the instructors were analyzed. The instructors were asked “**Do you empathize with your students? If yes, how?**” All the interviewed instructors reported that they tried to empathize with their students.

Table 4.24. Instructors’ Responses Related to Empathy as Obtained Through Interviews

INSTRUCTORS’ EMPATHETIC ROLES	INSTRUCTORS (<i>n</i> = 15)	
	F	%
Trying to put themselves in place of sts.	12	80
Trying to understand sts.’ behavior / feelings / expectations / difficulties	8	53.3
Being a counselor / listening to sts.’ problems	6	40
Accepting / considering sts.’ ideas / points of view	9	60
Giving examples from their own lives	3	20
Leaving their role as an authority aside	1	6.7
Tolerating sts.’ mistakes	4	26.7
Giving sts. another chance when they are unsuccessful & encouraging them	1	6.7
Encouraging sts. to be empathetic & tolerant	1	6.7

As seen in Table 4.24., the instructors tried to put themselves in place of their students, accepted and considered students’ ideas or points of views and tried to understand the reasons for students’ behavior, how they might feel, their expectations

from the course and the difficulties they might be experiencing during the learning process the most frequently.

4.2.8. Support as Perceived by Instructors

In order to find an answer for research question 1.2.8. “To what extent are the instructors in ELT Methodology II courses **supportive**?, the interviews with the instructors were analyzed. First, the instructors were asked “**How do you provide support for your students’ learning?**”

Table 4.25. Instructors’ Responses Related to Support as Obtained Through Interviews

INSTRUCTORS’ SUPPORTIVE ROLES	INSTRUCTORS (<i>n</i> = 15)	
	F	%
Facilitator	9	60
Guide	9	60
Providing constructive feedback about performance	7	46.7
Being encouraging	6	40
Being thought provoker / developing critical thinking	2	13.3
Stimulator / motivator	6	40
Cooperator in sts.’ studies	1	6.7
Advisor / supervisor in sts.’ studies	7	46.7
Positive approach in behaviors & good relationship with sts.	12	80
Providing a positive learning environment for learning / various learning activities	7	46.7
Raising sts.’ consciousness towards language learning & teaching	1	6.7
Being a parent for sts.	1	6.7

As seen in Table 4.25., the instructors reported the most frequently that they had positive approach in their behaviors and had good relationship with the students. The instructors stated that they were friendly, tolerant, benevolent, trustworthy, sincere, flexible and relaxing during microteaching. However, 13.3 % of the instructors (*n* = 2) stated that they were sometimes irritable although they tried to be supportive. These

instructors also said that they were more critical in their feedback this term compared to the first term. The instructors also mentioned the most frequently their roles as facilitators and guides for supporting students' learning. An instructor further emphasized that in his guidance he led the students to learn through their own efforts rather than depending on him.

Moreover, the instructors were asked **“What kind of roles do you think you should assume in the classroom?”** Majority of the interviewed instructors (n = 11, P = 73.3 %) reported that the roles they assumed in the classroom currently were sufficient and effective while 26.7 % of the instructors (n = 4) provided suggestions for their roles in the classroom. 13.3 % of the instructors (n = 2) stated that they wished to have more time outside the class to be together with the students and communicate with them. One of these instructors stated that since she knew a lot about the students including their socioeconomic background, she probably could not establish the balance between her role as an instructor and a friend and desired to establish the balance in her relationships with the students. The other instructor stated that she wished to bring the students together in her house and to discuss some books. She also desired to motivate the students and to prepare them for life through social activities. Another instructor reported that they should leave their roles as lecturers aside and try to understand the students more.

An instructor also suggested that an instructor should be a good model for the students and there should be a consistency between what s/he was saying and doing. S/he should also provide an enjoyable learning environment, encourage the students to read, question and think more and discuss with the students not only the rote information, but also the issues related to the social life. The instructor concluded that her job should not only be to train effective language teachers, but also to encourage her students to be good citizens and human beings.

4.3. Observed Constructivist Classroom Characteristics

In order to find an answer for research question 1.3. **“To what extent are the current classroom characteristics in ELT Methodology II courses constructivist as observed?”**, observations were conducted by the researcher in ELT Methodology II classes at ELT departments of METU and Gazi University. During the observations, every five minutes

the researcher noted down the task or the activity that was being done, what the instructor and the students were doing and the learning aids that were being used. The observations were conducted in 4 classrooms at METU and in 8 classrooms at Gazi University. Each class was observed once. Since one session of ELT Methodology II course was 3 hours, each class was observed 3 hours. Totally, the classes were observed for 36 hours (12 hours at METU and 24 hours at Gazi University).

The researcher observed students' microteaching. Microteaching was a mini-lesson demo by the students in order to practice using the teaching techniques introduced in the course and approximately took 20-25 minutes. As a whole, 73 students were observed during their microteaching practices. The purpose of the observations was to find out the learning activities and the learning aids used by the students during their microteaching, the nature of feedback procedures and negotiation among the students. Table 4.26. summarizes the learning activities and aids used by the students during microteaching.

Table 4.26. Learning Activities and Learning Aids Used by the Students During Microteaching

LEARNING ACTIVITIES	STUDENTS (<i>n</i> = 73)		LEARNING AIDS	STUDENTS (<i>n</i> = 73)	
	F	%		F	%
Group or pair work	73	100	Worksheets / texts	73	100
Question & answer	73	100	Flashcards / pictures	73	100
Prediction	58	79.5	Cartoons	14	19.2
Games / competitions	31	42.5	Drawings	2	2.7
Brainstorming	2	2.7	Posters	5	6.8
Role-playing / drama	13	17.8	Photographs	1	1.4
Discussions	7	9.6	Realia	18	24.6
Visualization	3	4.1	Stories	4	5.5
Simulation	2	2.7	Board	73	100
Pantomime	1	1.4	Tape-recorder	32	43.8
Oral grammar drills	2	2.7	OHP	9	12.3
Creative activities *	3	4.1			

*creating a slogan, a poem, a story etc.

First, *the learning activities used by the students during their microteaching* were observed. The students practiced teaching grammar, reading, writing, listening or reading. Vocabulary activities were integrated in reading activities in both universities. All the presenters started their microteaching with a warm-up activity for 1-2 minutes. Moreover, all the presenters tried to create a context and relate their teaching to the students' own experiences or outside world. By this way, they tried to arouse students' interest and attract their attention to the topic.

As seen in Table 4.26., group or pair work, question and answer technique and prediction were used the most frequently by the presenters. All the presenters divided the class into groups or pairs to do a task and later to share it with the whole class. Even the competitive tasks were conducted in groups through competition of groups with each other. The presenters asked the students to answer the questions related to the task they prepared. They also encouraged the students predict the following task through the use of several cues such as flashcards, music and the title of the topic. In addition to these, 6.8 % of the presenters (n = 5) used activities addressing learners with diverse learning styles, for example, the activities attracting both auditory and kinesthetic or visual learners.

Secondly, *the learning aids that were used by the presenters* were observed. As seen in Table 4.26., worksheets or texts, flashcards or pictures, the board and the tape-recorder were the most frequently used learning aids by the students to support their teaching. Worksheets and flashcards were prepared by the students. The board was used less frequently for writing than for putting the flashcards and the pictures on it. Tape-recorders were usually used for supporting listening activities. 4.1 % of the students (n = 3) also used them for supporting their learning activities or for arousing interest.

Thirdly, *the way students were provided feedback for their microteaching* was observed. In 9 out of 12 observed classrooms, the students received feedback from their instructors and classmates and also evaluated their own performance. In four classrooms, the instructors made appointments with the students to provide them with feedback individually after the class. The instructors in all the classrooms took notes during presentations. An instructor gave the notes which she kept during students' microteaching to them so that the students could get feedback about their microteaching. During the break, the students also asked their instructors to give feedback about their performance.

During the feedback sessions, the instructors discussed the presenters' confidence, use of classroom management skills, effectiveness of the activities, grammar and pronunciation mistakes, the purpose of using a particular learning activity or a material, whether learning activities were mechanical or meaningful, simplicity, fluency and authenticity of the presenters' language, variety and creativity in the learning activities and the materials that were used.

For peer evaluation, the instructors asked the students to evaluate the presentations and provide suggestions for improving them. In one of the classes, the instructor asked the students to write their comments on their friends' presentations down. Another instructor asked the students' opinion for grading presentations. For self-evaluation, the instructors asked the presenters what they thought about their own performance, positive and negative aspects of their presentations and what could be done for improving or modifying the tasks. The instructors also discussed the presenters' feelings and the reasons for them. The observations revealed that in all the classes instructor feedback was the most dominant while peer evaluation was the least frequent.

Fourthly, *the way the students cooperated and negotiated with each other* were observed. The observations revealed that in all the classes the students negotiated with each other in group or pair activities. They also contributed to their peers' microteaching and classroom atmosphere positively, through their participation in answering questions, their attention and their performance in role-playing or drama activities. In two classrooms the students played the role of English learners. In majority of the classrooms (9 out of 12 classrooms), the students helped the presenters while putting the flashcards or pictures on the board and arranging the tape-recorder or OHP. In five classrooms the students clapped their friends at the end of their teaching. In one of the classrooms, the students did not participate in the activities and remained silent for the most of the time. The informal talks with the students revealed that they were reluctant because they were bored and tired since they were at the end of the semester. They also added that they felt stressful and were thinking about their own presentations.

Table 4.27. summarizes the results related to current classroom characteristics as perceived by students and instructors and as observed. Since observations were limited to

observations of learning activities, feedback procedures and negotiation among the students, the results only related to these dimensions are reported.

Table 4.27. Summary of the Results Related to Current Classroom Characteristics

Subdimensions	Questionnaire (Students)	Interviews (Students)	Interviews (Instructors)	Observations (Students)
Learning Activities	*microteaching *use of a variety of materials *lecturing	*microteaching *use of coursebooks *lecturing	*microteaching *use of coursebooks & tape-recorders *lecturing	*group or pair work *question & answer *use of worksheets / flashcards / board
Evaluation	*written exams or tests * evaluation of oral performance * evaluation of written work	*mid-terms / final exams *evaluation of microteaching & lesson plans * instructor feedback *self-evaluation	*mid-terms / final exams *evaluation of microteaching & lesson plans * instructor feedback *self-evaluation *peer evaluation	*instructor feedback *self-evaluation
Professional Relevance	*learning about teaching profession *learning about future profession * learning to solve problems related to teaching	*learning about basic teaching tips * being able to apply what has been learnt *criticizing & preparing oneself for teaching profession	*the course as a whole is relevant to teaching profession *sts. might not be able to relate the course to teaching profession	—
Reflective Thinking	*learning to be open to new ideas * learning how to become a better learner * thinking carefully about one's own ideas	<i>Learning activities or practices developing reflective thinking:</i> *microteaching *self-evaluation *discussions	<i>Learning activities or practices developing reflective thinking:</i> *microteaching *self-evaluation *discussions	—

Table 4.27. (Continued)

Subdimensions	Questionnaire (Students)	Interviews (Students)	Interviews (Instructors)	Observations (Students)
Reflective Thinking	<ul style="list-style-type: none"> *learning to be open to new ideas * learning how to become a better learner * thinking carefully about one's own ideas 	<i>Learning activities or practices developing reflective thinking:</i> <ul style="list-style-type: none"> *microteaching *self-evaluation *discussions 	<i>Learning activities or practices developing reflective thinking:</i> <ul style="list-style-type: none"> *microteaching *self-evaluation *discussions 	—
Negotiation	<ul style="list-style-type: none"> *getting chance to talk to other sts. *sharing learning experiences with other sts. *explaining ideas to other sts. 	<i>Learning activities or practices enhancing negotiation</i> <ul style="list-style-type: none"> *group or pair work *microteaching *discussions 	<i>Learning activities or practices enhancing negotiation</i> <ul style="list-style-type: none"> *microteaching *group or pair work *discussions 	<ul style="list-style-type: none"> * negotiation among sts. during group or pair work *participation in class activities during peers' microteaching *encouraging & providing help during microteaching
Leadership	<ul style="list-style-type: none"> *acting confidently *being enthusiastic about teaching *explaining things clearly 	<ul style="list-style-type: none"> *observer during microteaching * constructivist classroom manager *constructivist leader 	<ul style="list-style-type: none"> *observer during microteaching * constructivist classroom manager * constructivist leader 	—
Empathy	<ul style="list-style-type: none"> *listening to sts. if they have stg. to say *being patient *being willing to explain things again 	<ul style="list-style-type: none"> *being understanding *respecting / being open to students' ideas *being tolerant 	<ul style="list-style-type: none"> *trying to put themselves in place of sts. *accepting or considering sts.' ideas * trying to understand sts. 	—
Support	<ul style="list-style-type: none"> *being able to tell instructor when sts. don't understand *helping sts. with their work *being friendly 	<ul style="list-style-type: none"> *guide *facilitator *encouraging 	<ul style="list-style-type: none"> *positive behavior & good relationships with sts. *facilitator *guide 	—

The results related to the questionnaire included the first 3 items with the highest mean scores while the results related to the interviews and the observations included the most frequently mentioned or observed 3-5 activities or practices. The results collected through different data sources usually revealed similar results or complemented each other except a few differences between the students' and the instructors' perceptions of classroom characteristics. The results as a whole indicated that majority of the students and the instructors participated in the study perceived the classroom characteristics to be constructivist. Observations mostly showed that students' microteaching experiences were constructivist with respect to the variety of the learning activities and learning aids used by the students, feedback procedures following microteaching and negotiation and cooperation among the students.

4.4. Usefulness of Constructivist Learning Activities and Evaluation Strategies

In this part, students' and instructors' perceptions related to the usefulness of constructivist learning activities and evaluation strategies are presented.

4.4.1. Usefulness of Constructivist Learning Activities as Perceived by Students

To find an answer for research question 2.1.1., "To what extent are the **constructivist learning activities** in ELT Methodology II courses useful?, the interviews with the students were analyzed. First, the students were asked "**Are the learning activities or practices in the classroom useful for facilitating your learning?**"

Majority of the students (n = 34 out of 40, P = 85 %) stated that the activities and practices facilitated their learning. 7.5 % of the students (n = 3) thought that the activities did not always facilitate learning because lecturing dominated the learning activities and they could not improve their speaking skills because of their hesitation to speak in the class. A student reported that usefulness of the activities depended on their nature and difficulty level. Another student also criticized the coursebook because it did not encourage the students to be creative, but just presented the ready-made knowledge. Moreover, since the book was American, it did not reflect the needs of the Turkish learners and did not contribute to improvement in teaching much.

Secondly, the students were asked **“Which learning activities or practices in the classroom are more useful and why?”** The students mentioned the most frequently microteaching and discussions to be useful. More than half of the students also stated that all activities were useful. The useful learning activities and practices as perceived by the students (n = 40) are summarized below:

Microteaching was useful (n = 36, P = 77.5 %) because ...

- it involved learning by doing and application of what was learned.
- it provided a good preparation for teaching profession
- it was enjoyable and motivating.
- it was easier and more permanent to learn through microteaching rather than to learn from the textbook or through lecturing.
- developing or adapting learning activities improved creativity.
- it helped the students act and feel like a teacher.
- it decreased the students' excitement and enhanced feelings of competence and confidence in teaching.
- it developed classroom management skills.
- during microteaching real classroom environments were simulated.
- it enabled the students to learn from their own and their friends' mistakes, improve their teaching style and be open to criticisms.

All the activities (n = 27, P = 67.5 %) were useful because...

- they were student-centered
- they facilitated visual learning
- they were relaxing and attracting attention.
- they made the students feel closer to teaching profession

Discussions were useful (n = 22, P = 55 %) because...

- they enabled to discuss and think of the solutions for probable problematic cases that might be experienced during teaching.
- they enabled the students to gain a general attitude towards or an idea about effective teaching.
- they encouraged student participation and discouraged instructor domination.

Use of a variety of learning activities and materials was useful (n = 17, P = 42.5 %) because...

- learning through various activities were more permanent.
- the use of various materials by the instructor facilitated learning and gave an idea about which materials could be used during teaching.
- the use of self-made materials made learning more effective and enjoyable.

Article reviews (n = 7, P = 17.5 %) were useful because...

- they enabled to get knowledge about different views on language learning
- students' perspectives were enlarged and they learned some terminology related to ELT.

Lecturing (n = 2, P = 5 %) was useful because...

- it provided with knowledge necessary for being successful in the exams.
- dictation by the instructor during lectures was a good summary of the lesson.

Journal writing (n = 1, P = 2.5 %) was useful in developing the trust and providing a vehicle for communication between the students and the instructor.

Drama (n=1, P = 2.5 %) was useful because it addressed to the students with different learning styles.

Finally, the students were asked **“Do you have any suggestions for improving the current learning activities or practices in the classroom?”** 40 % of the students (n = 16 out of 40) made the following suggestions for improving the learning activities or practices:

- There should be more drama and role-playing in the classroom.
- There should be more microteaching.
- Microteaching should be practiced in real classroom environments.
- Microteaching should be practiced both in the methodology class and in a real class and students' performances in each should be compared.
- Microteaching demos should be shorter.
- There should be debates on language teaching strategies.

- Instructors' and students' sample demos should be recorded on the video and analyzed strictly.
- Learning through discovery rather than from the coursebook should be encouraged.
- There should be more communicative activities for improving students' confidence in speaking English.
- The activities should be enjoyable, varied and supported by the use of audio visuals.
- The activities should encourage reflection and be student-centered.
- Cases on probable teaching problems should be analyzed and solved.
- There should be a balance between group and individual activities.
- There should be more group or pair work.

4.4.2. Usefulness of Constructivist Evaluation Strategies as Perceived by Students

In order to find an answer for research question 2.1.2. "To what extent are the **constructivist evaluation strategies** in ELT Methodology II courses useful as perceived **by students?**", the student interviews were analyzed. First, the students were asked "**Are the evaluation strategies used in this classroom useful?**" More than half of the interviewed students (n = 25 out of 40, P = 62.5 %) reported that the evaluation strategies were useful.

Secondly, the students were asked "**Which evaluation strategies are more useful and which ones are not so useful? Why or Why not?**" The interviews revealed that more than half of the students found evaluation of microteaching and feedback sessions as useful evaluation strategies. The useful evaluation strategies as perceived by the students (n = 40) are summarized below:

- Evaluation of microteaching rather than written exams (n = 24, P = 60 %) were useful because ...
 - students' teaching competency was assessed.
 - it was based on instructors' observation.
- Feedback sessions (n = 23, P = 57.5 %) were useful because ...

- constructive and positive instructor feedback contributed to improvement in students' performance.
 - instructor feedback was not based on grading and its effect was permanent.
 - peer feedback and self-evaluation enabled the students to analyze their own and friends' performance critically.
 - peer evaluation enabled the students to express their views on their peers' performance.
 - self-evaluation developed students' awareness of what they were doing.
- Both written and oral exams (n = 5, P = 12.5 %) were useful because...
 - they assessed both students' written and oral performance.
 - they were objective
 - they aimed at improving students' performance and discouraged memorization.

A student also stated that their instructor considered their participation while evaluating students' performance. Another student stated that evaluation techniques were sufficient because he didn't experience any other evaluation techniques in his earlier school life.

37.5 % of the students (n = 15) reported the following evaluation strategies were not useful:

- Written exams were not useful compared to microteaching (n = 15, P = 37.5 %) because...
 - they only evaluated students' theoretical background.
 - they were not objective and fair
 - their weight in assessment was much more greater than the other evaluation techniques
 - it was difficult for the students to reflect what they learned through exams.
- There was too much evaluation which increased students' workload (n = 9, P = 22.5 %).

- Students' participation and personality was not considered in evaluation so much (n = 5, P = 12.5 %).
- Instructor feedback was not useful (n = 2, P = 5 %) because the instructors criticized students' performance too much and expected them not to make any mistakes.
- Evaluation techniques were not sufficient for assessing students' performance, but they could not be improved because of the crowd in the classrooms and time limitations (n = 2, P = 5 %).
- Evaluation of microteaching was not useful (n = 1, P = 2.5 %) because there was an inconsistency in evaluation of students' performance by the instructors in different method courses.

Finally, the students were asked **“Do you have any suggestions for improving current evaluation strategies?”** 25 % of the students (n = 10) made the following suggestions:

- Students' class participation should be considered in evaluation more.
- The instructors should know their students well and should consider their motivation, interest, skills, abilities, capacities and personalities while evaluating them.
- There should be a consistency in evaluation of students' performance in microteaching among different instructors.
- There should be less quizzes and assignments.
- There should be more quizzes and exams in order to prevent students from losing interest in the course.
- Students should get feedback about the draft of their microteaching before practicing it in the classroom.
- Students should be evaluated through presentations, home assignments and projects rather than through written exams.
- Grading should be more flexible and fair.

4.4.3. Usefulness of Constructivist Learning Activities as Perceived by Instructors

To find an answer for research question 2.2.1, “To what extent are the **constructivist learning activities** in ELT Methodology II courses useful as perceived **by instructors?**”, the interviews with the instructors were analyzed. First, the instructors were asked “**Are the learning activities or practices in the classroom useful for facilitating students’ learning? Why or why not?**” majority of the interviewed instructors (n = 10, P = 66.7 %) stated that all the learning activities or practices were useful in facilitating students’ learning. An instructor stated that it was not easy to decide on the usefulness of the course and only the students could decide on that. The reasons for the usefulness of the learning activities or practices as perceived by the instructors are summarized below (n = 15):

- Microteaching practice enabled the students to develop their classroom management skills and increase their confidence and competence in teaching (n = 9, P = 60 %).
- This course developed students’ creativity and was enjoyable (n = 6, P = 40 %).
- This course enabled the students to establish a link between theory and practice in teaching (n = 6, P = 40 %).
- The learning activities were student-centered and encouraged student participation (n = 5, P = 33.3 %).
- This course was not dominated by lecturing (n = 3, P = 20 %).
- The variety in learning activities addressed to the students with different learning styles (n = 2, P = 13.3 %).
- In this course, the process of learning rather than the product was emphasized (n = 2, P = 13.3 %).
- Activities encouraging students to compare their previous and present learning experiences helped them develop themselves (n = 1, P = 13.3 %).
- Lecturing was useful because it was interactive, included questions which enabled the students to state their own views and provided them with the theoretical and practical knowledge related to language teaching (n = 1, P = 13.3 %).
- There was no ‘spoonfeeding’ in this course and the students were encouraged ‘to learn fishing rather than being provided with the fish’ (n = 1, P = 6.7 %).
- Students achieved ownership in learning through microteaching practice (n = 1, P = 6.7 %).

- Journal writing encouraged the students to be honest and sincere about their feelings and monitor their own and friends' performance (n = 1, P = 6.7 %).
- Article reviews and discussions helped the students get an idea about different views in language teaching and developed their critical thinking skills (n = 1, P = 6.7 %).
- Article reviews contributed to development of students' terminology, academic writing skills and practical knowledge about teaching (n = 1, P = 6.7 %).
- Students had the opportunity to negotiate and discuss their performance with their instructor and did not have difficulty in Practice Teaching course because they had taken ELT Methodology before (n = 1, P = 6.7 %).
- In this course not only cognitive, but also affective learning and personal development were achieved (n = 1, P = 6.7 %).
- The methodology course integrated with NLP helped the students realize their potential and creativity, relax their minds using it as a resource, grow as people as well as teachers (n = 1, P = 6.7 %).
- Students' cognitive background and awareness about the various teaching-learning theories contributed to the usefulness of the course and the microteaching practices (n = 1, P = 6.7 %).
- Instructors' educational background and experience contributed to the usefulness of the course (n = 1, P = 6.7 %).
- Group and pair work prevented the course from being monotonous and enabled the students to participate actively and freshly in class (n = 1, P = 6.7 %).

Majority of the instructors (n = 10, P = 66.7 %) complained about the class size and inadequate course hours while 20 % of the instructors (n = 3) complained only about the inadequate course hours. (n = 5, P = 33.3 % of the instructors mentioned the following factors affecting the usefulness of the course negatively:

- Students did not have an opportunity to practice microteaching in authentic contexts.
- Physical facilities such as buildings and classrooms and technical facilities such as the use of videos and computers were limited.
- Students were not aware of the professional journals related to ELT.

- Since their course load was too much, the instructors did not have enough time for communicating with the students.
- There was not much opportunity for teacher development.
- There was lack of time for covering the course material.
- One of the instructors lacked experience in teaching ELT Methodology courses.
- Covering the same course material in all ELT Methodology classes which varied from each other in terms of the instructors' pace and the students' motivation caused problems.
- The coursebook was sometimes not useful because it lacked the theory and heavily depended on practice. It also lacked information on some research methods.

Secondly, the instructors were asked **“Do you have any suggestions for improving current learning activities or practices?”** Majority of the instructors (n = 13, P = 86.7 %) suggested that class hours should be increased and the class size should be decreased. However, most of the instructors (n = 11, P = 73.3 %) stated that current learning activities were useful enough while 33.3 % of the instructors (n = 5) made the following suggestions for improving the learning activities:

- More realistic contexts should be created in the classroom or students should practice microteaching in real classrooms.
- There should be more time for teaching and practicing NLP.
- The students should do more microteaching.
- The instructors should modify or adapt some parts of the coursebook.
- Students should be taught how to collect and interpret data through action research.
- Video teaching should be taught.
- More time should be devoted to useful material and equipment use.
- There should be some activities to decrease students' anxiety level.
- There should be more presentations in Spoken English course in order to prepare the students for microteaching.
- Macro teaching should start earlier.
- Physical and technical facilities should be improved.
- Instructors' office hours should be increased.
- Students should be encouraged to take more initiatives.

- Students should be encouraged to read and use professional journals in their presentations.
- Teacher education should enable the students to integrate teaching profession with their private life.
- Students should be encouraged to take part in such activities as visiting conferences, getting a pen-friend and so on.
- The instructors should provide the students with a written code of contact to make them aware of his/her expectations from them.
- The instructors should have their own web sites to provide a source for their students and to establish communication with them.

4.4.4. Usefulness of Constructivist Evaluation Strategies as Perceived by Instructors

In order to find an answer for research question 2.2.2. “To what extent are the **constructivist evaluation strategies** in ELT Methodology II courses useful as perceived **by instructors**?”, the interviews with the instructors were analyzed. First, the instructors were asked “**Are the evaluation strategies used in this classroom useful? Why or why not?**” Majority of the instructors (n = 11, P = 73.3 %) stated that the evaluation strategies were useful. The reasons for the usefulness of evaluation strategies as perceived by the instructors (n = 15) are summarized below :

- Written exams were useful because the questions in the exam often required the students to implement their knowledge in specific teaching cases (n = 7, P = 46.7 %).
- Evaluation strategies for assessment of students’ learning were varied enough; more evaluation techniques could be too much for the students (n = 3, P = 20 %).
- Evaluation strategies enabled the instructors to evaluate both the students’ theoretical knowledge and to what extent they could use it in practice (n = 2, P = 13.3 %).
- Since the students took the method lessons from the same instructors, they were aware of the evaluation techniques of a particular instructor (n = 1, P = 6.7 %).
- Personal letters written by the students to the instructor for course and instructor evaluation were useful because they were much more sincere and explanatory than the formal evaluation (n = 1, P = 6.7 %).

- Students' knowledge, skills and comprehension were evaluated both through oral and written exams (n = 1, P = 6.7 %).
- Written exams encouraged the students to use their higher thinking skills such as discussing, interpreting rather than to impart the memorized knowledge (n = 1, P = 6.7 %).

26.7 % of the instructors (n = 4) reported that the following evaluation strategies were not useful:

- Multiple choice questions in the written exams were not useful because they required the students to remember mechanical and theoretical information. However, crowded classrooms did not enable the instructors to give more useful exams.
- Giving a standard exam for all ELT Methodology classes caused problems because each instructor's pace for covering the course material was different from each other.
- Written exams were not authentic evaluation techniques.
- Instructors were not useful in correcting students' grammar and pronunciation mistakes.
- The official forms for evaluating the instructors were less useful than the written feedback received from the students because the function of the former was unclear.
- Peer feedback did not function well because the students avoided criticizing their friends thinking that they would be hurt.

An instructor also emphasized that the instructors were legally obligated to give written exams whether they liked it or not.

Finally, the instructors were asked **“Do you have any suggestions for improving the current evaluation strategies?”** 53.3 % of the instructors (n = 8) provided the following suggestions:

- There should be a deadline to encourage students to bring the assignments on time.

- The language of the written exams should be “authentic”, but not artificial.
- Written exams should be replaced with portfolio assessment.
- There should an exam based on problem-solving, that is students should be required to provide solutions for several problematic teaching cases (e.g. how to teach in a multi-level class, in a crowded class or in a class with demotivated students).
- There should be self-evaluation in each demo.
- Demos should be recorded on the video and analyzed in detail.
- Demos should be evaluated by a panel of the instructors teaching the course for increasing the interrater reliability.
- Instructor evaluation should be emphasized more and the instructors should be promoted considering the results of the evaluation by the students.
- The time devoted to feedback on microteaching should be increased.
- Students’ teaching both in real classrooms in ELT Methodology classroom should be assessed.
- There should be more assignments and projects.

Table 4.28. summarizes the learning activities and evaluation strategies mentioned to be useful the most frequently by the students and the instructors. The results revealed that majority of the students and the instructors participated in the interviews perceived constructivist learning activities and evaluation strategies to be more useful.

Table 4.28. Summary of the Results Related to Usefulness of Constructivist Learning Activities and Evaluation Strategies

Subdimensions	Interviews (Students)	Interviews (Instructors)
Learning Activities	*all learning activities *microteaching *discussion	*all learning activities * creative & enjoyable learning activities * activities facilitating the link between theory & practice
Evaluation	*evaluation of microteaching *feedback sessions	*written exams *a variety of evaluation techniques

4.5. Students' and Instructors' Conceptions of Learning and Teaching

In this part, students' and instructors' conceptions of learning and teaching are presented. *While reporting the results, some conceptions are labeled with more than one name (e.g. both constructivist and humanistic) because their implications are true for more than one theory.*

4.5.1. Students' Conceptions of Learning and Teaching

In order to answer research question 3.1. "To what extent do the students in ELT Methodology II courses hold constructivist conceptions of learning and teaching?" and its subquestions (3.1.1. and 3.1.2.), first, the questionnaires administered to 410 students were analyzed.

Table 4.29. Students' Responses Related to Conceptions of Learning and Teaching as Obtained Through Questionnaires (n = 410)

	FREQUENCIES		PERCENTAGES	
	Learning	Teaching	Learning (%)	Teaching (%)
Behaviorist	120	181	29,6	44,6
Cognitivist	20	76	4,9	18,7
Humanistic	54	69	13,3	17
Constructivist	209	75	51,5	18,5
Other	3	5	0,7	1,2
TOTAL	406	406	100	100

As seen in Table 4.29., about half of the students (51,5 %) preferred Constructivist conception of learning whereas 44,6 % of the students were in favor of Behaviorist conception of teaching.

In the questionnaire, the students were also asked to write down if they had any other conceptions of learning and teaching than the given ones. Twelve students provided their own conceptions of learning. The number of the students who provided each conception and the possible theoretical bases of the conceptions were summarized in Table 4.30.

Table 4.30. Students' Responses Related to Conceptions of Learning as Obtained Through the Open-ended Item in the Questionnaires (n = 12)

CONCEPTIONS OF LEARNING	LEARNING THEORIES			
Learning ...	Behaviorist	Cognitivist	Humanistic	Constructivist
is a personal development.	–	–	3	3
is a change of behavior.	3	–	–	–
is achieved through experiencing.	–	2	2	2
is an intake of knowledge presented by the instructor.	2	2	–	–
occurs if the student participates actively in learning activities.	–	1	1	1
is a life-long process.	–	–	1	1
TOTAL	5	5	7	7

As seen in Table 4.30, seven students' conceptions of learning were either Constructivist or Humanistic while five students' conceptions were either Behaviorist or Cognitivist. A student reported that s/he didn't agree with any of the conceptions, but didn't provide an alternative one. Next, the conceptions of teaching the students provided in the questionnaire are summarized in Table 4.31.

Table 4.31. Students' Responses Related to Conceptions of Teaching as Obtained Through the Open-ended Item in the Questionnaires (n = 6)

CONCEPTIONS OF TEACHING	TEACHING THEORIES			
Teaching is ...	Behaviorist	Cognitivist	Humanistic	Constructivist
to provide fundamental information.	1	1	–	–
to guide learners considering their abilities and interests.	–	–	2	2
to help learners learn by experiencing.	–	1	1	1
to contribute to learners' personal development.	–	–	1	1
to share what one knows with the others through disregarding individual differences (religion, race etc.)	–	–	1	–
TOTAL	1	2	5	4

Eight students provided their own conceptions of teaching. Among these, 2 students reported that they agreed with both of the teaching conceptions that were given in the questionnaire. One of these students preferred both Humanistic and Constructivist conceptions while the other one preferred both Behaviorist and Constructivist ones. As seen in Table 4.31, majority of the reported conceptions of teaching were either Humanistic or Constructivist. Next, the interviews conducted with 40 students were analyzed. First, the students were asked “What do you think learning is ?” Students’ responses are summarized in Table 4.32.

Table 4.32. Students’ Responses Related to Conceptions of Learning as Obtained Through Interviews (n = 40)

CONCEPTIONS OF LEARNING Learning is ...	LEARNING THEORIES			
	Behaviorist	Cognitivist	Humanistic	Constructivist
to be able to use knowledge in different contexts and transfer it.	–	6	–	6
a permanent behavior change.	5	–	–	–
to do or to experience.	–	5	5	5
to acquire or receive knowledge.	4	4	–	–
to make one’s own meaning out of the knowledge.	–	3	–	3
to learn how to learn.	–	3	–	3
to acquire target behavior.	3	–	–	–
knowledge that has been remembered.	3	3	–	–
to produce one’s own knowledge.	–	2	–	2
to develop competency in teaching skills through frequent practice.	–	2	–	2
to acquire / interpret / discover new knowledge using prior knowledge / experiences	–	3	–	3
to be able to use one’s potential / abilities in the best way.	–	–	1	–
a result of cooperative work.	–	1	1	1
to relate the concepts to each other.	–	1	–	1
knowledge measured by exams	1	–	–	–
TOTAL	16	33	7	26

As seen in Table 4.32., majority of the reported conceptions of learning (n = 33) were Cognitivist while seven of the conceptions were Humanistic. Secondly, the students were asked “**What do you think teaching is?**”. Students’ responses are summarized in Table 4.33.

Table 4.33. Students’ Responses Related to Conceptions of Teaching as Obtained Through the Interviews (n = 40)

CONCEPTIOS OF TEACHING	TEACHING THEORIES			
Teaching is ...	Behaviorist	Cognitivist	Humanistic	Constructivist
to transmit knowledge in the best possible way / using the most appropriate teaching methods.	14	14	–	–
to help students acquire target behavior.	10	–	–	–
to guide students for learning.	–	–	4	4
to facilitate learning.	–	–	3	3
to contribute to learners’ personal development.	–	–	2	2
to help learners use what they learnt in new contexts and transfer it.	–	2	–	2
to help students discover knowledge.	–	1	–	1
to negotiate with the learners.	–	–	1	1
to help learners use their potential in the best way.	–	–	–	1
to help learners improve their thinking skills	–	1	–	1
TOTAL	24	18	10	15

As indicated in Table 4.33., majority of the students’ conceptions were Behaviorist (n = 24) whereas ten of the conceptions were Humanistic.

4.5.2. Instructors’ Conceptions of Learning and Teaching

In order to answer research question 3.2. “To what extent do the instructors in ELT Methodology II courses hold constructivist conceptions of learning and teaching?” and

its subquestions (3.2.1. and 3.2.2.), the interviews with 15 instructors were analyzed. First, the instructors were asked “**What do you think learning is?**”. The instructors’ responses are summarized in Table 4.34.

Table 4.34. Instructors’ Responses Related to Conceptions of Learning as Obtained Through Interviews (n = 15)

CONCEPTIONS OF LEARNING	LEARNING THEORIES			
Learning is ...	Behaviorist	Cognitivist	Humanistic	Constructivist
to express a concept, an idea or a feeling in one’s own words.	–	1	–	1
to make one’s own meaning out of knowledge.	–	1	–	1
to construct an idea or a concept in the mind and to assimilate or to internalize it	–	1	–	1
a life-long or long-term process.	–	2	–	2
achieved through collaboration.	–	1	1	1
to learn how to learn.	–	2	–	2
to develop a strategy to cope with a problematic case.	–	1	–	1
to use the theory or knowledge in appropriate contexts.	–	1	–	1
to do or to experience.	–	1	1	1
to think analytically and reach a synthesis.	–	1	–	1
to understand.	1	1	–	1
to relate the new knowledge to the previous ones.	–	1	–	1
to broaden one’s mind through looking at things from different perspectives.	–	1	–	1
to change the constructed knowledge into behavior in appropriate contexts and conditions.	–	1	–	1
a permanent change in behavior.	1	–	–	–

Table 4.34. (Continued)

CONCEPTIONS OF LEARNING	LEARNING THEORIES			
Learning is ...	Behaviorist	Cognitivist	Humanistic	Constructivist
to acquire knowledge / skills.	1	1	–	–
a reaction towards a stimulus.	1	–	–	–
to keep knowledge in mind and remember it when needed.	1	1	–	–
TOTAL	5	18	2	16

Five instructors reported that they had two conceptions. As seen in Table 4.34., majority of the instructors' conceptions of learning were Cognitivist (n = 18) while only two of the conceptions were Humanistic. Moreover, an instructor emphasized that it was of secondary importance whether an individual was presented by the knowledge or he himself found out it, but the important thing was to assimilate it. Secondly, the instructors were asked **“What do you think teaching is?”**. The instructors' responses are summarized in Table 4.35.

Table 4.35. Instructors' Responses Related to Conceptions of Teaching as Obtained Through Interviews (n = 15)

CONCEPTIONS OF TEACHING	TEACHING THEORIES			
Teaching is ...	Behaviorist	Cognitivist	Humanistic	Constructivist
to help the students assimilate knowledge through relating it to their daily life and their own ideas.	–	1	–	1
to facilitate student learning through providing an appropriate learning environment for them.	–	–	2	2
to guide students in their learning.	–	–	2	2
to help students gain higher-order thinking skills.	–	2	–	2
to help students use knowledge in appropriate contexts.	–	2	–	2
to share knowledge, experience & ideas with the students considering their needs and interests.	–	–	1	1

Table 4.35. (Continued)

CONCEPTIONS OF TEACHING	TEACHING THEORIES			
Teaching is ...	Behaviorist	Cognitivist	Humanistic	Constructivist
to help students understand and relate the new knowledge with the previous ones.	–	1	–	1
to help students gain different perspectives.	–	1	–	1
to transmit knowledge in the best possible way / using the most appropriate techniques and materials.	4	4	–	–
should be subordinated to learning; in other words, learning should be emphasized more than teaching.	–	–	1	1
TOTAL	4	11	6	13

As indicated in Table 4.35., majority of the instructors' conceptions of teaching were Constructivist (n = 11) while only four of the conceptions were Behaviorist. Two instructors reported two conceptions.

Table 4.36. summarizes the results related to students' and instructors' conceptions of learning and teaching.

Table 4.36. Summary of the Results Related to Conceptions of Learning and Teaching

CONCEPTIONS	Questionnaire (Students)	Interviews (Students)	Interviews (Instructors)
Conception of Learning	Constructivist	Cognitivist	Cognitivist
Conception of Teaching	Behaviorist	Behaviorist	Constructivist

Analysis of the questionnaires revealed that majority of the students held Constructivist conceptions of learning and Behaviorist conceptions of teaching. The interviews indicated that both the students and the instructors had Cognitivist conceptions of learning. On the other hand, the students were Behaviorist in their conceptions of teaching while the instructors were Constructivist.

4.6.1. Difference in Perception of Constructivist Classroom Characteristics According to Universities

In order to answer research question 4.1. “Do the constructivist classroom characteristics perceived by the students in ELT Methodology II courses differ according to universities?” one-way ANOVA was conducted. The results are summarized in Table 4.37.

Table 4.37. Perception of Constructivist Classroom Characteristics According to Universities (Means out of 5)

SUBDIMENSIONS	UNIVERSITIES							
	METU (n = 107)		Gazi University (n = 128)		Çukurova University (n = 90)		Dicle University (n = 85)	
	x	Sd	x	Sd	x	Sd	x	Sd
Learning Activities	3.19	.60	3.39	.40	2.95	.43	2.78	.59
Evaluation	3.26	.66	3.01	.52	2.94	.57	2.45	.64
Professional Relevance	4.43	.41	4.30	.53	4.21	.66	3.77	.89
Reflective Thinking	3.70	.91	3.94	.77	3.97	.65	3.59	.86
Negotiation	3.78	.86	3.96	.69	3.77	.71	3.72	.82
Leadership	4.80	.30	4.02	.87	4.41	.59	4.31	.79
Empathy	4.38	.53	3.91	.81	4.23	.73	3.91	.85
Support	4.53	.45	4.23	.75	3.93	.84	3.67	.88
TOTAL	3.69	.52	3.68	.44	3.51	.30	3.33	.48

Table 4.37. (Continued)

SUBDIMENSIONS	p	F	df 1	df 2	η²
Learning Activities	.000	29.07	3	403	.18
Evaluation	.000	29.71	3	403	.18
Professional Relevance	.000	17.77	3	406	.12
Reflective Thinking	.001	5.58	3	405	.04
Negotiation	.110	2.02	3	406	.02
Leadership	.000	22.46	3	401	.14
Empathy	.000	9.90	3	404	.07
Support	.000	21.80	3	403	.14
TOTAL	.000	13.58	3	400	.09

Analysis of the **whole questionnaire** revealed that students' perception of constructivist classroom characteristics differed according to universities, $F(3, 400) = 13.58$, $p < .05$, $\eta^2 = .09$. Tukey test for multiple comparisons indicated no significant difference between the mean scores of the students from METU and Gazi University while there were significant differences among the mean scores of the other students. The students from METU and Gazi University perceived the classroom characteristics to be more constructivist ($x = 3.69$ and 3.68 respectively) compared to the students from Dicle University ($x = 3.33$).

Further analysis of data was carried out in order to analyze the difference in perception of each subdimension of the classrooms according to universities. As seen in Table 4.37., there was a significant difference in all subdimensions except in **Negotiation** ($p > .05$). Tukey tests were conducted to assess pairwise differences among the mean scores. In **Learning Activities**, there was a significant difference among the mean scores of the students from all universities. The students from Gazi University perceived the learning activities to be more constructivist ($x = 3.39$) compared to the ones from Dicle University ($x = 2.78$). In **Evaluation**, there was no significant difference between the mean scores of the students from Gazi and Çukurova Universities but there were significant differences among the mean scores of the other students. The students from METU perceived the evaluation strategies to be more constructivist ($x = 3.26$) compared to the ones from Dicle University ($x = 2.45$).

In **Professional Relevance**, there was a significant difference between the mean scores of the students from Dicle University and the ones from the other universities. METU students perceived the course to be more relevant to teaching profession ($x = 4.43$) than the students from Dicle University. In **Reflective Thinking**, there was a significant difference between the mean scores of the students from Dicle University and the students from Gazi and Çukurova Universities. There were no significant differences among the mean scores of the students from the other universities. The students from Gazi ($x = 3.94$) and Çukurova Universities ($x = 3.97$) perceived more frequently that their reflective thinking developed in this course compared to the students from Dicle University ($x = 3.59$).

In **Leadership**, there was no significant difference between the mean scores of the students from Çukurova University and Dicle University whereas there were significant differences among the mean scores of the other students. METU students ($x = 4.80$) perceived the instructors to be more effective leaders than the students from Gazi University ($x = 4.02$). In **Empathy**, there were no significant differences between the mean scores of the students from METU and Çukurova University, and the students from Gazi and Dicle University. On the other hand, there were significant differences between the mean scores of the students from the other universities. METU students ($x = 4.38$) perceived the instructors to be more empathetic compared to the students from Gazi and Dicle Universities. In **Support**, there was no significant difference between the mean scores of the students from Çukurova University and Dicle University while there were significant differences among the mean scores of the other students. METU students ($x = 4.53$) perceived the instructors more supportive compared to the students from Dicle University ($x = 3.67$).

4.6.2. Difference in Perception of Constructivist Classroom Characteristics

According to Sex

In order to answer research question 4.2. “Do the constructivist classroom characteristics perceived by the students in ELT Methodology II courses differ according to their sex?” one-way ANOVA was conducted. The results are summarized in Table 4.38.

Table 4.38. Perception of Constructivist Classroom Characteristics According to Sex (Means out of 5)

SUBDIMENSIONS	S E X								
	Female Students (n = 284)		Male Students (n = 126)						
	x	Sd	x	Sd	p	F	df 1	df 2	η^2
Learning Activities	3.15	.56	3.03	.54	.055	3.77	1	405	.01
Evaluation	3.00	.66	2.82	.62	.008	7.13	1	407	.01
Professional Relevance	4.23	.64	4.13	.73	.170	1.93	1	408	.01
Reflective Thinking	3.85	.79	3.70	.87	.082	3.03	1	407	.01
Negotiation	3.84	.72	3.77	.87	.365	.82	1	408	.03
Leadership	4.33	.77	4.39	.69	.490	.48	1	403	.00
Empathy	4.12	.78	4.03	.77	.304	1.06	1	406	.00
Support	4.08	.80	4.11	.83	.694	.16	1	405	.00
TOTAL	3.64	.45	3.55	.49	.072	3.26	1	402	.01

Analysis of the **whole questionnaire** revealed that students' perception of constructivist classroom characteristics did not differ according to student sex, $F(1, 402) = 3.26$, $p > .05$, $\eta^2 = .01$. Further analysis of the data in order to find out the difference in perception of each subdimension of the classrooms according to student sex also did not reveal significant differences except in Evaluation. In **Evaluation**, there were significant differences between the perceptions of female and male students, $F(1, 407) = 7.13$, $p < .05$, $\eta^2 = .01$. Female students ($x = 3.00$) perceived the evaluation strategies to be more constructivist compared to the males ($x = 2.82$).

4.6.3. Difference in Perception of Constructivist Classroom Characteristics According to Type of High School

In order to answer research question 4.3. "Do the **constructivist classroom characteristics** perceived by the students in ELT Methodology II courses differ according to the **type of high school** the students graduated from?" one-way ANOVA was conducted. The results are summarized in Table 4.39.

Table 4.39. Perception of Constructivist Classroom Characteristics According to Type of High School (Means out of 5)

SUBDIMENSIONS	TYPE OF HIGH SCHOOL								
	Anatolian Teacher High School (n = 180)		Other High Schools (n = 230)						
	x	Sd	x	Sd	p	F	df 1	df 2	η^2
Learning Activities	3.13	.55	3.10	.55	.706	.14	1	405	.00
Evaluation	3.05	.67	2.86	.63	.003	9.09	1	407	.02
Professional Relevance	4.21	.62	4.18	.71	.732	.12	1	408	.00
Reflective Thinking	3.68	.80	3.90	.81	.008	7.16	1	407	.02
Negotiation	3.77	.82	3.86	.73	.204	1.62	1	408	.01
Leadership	4.33	.68	4.37	.79	.561	.34	1	403	.00
Empathy	4.14	.74	4.06	.81	.320	.99	1	406	.00
Support	4.08	.78	4.10	.83	.770	.09	1	405	.00
TOTAL	3.61	.49	3.61	.45	.985	.00	1	402	.00

Analysis of the **whole questionnaire** revealed that students' perception of constructivist classroom characteristics did not differ according to type of high school, $F(1, 402) = .00$, $p > .05$, $\eta^2 = .000$. Further analysis of data in order to find out the difference in perception of each subdimension of the classrooms did not reveal significant differences except in Evaluation and Reflective Thinking. In **Evaluation** and **Reflective Thinking**, there were significant differences between the perceptions of the graduates of Anatolian Teacher HS and the other HS. The graduates of Anatolian Teacher HS ($x = 3.05$) perceived the evaluation strategies to be more constructivist compared to the graduates of the other HS ($x = 2.86$) while the graduates of other high schools ($x = 3.90$) perceived the course to encourage reflective thinking more compared to Anatolian Teacher HS graduates ($x = 3.68$).

4.6.4. Difference in Perception of Constructivist Classroom Characteristics

According to Expected Average Score

In order to answer research question 4.4. “Do the **constructivist classroom characteristics** perceived by the students in ELT Methodology II courses differ according to the **expected average score** in the course?” one-way ANOVA was conducted. For analyzing the difference in students’ perception of constructivist classroom characteristics according to the average score they expected to get in the course, the students were divided into three categories, students with average scores of 0-69, 70-79 and 80-100. The results are summarized in Table 4.40.

Table 4.40. Perception of Constructivist Classroom Characteristics According to Expected Average Score (Means out of 5)

SUBDIMENSIONS	AVERAGE SCORE										
	0 – 69 (n = 112)		70 – 79 (n = 124)		80 – 100 (n = 164)						
	x	Sd	x	Sd	x	Sd	p	F	df 1	df 2	
Learning Activities	2.95	.61	3.12	.50	3.23	.53	.000	8.77	2	395	.04
Evaluation	2.70	.69	2.83	.55	3.18	.64	.000	22.27	2	397	.10
Professional Relevance	3.96	.80	4.16	.66	4.38	.53	.000	13.47	2	397	.06
Reflective Thinking	3.72	.82	3.74	.72	3.92	.82	.055	2.92	2	396	.02
Negotiation	3.63	.90	3.83	.68	3.95	.73	.004	5.66	2	397	.03
Leadership	4.40	.78	4.20	.76	4.43	.69	.031	3.50	2	393	.02
Empathy	4.06	.78	3.90	.77	4.26	.76	.000	7.90	2	395	.04
Support	3.93	.88	3.93	.82	4.32	.70	.000	11.88	2	394	.06
TOTAL	3.47	.53	3.54	.39	3.76	.43	.000	16.49	2	392	.08

As seen in Table 4.40, analysis of the **whole questionnaire** revealed that students’ perception of constructivist classroom characteristics differed according to average score, $F(2, 392) = 16.49$, $p < .05$, $\eta^2 = .08$. Tukey test for multiple comparisons indicated no significant difference between the mean scores of the students whose average scores were

0-69 and 70-79 while there were significant differences among the mean scores of the other students. The students with the average scores of 80-100 ($x = 3.76$) perceived the classroom characteristics to be more constructivist compared to the ones with the average scores of 0-69 ($x = 3.47$).

Further analysis of the difference in perceptions of each subdimension according to average score also revealed significant differences in all subdimensions except in Reflective Thinking. In **Reflective Thinking**, there was no significant difference among the mean scores of the students, $F(2, 396) = 2.92$, $p > .05$, $\eta^2 = .02$. In **Learning Activities** and **Negotiation**, there was a significant difference between the mean scores of the students whose average scores were 0-69 and the ones with average scores of 80-100. In **Evaluation**, **Professional Relevance** and **Support**, there were significant differences between the mean scores of the students with average scores of 0-69 and the ones with average scores of 70-79 and between the students with average scores of 0-69 and the ones with average scores of 80-100. In **Leadership** and **Empathy**, there was a significant difference between the mean scores of the students with average scores of 70-79 and the ones with 80-100.

In 7 of the subdimensions which revealed significant differences, the students with average scores of 80-100 had the highest mean scores while in 5 of 8 subdimensions (**Learning Activities**, **Evaluation**, **Professional Relevance**, **Empathy** and **Support**) the students with average scores of 0-69 had the lowest mean scores, but they perceived the leadership qualities of their instructors more positively ($x = 4.40$). In three subdimensions (**Leadership**, **Empathy** and **Support**), the students with average scores of 70-100 had the lowest mean scores. To sum up, analysis of the subdimensions usually revealed that the students with average scores of 80-100 perceived the classroom characteristics to be more constructivist compared to the students with average scores of 0-69. On the other hand, the students with average scores of 70-100 perceived the instructors' roles to be less constructivist compared to the other students.

4.6.5. Difference in Perception of Constructivist Classroom Characteristics According to Competency in English

In order to answer research question 4.5. "Do the constructivist classroom characteristics perceived by the students in ELT Methodology II courses differ

according to the **competency in English?**” one-way ANOVA was conducted. The results are summarized in Table 4.41. The students who perceived their English to be “average” and those who perceived it to be “very good” were included in this analysis.

Table 4.41. Perception of Constructivist Classroom Characteristics According to Competency in English (Means out of 5)

SUBDIMENSIONS	COMPETENCY IN ENG								
	Average (n = 84)		Very Good (n = 88)						
	x	Sd	x	Sd	p	F	df 1	df 2	η^2
Learning Activities	2.82	.65	3.23	.58	.000	18.60	1	167	.10
Evaluation	2.66	.68	3.08	.68	.000	16.51	1	169	.09
Professional Relevance	3.99	.72	4.20	.71	.055	3.81	1	170	.02
Reflective Thinking	3.69	.69	3.69	.97	.956	.00	1	169	.00
Negotiation	3.42	.84	3.73	.86	.018	5.74	1	170	.03
Leadership	4.27	.89	4.37	.71	.414	.67	1	168	.00
Empathy	3.94	.88	4.24	.78	.022	5.36	1	168	.03
Support	3.84	.82	4.25	.81	.001	10.59	1	168	.06
TOTAL	3.38	.50	3.67	.49	.000	14.65	1	164	.08

As seen in Table 4.41., analysis of the **whole questionnaire** revealed that students’ perception of constructivist classroom characteristics differed according to competency in English, $F(1,164) = 14.65$, $p < .05$, $\eta^2 = .08$. The students who perceived their English to be “very good” ($x = 3.67$) perceived the classroom characteristics to be more constructivist compared to the students who perceived it “average” ($x = 3.38$). Analysis of the subdimensions of the questionnaire revealed significant differences between the mean scores of the students in 5 out of 8 subdimensions in favor of the students who perceived their English to be “very good”. In **Professional Relevance**, **Reflective Thinking** and **Leadership**, there were no significant differences between the students who perceived their English to be “very good” and the students who perceived it “average”.

Table 4.42. summarizes the results related to students' perception of constructivist classroom characteristics. The results revealed that students' perception differed according to universities, expected average score in the course and perceived competency in English, but it did not differ according to sex and type of high school. The students from METU and Gazi University, high achievers with average scores of 80-100 and the students with a high conception of their competency in English perceived the classroom characteristics to be more constructivist compared to the other students.

Table 4.42. Summary of the Results Related to Difference in Students' Perceptions of Constructivist Classroom Characteristics

VARIABLES	p	More Constructivist Perception	Less Constructivist Perception
University	.000	Sts. from METU & Gazi University	Sts. from Dicle University
Sex	.072	No difference	No difference
Type of High School	.985	No difference	No difference
Average Score	.000	Sts. with average scores of 80-100	Sts. with average scores of 0-69
Competency in English	.000	Sts. perceiving their English to be "very good"	Sts. perceiving their English to be "average"

4.7. Summary of the Results

The results of the study as a whole are summarized below:

1. For investigating to what extent constructivist classroom characteristics existed in ELT Methodology II courses, questionnaires, interviews and observations were administered to the students taking *ELT Methodology II*, interviews were conducted with the students and their instructors teaching *ELT Methodology II* and observations were conducted in *ELT Methodology II* classes. Analysis of the questionnaires revealed that the students perceived the current classroom characteristics to be **often** constructivist. Analysis of the subdimensions of the questionnaire indicated that the students perceived the learning

activities and the evaluation strategies in the classroom to be **sometimes** constructivist while they perceived the rest of the dimensions to be **often** constructivist.

The interviews with the students revealed that lecturing, group or pair work, discussions, microteaching, sample demos by the instructors and the use of a variety of learning aids were the most frequently used learning activities while written exams, evaluation of microteaching, lesson plans and assignments were the most frequent evaluation strategies. The interviews with the instructors teaching ELT Methodology II course revealed that lecturing, group or pair work, discussions, microteaching, case studies on teaching problems, sample demos by the instructors, research assignments and the use of a variety of learning aids were the most frequently used learning activities while written exams, evaluation of microteaching and lesson plans were the most frequent evaluation strategies. All the interviewed instructors and the students also reported that feedback procedures such as instructor feedback, self-evaluation and peer evaluation were present in their classrooms.

Majority of the interviewed students and instructors also reported that ELT Methodology II course was relevant to teaching profession, promoted reflective thinking and enabled the students to negotiate with each other. With respect to the roles of the instructors, majority of the students and the instructors mentioned the instructors' leadership, empathetic and supportive roles for facilitating students' learning.

Observation of students' microteaching at METU and Gazi University revealed that the students used a variety of learning activities and learning aids to support their microteaching. Moreover, the students frequently negotiated and cooperated with each other. It was also observed that instructor feedback was the most dominant in the class while peer evaluation was the least dominant.

2. For analyzing to what extent constructivist learning activities and evaluation strategies were useful, interviews with the students and their instructors were conducted. The interviews revealed that majority of the students and the instructors perceived the constructivist learning activities and evaluation strategies to be useful. Moreover, they also preferred constructivist learning activities and evaluation strategies to take place in the classroom more or the present ones to be improved. Both the students and the

instructors suggested that microteaching practices should be increased and effective use of audiovisuals should be taught. With respect to evaluation strategies, both the students and the instructors emphasized the use of a variety of evaluation techniques rather than depending on written exams.

3. For analyzing to what extent the students and the instructors held constructivist conceptions of learning and teaching, the students were administered questionnaires and the students and their instructors were interviewed. The questionnaires revealed that majority of the students held Constructivist conceptions of learning and Behaviorist conceptions of teaching. The interviews indicated that both the students and the instructors had Cognitivist conceptions of learning. On the other hand, the students were Behaviorist in their conceptions of teaching while the instructors were Constructivist.

4. For analyzing whether students' perception of constructivist classroom characteristics differed according to certain variables, the students were administered questionnaires and ANOVA was carried out. The results revealed that perception of constructivist classroom characteristics differed according to universities in favor of METU and Gazi University, according to expected average score in the course in favor of the students with average scores of 80-100, according to perceived competency in English in favor of the students who perceived their English to be very good. On the other hand, perception of classroom characteristics did not differ according to student sex and type of high school the students graduated from.

In the following chapter, conclusions and implications of the present study is discussed.

CHAPTER V

CONCLUSIONS AND IMPLICATIONS

This chapter presents the conclusions and discussion of the findings, and implications for improving ELT Methodology courses and for further research.

5.1. Conclusions

The conclusions and discussion related to the findings of the study are presented under four main headings: Constructivist classroom characteristics, usefulness of constructivist learning activities and evaluation strategies, conceptions of learning and teaching and the difference in students' perception of constructivist classroom characteristics according to certain variables. The results of the questionnaire were reported in terms of means out of 5 (*Always is 4.5 - 5.00, Often is 3.51- 4.50, Sometimes is 2.51 - 3.50, Seldom is 1.51 - 2.50 and Never is 0 -1.5*) while the results of the interviews and the observations were reported in terms of percentages and 50 % or higher percentages were reported to be the most frequent. In addition, *410 students were administered the questionnaire while 40 students and 15 instructors were interviewed.*

5.1.1. Conclusions Related to Constructivist Classroom Characteristics

In order to answer research question 1. "To what extent are the current **classroom characteristics** in ELT Methodology II courses constructivist?" and its subquestions, the data were collected through questionnaires administered to the students taking ELT Methodology II course in ELT departments at Faculties of Education, interviews conducted with the students and the instructors teaching ELT Methodology II and the observations of the classrooms.

Analysis of the questionnaires administered to the students revealed that the students perceived the current classroom characteristics to be **often** constructivist ($x = 3.64$). Although the students perceived the learning activities and evaluation strategies to be

sometimes constructivist ($x = 3.11$ and 2.94 respectively), they perceived the other dimensions (**Professional Relevance, Reflective Thinking, Negotiation, Leadership, Empathy and Support**) to be **often** constructivist. This was consistent with the literature emphasizing that regardless of the particular techniques used in instruction, students could construct and reorganize knowledge if an educational activity is used appropriately (Airasian and Walsh, 1997; Bonnstetter, 1998; Windschitl, 1999). Within all the subdimensions, **Leadership** had the highest mean score ($x = 4.35$) indicating that the students perceived their instructors to have the essential leadership qualities.

In the following parts, the results related to the characteristics of the subdimensions of the constructivist classrooms including learning activities, evaluation, professional relevance, reflective thinking, negotiation, leadership, empathy and support are discussed.

5.1.1.1. Conclusions Related to Constructivist Learning Activities

With respect to *learning activities present in the classroom*, analysis of the questionnaire administered to the students revealed that majority of the learning activities were either **often** or **sometimes** present in the classroom while journal writing ($x = 2.39$) and keeping portfolios ($x = 1.36$) were either **seldom** or **never** present. The interviews with the students and the instructors revealed that microteaching, lecturing, group or pair work, discussions and sample demos by the instructors were the most frequent learning activities. In addition to these, the instructors also mentioned frequently case studies and research assignments. Observations of students' microteaching also revealed that group or pair work, question and answer and prediction activities were the most frequently used learning activities by the students.

As the literature indicated, the current learning activities used in the classrooms could be considered to be constructivist except the reservations concerning the constructivist nature of lecturing and question-answer technique (Andrew and Isaacs, 1995, cited in Fardouly, 2001; Bonsteter, 1998; Brooks and Brooks, 1993; Casey and Howson, 1993; Cochran et al., 1993; Ho and Richards, 1993; Johnson and Johnson, 1987, cited in Crowther, 1997; Lundeberg and Scheurman, 1997; Mohktari et. al, 1996; Rainer and Guyton, 1994; Smerdon et al., 1999; Tynjälä, 1999; Wheatley, 1990; Wilson, 1996; Wilson, 1997; Windschitl, 1999).

Both the questionnaires and the interviews in the present study indicated that lecturing was one of the most frequently used learning activities in the classroom. This may be considered as a sign of nonconstructivism because it is suggested that in a constructivist classroom time allocated to lecturing is reduced to allow more time for other activities such as group-based teaching and self-directed learning (Fardouly, 2001). However, the interviews usually showed that lecturing was used by the instructors in the constructivist sense since it was interactive and encouraged student participation through several activities. On the other hand, lecturing was perceived to be nonconstructivist by 10 % of the students (n = 4) because it dominated the course, was teacher-centered and involved transmission of knowledge and such lower level activities as dictation, fill-in-the blanks and so on. The literature also suggested that lecturing based on a one-way transmission of knowledge through listening to the teacher passively and copying his or her notes was considered to be a didactic activity rather than being constructivist (Selley, 1999; Smerdon et al., 1999).

The question and answer technique used by 26.7 % of the instructors (n = 4) aimed at encouraging students to think, assessing their readiness level for the new topic. Moreover, the questions did not require a single correct answer, were two-way directed that is, they were both from the instructor to the students and from the students to the instructor. The literature also indicated that such a questioning technique was constructivist (Hannafin and Land, 1992; Jonassen, 1991; Richardson, 1997).

In the present study, it was observed that two students used drills and repetition in their microteaching. The literature suggests that such activities as drills and repetition facilitate just the acquisition of lower level skills (Andrew and Isaacs, 1995, cited in Fardouly, 2001; Dewey, 1938, cited in Rainier and Guyton, 1994; Talbert and McLaughlin, 1993, cited in Smerdon et al., 1999). However, practice in using a variety of activities could also be considered to be an essential teaching experience for the student teachers.

With regard to *learning aids used in the classroom*, student questionnaires revealed that a variety of materials (x = 3.84) and equipment (x = 3.52) were **often** used to support learning. The literature also emphasized the importance of providing the students with enriched materials and equipment in facilitating the construction of knowledge (Wilson,

1996). The results of the study as a whole indicated that the use of supplementary materials were more frequent compared to the use of audio-visual equipment. This may be because of the limitations of the technical facilities at the universities. On the contrary, the literature emphasized that technology should be used frequently in constructivist learning environments to facilitate learning (Alkan et al., 1995; Jonassen et al., 1999; Mannikkö and Fahreus, 1997; Perkins, 1991; Wilson, 1996).

All the interviewed students and instructors mentioned the coursebooks to be used as a main material in addition to other learning aids. In addition, 30 % of the students (n = 12) stated that their instructors used OHP during lecturing while 20 % of the students (n = 8) pointed out that they used OHP in their microteaching. Such learning aids as slides and diagrams were also used by an instructor. Observations of students' microteaching revealed that the students used a variety of materials they prepared or adapted from relevant sources. The literature showed that when the students prepared, selected and used the materials and equipment by themselves, their skills in effective use of materials and equipment and their interest were enhanced and they learned more (Jonassen et al., 1996; Varış, 1996).

Although the coursebooks were used in all the universities participated in the study, the interviews revealed that they were followed more closely by the instructors in a university through changing or adapting some of its parts. Nevertheless, the selection of the tasks from the coursebook rather than from various sources could be considered to be one of the characteristics of the traditional classrooms because in such classrooms the structure of the course depended heavily on the coursebooks (Caprio, cited in Henriques, 1997).

With respect to *negotiation with the students in planning the learning activities*, both the questionnaires and the interviews indicated that students' ideas and suggestions about the learning activities were considered; however, the students did not take place in the design of the course. This could be attributed to the fact that the content of the courses were legally prespecified. About half of the instructors (n = 8, P = 53.3 %) emphasized the negotiation among the instructors while designing and improving the course. Team work and collaboration were valued in constructivist learning environments (Marlowe and Page, 1998). However, it was also asserted that the curriculum should be adapted to

students' needs (Brooks and Brooks, 1993) and students should take primary responsibility for determining the topics and the methods to learn (Wilson, 1996). Lack of flexibility in the content of the course in different universities could be interpreted as one of the major characteristics of traditional education (Dewey, 1938, cited in Rainer and Guyton, 1994).

5.1.1.2. Conclusions Related to Constructivist Evaluation Strategies

With respect to *current evaluation strategies*, analysis of the student questionnaires revealed that written exams or tests ($x = 4.20$), evaluation of students' written work ($x = 4.09$) and oral performance ($x = 4.15$) were the most frequent evaluation strategies. The interviews with the students and the instructors revealed that a combination of several evaluation strategies (e.g. mid-term and final exams, evaluation of students' microteaching and lesson plans, assignments and reports) was used the most frequently in the classes. The literature also emphasized that multiple modes of evaluation techniques are used for evaluating students' performance. (Brooks and Brooks, 1993; Wilson, 1995; Windschitl, 1999). Evaluation of students' microteaching through instructors' observation could also be considered constructivist because the literature emphasized that teacher observation as an informal assessment was considered to be fruitful and more useful than formal assessments (Bednar, 1991).

The results of the study revealed some differences in views with respect to consideration of class participation in evaluation because the instructors ($n = 6$, $P = 40\%$) mentioned more frequently than the students ($n = 8$, $P = 20\%$) that students' class participation were considered in evaluation. This could be attributed to the possibility that although the instructors included students' class participation in evaluation, students were not aware of that. The importance attached to attendance in one university could not be considered a constructivist approach because attendance was considered to be optional in constructivist classrooms (Andrew and Isaacs, 1995, cited in Fardouly, 2001).

With respect to *feedback procedures in the classroom*, the findings of the study were parallel to each other; that is, instructor feedback, self-evaluation and peer evaluation after microteaching were present in all the classrooms participated in the study. The literature also indicated that constructivist evaluation strategies emphasized assessment of

the learning process regularly, encouraging students to engage in self-evaluation and peer evaluation, metacognitive and reflective activities and promoting higher-order learning (Biggs, 1996; Hannafin and Land, 1997; Jonassen, 1991; Kerka, 1997; Martha and Deborah, 2000; Tynjälä, 1998; Tynjälä, 1999; Yackel et al., 1992, cited in Hendry, 1996). However, student questionnaires and observations revealed that instructor feedback was the most frequent while peer evaluation was the least frequent. The interviews also revealed that the feedback was almost always provided on students' microteaching.

The findings related to the way the students were provided with feedback were also consistent with the relevant literature in some respects. For example, in constructivist classrooms evaluation occurred both through individual interviews based on the analysis of the performance deeply (Erdem, 2001) as 20 % of the instructors (n = 3) preferred to do and through sharing and negotiating it with the whole class (Brooks and Brooks, 1993) as 80 % of the instructors (n = 12) preferred to do. While observing the students, the teachers tended to fill in the observation forms they prepared or to take detailed notes in order to evaluate the students (Yaşar, 1998). The literature also supports that the feedback involves individual assessment rather than comparing the learners with each other considering the nature of learning and teaching process, difficulties that were experienced, needs and feelings (Marlowe and Page, 1998). On the contrary to the findings of the study, in constructivist classrooms improvement in process of learning rather than grading is emphasized (Bednar, 1991).

With respect to *course and instructor evaluation by the students*, the findings of the study were conflicting. The student questionnaires revealed that course and instructor evaluation by the students was seldom present in the classroom ($x = 2.43$ and $x = 1.94$ respectively). On the other hand, more than half of the interviewed students and all the interviewed instructors stated that in their classroom the students had the opportunity to evaluate both the course and the instructor. The students who stated that there were no instructor or course evaluation in the classroom attributed this to lack of time and the instructors' negative attitudes towards evaluation. Nevertheless, the literature emphasized that in constructivist classrooms students were engaged in critical course evaluation and evaluation of the efficacy of the teacher as a promoter of understanding (Crowther, 1997; Tynjälä, 1999). The findings of the study also revealed that informal course and instructor evaluation was more frequent in the classroom compared to the formal evaluation done

by a standard form or a questionnaire. The literature also emphasized that informal assessment techniques should be dominant in constructivist classrooms (Bednar, 1991).

With respect to *negotiation in designing the exams* the findings of the study showed parallelism. In other words, both the students and the instructors perceived that the students did not take part in the process of designing evaluation strategies, but their suggestions were considered by the instructors. On the contrary, in constructivist classrooms the nature and the criteria of the evaluation are decided through negotiation between the teacher and the students even including parents (Airasian and Walsh, 1997; Reeves and Okey, 1996; Windschitl, 1999).

5.1.1. 3. Conclusions Related to Professional Relevance

With respect to *relevance of ELT Methodology II course to teaching profession*, the results revealed that majority of the students and the instructors perceived the course to be relevant to teaching profession and interesting. On the other hand, during the interviews a student and 26.7 % of the instructors (n = 4) stated that the students might have difficulty in relating what they learnt in this course to teaching profession in the future because of their lack of experience in teaching, lack of appropriate conditions in real classrooms and resistance to the use of innovative learning activities such as drama in the classroom. The literature also identified these factors as probable barriers to change in traditional modes of teaching and employment of constructivist teaching techniques in the classrooms (Aksu, 1996; Airasian and Walsh, 1997; Prawat, 1992).

With respect to *relevance of ELT Methodology II to other courses*, the students mentioned that previous ELT and Education courses were relevant to the course while the instructors mentioned both the previous and the subsequent courses were relevant to it. Observations of the classes also revealed that the students could relate this course to *Teaching English to Young Learners* course the most. This may be because most of the activities and the materials they used in microteaching implied that they were prepared to teach young learners. A student stated that literature courses was not relevant to this course. The instructors mentioned more courses relevant to ELT Methodology compared to the students. This could be attributed to the fact that the instructors were more knowledgeable about the whole courses in ELT while the students only knew about the

courses they took previously. The instructors especially mentioned the increased competency of the students in the *Teaching Practice* course while a student stated that ELT Methodology was a good preparation for it. This is consistent with the literature emphasizing the importance of method courses or previous courses in improving students' teaching skills in practicum courses (Ferguson, 1999; Hassard, 1999; Steele and Widman, 1997).

The results of the study showed consistency in a great degree with the literature emphasizing that the content of the courses should be of interest for the students (Brooks and Brooks, 1993), the teacher candidates should perceive what has been learnt to be connected with teaching practices (Richardson, 1997), their prior knowledge and experiences on teaching and learning (Billet, 1996, cited in Kerka, 1997; Cochran et al., 1993; Dewey, 1938, cited in Hassard, 1999; Hannafin and Land, 1997; Henriques, 1997; Thomaz and Gilbert, 1989).

5.1.1.4. Conclusions Related to Reflective Thinking

With respect to *contribution of the course to reflective thinking*, the findings of the questionnaires and interviews revealed that majority of the students and the instructors perceived *ELT Methodology II course* contributing to students' reflective thinking. During the interviews the students mentioned that the course contributed to reflecting upon what was learnt and on one's own and peers' performance. In addition to these, the interviewed instructors mentioned the contribution of the ELT Methodology course to reflecting critically upon the effectiveness of the course, teaching methods and materials and professional writers' views. The results were consistent with the relevant literature (Abdal-Haqq, 1998; Brooks and Brooks, 1993; Fisher, Taylor and Fraser, 1996; Taylor and Maor, 2000; Maor, 1997; Taylor, 1995). This literature emphasized that reflective thinking involved thinking critically over one's own thinking and learning as well as others' views. In addition, the literature suggested that methods courses in constructivist classrooms should emphasize the teaching strategies promoting higher-level student thinking (Martin, 1996).

5 % of the students (n = 2) and 13.3 % of the instructors (n = 2) stated that the students could not develop their reflective thinking skills in this course because time

limitations and traditional primary and secondary educational system in which the learners had a passive role were barriers to development of reflective thinking. The literature also proposed that time limitations (Airasian and Walsh, 1997; Erdem, 2001; Mc Laughlin and Talbert (1993, cited in Smerdon et al., 1999, Perkins, 1991; Winschitl, 1999 and traditional educational system were major threats to development of higher-order thinking skills and construction of knowledge (Caprio, 1994, cited in Henriques, 1997; Duncan, 1999; Richardson, 1997; Spiro and Jengh, 1990, cited in Hannafin and Land, 1997).

With respect to *learning activities and practices contributing to reflective thinking*, the interviews revealed that both the students and the instructors perceived discussion, microteaching and self-evaluation contributing to reflective thinking. In addition to these, the instructors also mentioned peer evaluation and informal course evaluation. The literature also emphasized that these learning activities contributed to reflective thinking (Biggs, 1996; Bonnsetter, 1998; Brooks and Brooks, 1993; Casey and Howson 1993; Ching-Tang, 1998; Cochran et al., 1993; Foreman-Peck, 1994, cited in Fardouly, 2001; Hand and Peterson, 1995; Ho and Richards, 1993; Johnson and Johnson 1987, cited in Crowther, 1997; Jonassen, 1991; Lundeberg and Scheurman, 1997; Nyikos and Hashimoto, 1997; Rainier and Guyton, 1994; Richardson, 1997; Smerdon et al., 1999; Tynjälä, 1998, 1999; Wheatley, 1990; Windschitl, 1999; Wilson, 1997; Yackel et al., 1992, cited in Hendry, 1996).

On the other hand, an instructor reported that peer evaluation did not promote critical thinking because the students avoided criticizing their peers for the fear of being disapproved. Moreover, the students' (n = 12, P = 30 %) and the instructors' (n = 3, P = 20 %) suggestions for developing reflective thinking revealed that they expected the constructivist learning activities and evaluation strategies to be present in the classroom more.

5.1.1.5. Conclusions Related to Negotiation

With respect to *negotiation among the students*, both the student questionnaires and the interviews with the students and the instructors revealed that the students negotiated with their peers in the classroom frequently. Observations of the students' microteaching

also revealed that the students were willing to negotiate and cooperate with their classmates except in a classroom. In this classroom the students reported that they were not willing to participate in class activities and cooperate with their classmates because of the unfavorable and stressful classroom atmosphere rather than because of a negative attitude towards the presenters.

5 % of the interviewed students ($n = 2$) who thought that there was not always negotiation in the classroom stated that the students preferred to work on their own rather than cooperating. Moreover, there was a difference between the views of the students and the instructors in one of the universities with respect to the presence of negotiation in the classroom. While all the interviewed students at this university reported that there was negotiation in the class, majority of their instructors reported that the students formed groups within themselves, and did not share ideas and work together with the students in the other groups. The instructors also emphasized that there was competition among the students rather than cooperation. An instructor also stated that competition among the students increased their motivation and performance in microteaching.

The literature provided conflicting views with regard to the comparative effects of cooperation and competition on learning. Some studies revealed that cooperative learning increased motivation, achievement and relationships among students (Anderson, 1988; Bonstetter, 1998; Kesal, 1996) while the others indicated that a competitive environment enhanced achievement, motivation and cognitive growth (Dowell, 1980; Moos 1974, cited in Moos and Moos, 1978).

In addition, a student and three instructors who thought that there was not always negotiation among the students attributed this to such factors as students' personality, lack of time for the students coming together and knowing each other. The literature also indicated these factors as the probable reasons for affecting the amount of negotiation among the students (Fardouly, 2001; Klein, 1998).

With respect to learning activities or practices enhancing negotiation, both the students and the instructors mentioned the contribution of discussions, microteaching and group or pair work the most frequently. The literature also emphasized the effect of these learning activities in enhancing negotiation (Bonstetter, 1998; Ferguson, 1999; Hand and

Peterson, 1995; Hassard, 1999; Kroll and Black, 1993; Mc Diarmid, 1993; Nyikos and Hashimoto, 1997; Tynjälä, 1998; Tynjälä, 1999; Wheatley, 1991; Wilson, 1997).

Suggestions provided by the students and the instructors for enhancing negotiation revealed that there was a need for learning activities in the classrooms for developing students' cooperative learning and communication skills and enhancing their social development. The literature also emphasized the importance of such activities in enhancing negotiation (Brett et al., 1997; Kroll and Black, 1993; Hassard, 1999; Mc Diarmid, 1993; Nyikos and Hashimoto, 1997; Simon and Schifter, 1993; Tynjälä, 1998). An instructor's suggestion for enabling on-line communication among the students was considered to be an effective way in the literature for enhancing negotiation and overcoming the limitations of the crowded classes (Brett et al., 1997; Bonstetter, 1998; Cognition and Technology Group, 1992).

5.1.1.6. Conclusions Related to Leadership

With respect to *instructors' leadership role*, student questionnaires revealed that the instructors **often** had the leadership qualities. Among all the leadership qualities, acting confidently ($x = 4.59$) was the one that the instructors always had as perceived by the students. The interviews revealed that both the students and the instructors mentioned the most frequently that the instructors were leaders, classroom managers and observers during students' microteaching.

The literature also emphasized that the constructivist teachers should be effective leaders, classroom managers and observers (Fisher et al., 1996, Marlowe and Page, 1998). Classroom management in constructivist classrooms are considered to be very important, but different from the one in traditional classrooms. In traditional classrooms the teacher is always on the stage trying to control the classroom. In constructivist classrooms, the instructor prefers to stand back and let students engage in activities (Airasian and Walsh, 1997; Hannafin and Land, 1997; Henriques, 1997; Stanbridge 1990, cited in Hendry, 1996, Windschitl, 1999) and to be an observer (Marlowe and Page, 1998). The constructivist teacher is not the sole authority in the classroom, does not manage the class through commanding or forcing the students. Management is indirect, emotional and mental (Dewey, 1916, cited in Erdem, 2001). The teacher is aware of

everything in the classroom and decides on the nature of the management considering the environment and the students (Marlowe and Page, 1998; Selley, 1999).

The interviews usually revealed that the instructors were constructivist classroom managers. However, the instructor's full control over everything in the class (as reported by three students) and telling students what to do or what to learn (as reported by a student and two instructors) were more consistent with traditional teacher roles rather than constructivist ones. An instructor also reported that she was unable to establish a balance between her role as an instructor and a friend and sometimes found herself too friendly.

The findings of the study with respect to instructors' leadership roles were usually consistent with the relevant literature. This literature emphasized that constructivist teachers were the initiators and the organizers of the activities (Airasian and Walsh, 1997; Cochran et al., 1993; Wood, 19950, cited in Biggs, 1996), were self-confident, and trusted in their students (Selley, 1999) and served models as eager learners, enthusiastic and competent teachers (Biggs, 1996). However, the instructor roles such as designing the course, assigning grades and monitoring student performance were the traditional roles rather than constructivist ones because the literature revealed that in constructivist classrooms, students took primary responsibility for determining the topics to be covered and the methods of how to learn and construct knowledge actively (Spiro and Jengh, 1990, cited in Hannafin and Land, 1997; Wilson, 1996) while the teacher encouraged and accepted student autonomy and initiative (Brooks and Brooks, 1993) and allowed students to use several cognitive strategies to gain control over their own learning such as self-monitoring and self-assessment (Dollard and Christensen, 1996). Moreover, the role of the teacher as the promoter of understanding rather than as the person assigning grades was emphasized (Crowther, 1997 and Tynjälä, 1999).

The interviews also revealed a difference in the students' and the instructors' views with regard to the instructors' roles as knowledge dispensers. 7.5 % of the students (n = 3) and an instructor mentioned the instructors' role as knowledge dispensers, teachers or lecturers, while 13.3 % of the instructors (n = 2) emphasized their roles as encouraging students to learn through their own efforts and sharing knowledge with them rather than teaching. The literature emphasized that a constructivist teacher did not transmit

knowledge or facts explicitly; rather, s/he assisted in the improvement of the performance and the construction of knowledge (Airasian and Walsh, 1997; Hannafin and Land, 1997; Henriques, 1997).

5.1.1.7. Conclusions Related to Empathy

With respect to *the instructors' empathetic roles*, the student questionnaires revealed that the students perceived the instructors to be **often** empathetic. All the interviewed students and the instructors except a student also perceived the instructors to assume empathetic roles in the classroom. The students mentioned the most frequently that the instructors were understanding, while the instructors mentioned the most frequently that they tried to put themselves in place of the students and to understand them and accepted and considered their ideas. A student thought that their instructor could not think like a student and be empathetic. The other empathetic qualities mentioned by the students and the instructors were also emphasized in the literature. The literature also indicated that the lecturer should empathize with students' difficulties and problems, accept and consider their points of view, listen to them attentively, answer their questions, realize when they don't understand things, show confidence in them and be patient (Biggs, 1996; Brooks and Brooks, 1993; Fisher, Taylor & Fraser, 1996). It was also striking to note that an instructor encouraged her students to be empathetic.

5.1.1.8. Conclusions Related to Support

With respect to *instructors' support for students' learning*, the student questionnaires indicated that the students perceived their instructors to be often supportive. In the interviews, both the students and the instructors mentioned the most frequently the instructors' roles as facilitators and guides. The students and the instructors who mentioned the instructors' role as guides said that guidance was flexible and encouraged independent learning while a student reported that the instructor guided the students in the way she wished. The literature asserted that in constructivist classrooms, the teacher should act as a guide and a facilitator through encouraging student autonomy and initiative and providing the students with the responsibility for their learning (Brooks and Brooks, 1993).

In addition to these, the instructors also mentioned the most frequently that they were positive in their approach to students, had good relationships with them and were stimulators or motivators. Majority of the other roles they mentioned were also consistent with the literature (Airasian and Walsh, 1997; Bednar, 1991; Bonnstetter et al., 1998; Brooks and Brooks, 1993; Cochran et al., 1993; Hannafin and Land, 1997; Kerka, 1997; Marlowe and Page, 1998; Wilson, 1996; Wood, 1995, cited in Biggs, 1996). The literature emphasized that a constructivist teacher was a motivator and a provider of the learning environment that would evoke students' interest and lead to knowledge construction, a co-explorer encouraging the learners to develop their thinking skills through thoughtful questions, and a human resource that students could apply when they needed. The literature also pointed out that the constructivist teacher informally assessed and provided regular feedback on students' performance, encouraged self-awareness in the knowledge construction process and collaboration among students as well as collaborating with them. A bit less than half of the interviewed students ($n = 16$, $P = 40\%$) and the instructors ($n = 6$, 40%) mentioned the instructors' encouraging roles in learning. The literature also emphasized that in constructivist terminology, *encouraging* rather than *teaching* was used more frequently because the individual development could not be forced (Selley, 1999).

A supportive teacher is mainly defined as the one showing friendship and concern to the students, helping them with their work and being patient and tolerant during the learning process (Fisher, Taylor and Fraser, 1996; Taylor and Maor, 2000). A great majority of the interviewed instructors ($n = 12$, $P = 80\%$) also mentioned that they were supportive because they were like parents, friendly, trustworthy, sincere, flexible, positive, benevolent, tolerant and nice to the students while 35% of the interviewed students ($n = 14$) mentioned instructors to be friendly.

However, the interviews revealed a few differences in views with regard to the instructors' relationship with the students. For example, 13.3% of the instructors ($n = 2$) stated that they were usually friendly although they sometimes could be angry with the students. Although an instructor thought that she had a good relationship with the students, half of her students that were interviewed did not think like that. These students stated that the instructor was formal and disciplined in the class and had distant relationships with them. Being formal and disciplined could be interpreted as the

characteristics of traditional teachers because traditional views of student-teacher relationship are characterized as distant, with the teacher as an authority figure (Waller, 1932, cited in Smerdon et al., 1999). One of the students also perceived their instructor to care about some students more compared to the others. The research findings revealed that instructors' nonegalitarian or differential treatment of the students affected students' perception of the classroom environment negatively (Babad, 1995; Lawrence and Jarrard, 1985).

In constructivist classrooms one of the major tasks of the teacher is to provide the students with a supportive, nonthreatening, safe and free environment which facilitates disclosure of students' constructions (Airasian and Walsh, 1997; Watts and Bentley, 1987, cited in Hendry, 1996). The informal talks made with the students in a class following the observation also revealed that students did not feel like making a contribution to their friends' microteaching because there was a stressful learning environment in the classroom.

There were also some differences in views in the interviews with respect to instructors' roles as feedback providers. Among the students ($n = 14$, $P = 35\%$) and the instructors ($n = 7$, $P = 46.7\%$) who mentioned this role, majority of them reported that the instructors' feedback was constructive. On the other hand, 5% of the students ($n = 2$) mentioned that the instructors were too critical in their feedback while 13.3% of the instructors ($n = 2$) stated that they were more critical this semester compared to the last semester. The literature suggested the teachers to be flexible, patient while providing a support for students' learning (Fisher, Taylor and Fraser, 1996; Taylor and Maor, 2000).

With respect to *suggestions for the instructor roles in the classroom*, majority of the interviewed instructors ($n = 11$, $P = 73.3\%$) reported that the roles they were assuming currently in the classroom were sufficient and effective whereas all the interviewed students made some suggestions for improving instructor roles. The suggestions provided by the students and the instructors in the interviews reflected both the current and desired roles assumed by the instructors in the classroom. Both suggestions reflected the roles of a constructivist teacher as a leader, an empathizer and a provider of cognitive and affective support for students' learning (Brooks and Brooks, 1993; Fisher et al., 1996; Marlowe and Page, 1998; Selley, 1999; Wilson, 1996) except the importance attached to

teaching or imparting knowledge mentioned by two students (Airasian and Walsh, 1997; Hannafin and Land, 1997; Henriques, 1997). It was also remarkable that the instructors usually emphasized their role for enhancing personal development both in and outside the classroom as the literature also emphasized (Foreman and Peck, 1994, cited in Fardouly, 2001; Simon and Schifter, 1993) while the students only emphasized the instructors' role in the classroom. 13.3 % of the instructors (n = 2) also emphasized the instructors' role for social development. Simon and Schifter's study (1993) also revealed that constructivist teaching promoted students' social development.

5.1.2. Conclusions Related to Usefulness of the Constructivist Learning Activities and Evaluation Strategies

In order to answer research question 2. "To what extent are the constructivist learning activities and evaluation strategies in ELT Methodology II courses useful?" and its subquestions, the data were collected through interviews with the students taking ELT Methodology II course and their instructors. In the following parts, the results related to the usefulness of constructivist learning activities and evaluation strategies as perceived by students and instructors are discussed.

5.1.2.1. Conclusions Related to Usefulness of the Constructivist Learning Activities

It is emphasized that constructivism is not a theory of learning, a prescription for teaching or a given set of particular practices (Airasian and Walsh, 1997; Bonnstetter et al., 1998; Fosnot 1993, cited in Brooks and Brooks, 1993; Marton and Booth, in press, cited in Biggs, 1996). Furthermore, in constructivist classrooms the question is not whether to use lecture or discussion, but how to use these techniques (Winschitl, 1999). Therefore, in order to decide on the extent to which current learning activities are constructivist, it is essential to mention their perceived usefulness by the students and the instructors.

With respect to *usefulness of current learning activities*, majority of the interviewed students (n = 34, P = 85 %) and instructors (n = 10, 66.7 %) reported that the learning activities were useful. The students usually mentioned the usefulness of specific learning activities whereas the instructors mentioned the usefulness of the learning activities as a

whole. The students mentioned the most frequently that microteaching, all the activities and discussions were useful. The effects of the learning activities on students' learning outcomes reported by the students and the instructors are summarized below:

- learning by doing or experiencing
- application of what has been learnt in relevant contexts
- establishing a link between theory and practice
- enjoyment of learning and motivation to learn more
- development of higher order thinking skills, especially creative and reflective thinking skills
- conceptual development and change
- feeling more competent and confident in teaching
- gaining ownership of learning through student-centered activities
- facilitating students' learning with diverse learning styles
- development of oral and written communication skills and negotiation
- permanence in learning and remembering what has been learnt easily
- establishing relevance between what has been learnt in the course and teaching profession
- increase in students' consciousness and awareness
- development of classroom management skills
- promoting affective learning and personal development as well as cognitive learning

The results of the interviews were consistent with the literature in this sense because the literature also confirmed that constructivist learning activities yielded the learning outcomes or effects mentioned above (Abdal- Haqq, 1993; Biggs, 1996; Brett et al., 1997; Brooks and Brooks, 1993; Caprio,1990, cited in Henriques, 1997; Clements and Battista, 1990; Cobb et al., 1991; Condon et al., 1993; Demirel et al., 2000; Dewey, 1938, cited in Rainer and Guyton, 1994, Duncan, 1999; Foreman and Peck, 1994, cited in Fardouly, 2001; Hand et al., 1991; Hands and Peterson, 1995; Hassard, 1999; Hewson, 1999; Hendry, 1996; Jonassen, 1991; Kavcar et al., 1999; Kroll and Black, 1993; Marlowe and Page, 1998; Martin, 1996; Mc Diarmid, 1993; Nyikos and Hashimoto, 1997; Richardson, 1997; Simon and Schifter, 1991; Simon and Schifter, 1993; Stofflett,

1994; Tetenbaum and Mulkeen, 1989; Tetenbaum et al., 2001; Thomaz and Gilbert, 1989; Tynjälä, 1998, Tynjälä, 1999; Wilson, 1996; Windschitl, 1999).

13.3 % of the instructors (n = 2) and 5 % of the students (n = 2) thought that lecturing was useful. The instructors thought that lecturing was useful because it was interactive and encouraged student participation and development while the students reported that lectures contributed to success in the exam and dictation during lectures was a good summary of the lesson. The literature suggested that when information was acquired through transmission models, it was often used only for formal academic occasions such as exams (Cannella and Reiff, 1994, cited in Abdal-Haqq, 1998). Students' perception of usefulness of lecturing based on transmission of knowledge and dictation were consistent with the literature pointing out that such techniques were effective for promoting knowledge acquisition in traditional classrooms (Hannafin and Land, 1997). However, interactive lectures promoted constructivist learning (Fardouly, 2001).

With respect to *the learning activities that were not perceived to be useful*, the interviews also revealed a few differences in views. For example, a student pointed out that they could not develop their speaking skills because lack of enough opportunity to speak in class although majority of his interviewed classmates emphasized that communicative activities were among the most frequent activities in the classroom. Another student thought that lecturing was not useful because it was teacher-centered while her classmates and their instructor thought that they were student-centered. This result was consistent with the research findings revealing that students perceived the activities more effective if they were student-centered (Condon et al., 1993; Demirel et al., 2000; Wilson, 1996).

The interviews also revealed that the instructors in one of the universities (n = 8, 53.3 %) were more critical compared to the other instructors and to the students. In general, majority of the instructors (n = 10, 66.7 %) considered crowded classes and inadequate course hours as barriers to more effective instruction. The literature also emphasized that time limitations and crowded classes presented a major threat to constructivist learning (Airasian and Walsh, 1997; Christianson and Fisher, 1999; Erdem, 2001; Fardouly, 2001; Hendry, 1996; Perkins, 1991; Windschitl, 1999).

In addition to these, the instructors mentioned the factors related to the instructors such as lack of experience, course load and time limitations for developing oneself and the factors related to the students such as lack of motivation and unawareness of the relevant sources in ELT affecting the perceived usefulness of the courses. On the other hand, an instructor stated that the students' and the instructors' background affected the quality of the course positively. The research studies also revealed that student characteristics and teachers' professional and personal qualifications affected the nature of instruction (Newman et al., 1996; Raudenbush et al., 1993; Smerdon et al., 1999).

The instructors also emphasized that lack of authentic contexts for students' teaching practice, that is not teaching in real classrooms also affected the usefulness of microteaching. Observations of students' microteaching also revealed that since there was not an authentic learning environment in the classroom, the students did not really have the opportunity to assess their effectiveness as teachers for the most of the time and therefore, they did not have difficulty in teaching and managing the classrooms. Simulated learning environment provided by the students seemed to have a limited effect. On the other hand, a student thought that the simulated classroom environment enhanced the effectiveness of teaching practice. The literature also emphasized the importance of providing authentic contexts for learning and teaching experiences with all their complexities and richness (Andrew and Isaacs, 1995, cited in Fardouly, 2001; Lortie 1975, cited in Hassard, 1999; Wilson, 1996).

An instructor also emphasized that she did not approve of the standardization of the course, that is covering the same material in the same period of time in all the classes because the pace of each instructor and motivation of each class were different from each other. Her view was in line with the literature emphasizing the importance of variety for facilitating learning. It was asserted that identifying a single objective for all the students to achieve could undermine construction of knowledge because each learner was different from each other (Varış, 1996).

A student and three instructors (20 %) also mentioned that the coursebook was not useful in some aspects. The instructors stated that in order to make up for its weaknesses, they supplemented the coursebook with additional articles, modified or skipped some of its parts. The literature also asserted that constructivist instruction did not depend heavily

on textbooks for the structure of the course, but a variety of resources (Caprio, 1994, cited in Henriques, 1997; Fardouly, 2001).

An instructor also mentioned limited physical facilities such as buildings and classrooms and technical facilities such as the use of videos and computers as one of the negative aspects of the course. On the contrary, in constructivist classrooms learning is facilitated through technological support and a comfortable physical environment (Alkan et al., 1995, 2001; Cognition and Technology Group, 1992; Fardouly, 2001; Jonassen et al., 1999; Mannikkö and Fahreus, 1997; Marlowe and Page, 1998; Perkins, 1991; Wilson, 1996).

With respect to *suggestions for improving the current learning activities*, majority of the interviewed instructors ($n = 10$, $P = 66.7\%$) desired more class hours and less class size. The suggestions made both by the students and the instructors were microteaching in real classroom environments, more microteaching practices and teaching students to use audio visuals effectively. When the suggestions concerning learning activities as a whole were examined, it could be said that both the students and the instructors desired to have constructivist learning activities or practices in the classroom supported by various learning aids and resources. Moreover, their suggestions were directly related to the negative or missing aspects of the current learning activities or practices. One of the instructors especially emphasized that student learning could be enhanced outside the classroom as well as within the confines of the classroom. Martha and Deborah (2000) also suggested that constructivist learning did not only occur in the classroom, but also outside the classroom through experiencing.

Among the suggestions, earlier macro teaching was striking. The literature also supported that early, continuous and authentic field experience resulted in improvement in teaching skills and constructivist learning outcomes (Bonnstetter, 1998; Cochran et al., 1993; Ferguson, 1999; Mc Diarmid, 1993). Another suggestion by an instructor for making a written code of contact with the students seemed to be a behavioral technique. Nevertheless, Dollard and Christensen (1996) asserted that when implemented properly, contingency contracting could be used in constructivist classrooms because it could build students' skills at managing their own behavior by giving them the control through collaborative arrangement with the teacher.

5.1.2.2. Conclusions Related to Usefulness of the Constructivist Evaluation Strategies

With respect to *the usefulness of current evaluation strategies*, the interviews revealed that majority of the students ($n = 25$, $P = 62.5 \%$) and the instructors ($n = 11$, $P = 73.3 \%$) found them to be useful as a whole. The students mentioned the most frequently that evaluation of microteaching rather than written exams, feedback sessions and evaluation both through written and oral exams were useful. In addition to these aspects, the instructors also mentioned student evaluation in all method courses by the same instructors, informal course evaluation and written exams as useful evaluation strategies.

It could be inferred from the interviews that majority of the students and the instructors found the constructivist evaluation strategies to be more useful. In this sense the results were consistent with the literature (Airasian and Walsh, 1997; Bednar, 1991; Biggs, 1996; Brooks and Brooks, 1993; Farr, 1992, cited in Mohktari et al., 1996; Jonassen, 1991; Martha and Deborah 2000; Tynjälä, 1998, Tynjälä, 1999; Yackel et al., 1992, cited in Hendry, 1996; Wilson, 1995; Windschitl, 1999). The literature also emphasized that multiple modes of evaluation techniques involving both evaluation of students' written work and performance at work through observation were constructivist evaluation strategies. Moreover, constructivist evaluation strategies emphasize the learning process rather than the product at the end. The focus of constructivist assessment is development of understanding and skills rather than knowledge acquisition. Therefore, informal assessment such as regular and extensive feedback that is not based on grades and memorization are favored over formal assessment.

The results also revealed a few disagreements between the views of the students and the instructors with regard to the usefulness of the written exams. About half of the interviewed instructors ($n = 8$, $P = 53.3 \%$) perceived the written exams to be useful because they assessed both practical and theoretical knowledge and higher thinking skills. In contrast, 15 % of the students ($n = 6$) thought that written exams were not useful because they only evaluated students' theoretical background, were not objective and fair, did not reflect what the students learnt effectively, led the students to memorize the course material rather than to learn it and had greater weight in evaluation compared to the other evaluation strategies. 13.3 % of the instructors ($n = 2$) mentioned multiple

choice question parts, the same questions asked to all classes and lack of authenticity to be the negative aspects of the written exams.

The literature suggested that student performance should not be evaluated through an exam at the end of the course because traditional exams often led students to adopt a surface approach to learning and attempt to memorize the material instead of trying to understand it. Furthermore, traditional exams are not able to identify the actual changes in students (Airasian and Walsh, 1997; Farr, 1992, cited in Mohktari et al., 1996). In contrast, constructivist evaluation strategies assess higher-order thinking, construction of knowledge and ability to apply the knowledge in flexible contexts. In this sense, the multiple choice and short-answer tests can only measure knowledge and comprehension in Bloom's taxonomy but not higher thinking skills (Biggs, 1996; Martha and Deborah, 2000). However, essay exams and term-papers rather than standardized tests could be used to assess constructivist learning (Gergen, 1994, cited in Akar, 2001).

With regard to objectivity of evaluation, 5 % of the students (n = 2) stated that evaluation was objective while 7.5 % of the students (n = 3) stated that evaluation was not objective and fair and there was inconsistency among the evaluation of ELT instructors. The literature emphasized that it was not easy to be objective for a constructivist teacher considering the flexibility in evaluation standards because s/he faced the conflict between emphasizing the relative truthfulness of students' construction and its meaningfulness for the student during evaluation. For overcoming this drawback, it was suggested that evaluation criteria should be identified through consensus between the students and their instructor (Airasian and Walsh, 1997; Reeves and Okey, 1996; Windschitl, 1999). An instructor also stated that they were legally obliged to give written exams. Such as an 'imposition above' as put forward by Dewey (1938, cited in Rainier and Guyton, 1994) could be interpreted as one of the major characteristics of traditional education systems.

With respect to *the negative aspects of the current evaluation strategies*, it was remarkable to note that the students were more critical of the current evaluation strategies compared to the instructors, but the instructors provided more suggestions for improvement. Instructor feedback, peer evaluation and formal course evaluation were not considered to be useful by a student and 20 % of the instructors (n = 3). The literature

also emphasized the importance of informal assessments in constructivist classrooms (Bednar, 1991; Biggs, 1996; Jonassen, 1991; Tynjala, 1998, 1999; Yackel et al., 1992, cited in Hendry, 1996). Therefore, the informal assessment procedures needed to be improved. Nonetheless, the desire for more error correction by an instructor could be interpreted as the characteristics of traditional teachers because in constructivist classrooms self-monitoring strategies for enabling the students to gain control over their doings are adopted rather than correction of student mistakes directly by the teacher (Airasian and Walsh, 1997; Cochran et al., 1993; Dollard and Christensen, 1996).

In addition, 12.5 % of the students (n = 5) emphasized that their class participation and personal characteristics were not considered in evaluation. The literature indicated that since constructivist classrooms were student-centered, what students were doing in the process of learning should be evaluated rather than what the teacher taught (Biggs, 1996). 7.5 % of the students (n = 3) perceived the crowded classes and time limitations as the factors preventing the use of more effective evaluation strategies by the instructor. The literature also emphasized the importance of time and less crowded classes because the constructivist evaluation was a difficult and complex process and required much of the teacher (Airasian and Walsh, 1997; Erdem, 2001; Fardouly, 2001; Mc Laughlin and Talbert's study (1993, cited in Smerdon et al., 1999; Perkins, 1991; Windschitl, 1999).

It was also interesting that a student found the current evaluation strategies sufficient because he was not aware of any other evaluation techniques in his previous school life. This could also be interpreted as one of the characteristics of the traditional evaluation strategies based on a single or a few evaluation techniques compared to constructivist ones based on multiple modes of evaluation (Airasian and Walsh, 1997; Farr, 1992, cited in Mohktari et al., 1996). Too much evaluation which 10 % of the students (n = 4) complained about could also be considered as one of the side effects of constructivist evaluation.

With regard to *suggestions for improving current evaluation strategies*, the interviews revealed that majority of the students and the instructors desired constructivist evaluation techniques or practices more compared to the traditional ones. The suggestions reflected the participants' desire for the improvement of the negative aspects mentioned before. However, the suggestions made by the students and the instructors were different from

each other except the desire for evaluation of students' oral and written work rather than evaluation through written exams. Moreover, 5 % of the students (n = 2) reported that they wanted to have less exams and homework whereas a student stated that she desired to have more exams. The desire of a student for getting better grades in order to be motivated could be interpreted as the emphasis put on the grades in evaluation rather than personal development. The literature suggested that constructivist assessment techniques urged intrinsic motivation and students getting constructivist instruction were less ego-involved and less extrinsically motivated (Cobb et al., 1991; Reeves and Okey, 1996).

In addition to the improvement of current evaluation strategies, alternative evaluation strategies suggested by the instructors such as student evaluation by a panel of evaluators, rather than a single one (Jonassen, 1991), authentic assessment, portfolio assessment, assessment based on problem-solving, technology-assisted assessment (Bednar et al., 1992; Cates, 1992, cited in Bednar, 1991; Jonassen, 1991; Jonassen et al., 1999; Reeves and Okey, 1996; Windschitl, 1999) were in line with the constructivist evaluation strategies mentioned in the literature.

5.1.3. Conclusions Related to Conceptions of Learning and Teaching

In order to answer research question 3. “To what extent do the students and the instructors in ELT Methodology II courses hold constructivist conceptions of learning and teaching?” and its subquestions, the data were collected through the questionnaires administered to the students taking ELT Methodology II course and the interviews conducted with the students and their instructors. The questionnaires revealed that majority of the students held Constructivist conceptions of learning and Behaviorist conceptions of teaching. The interviews indicated that both the students and the instructors had Cognitivist conceptions of learning. On the other hand, the students were Behaviorist in their conceptions of teaching while the instructors were Constructivist.

It was remarkable that the instructors were more constructivist in their conceptions of teaching compared to the students. This could be attributed to the instructors' proficiency in subject matter knowledge and teaching experience and hence being more aware of contemporary trends in learning and teaching. With regard to the effects of subject matter knowledge and teaching experience on teachers' conceptions and teaching practices, the

literature revealed inconsistent results. Mc Laughlin and Talbert's study (1993, cited in Smerdon et al., 1999) indicated that the teachers with limited subject matter knowledge were less flexible in the type of instruction they used and were more likely to adopt and employ didactic teaching methods. On the other hand, Hashwesh (1996) reported that teachers' conceptions of learning and teaching were not related to their years of schooling, teaching experience, the level at which they were teaching and their specialization.

The students' preference for Behaviorist conceptions of teaching rather than Constructivist ones may reflect the effect of their previous school experience in which traditional teaching practices were more common as the students and the instructors also emphasized for a number of times during the interviews. This was consistent with the research findings revealing that students' conceptions were affected by the instruction or education they received (Hand et al., 1991; Hewson et al., 1999; Mc Diarmid, 1993; Simon and Schifter, 1993; Stofflett, 1994; Thomaz and Gilbert, 1989).

Furthermore, since the principles of constructivism could be considered as a combination of cognitivist and humanistic approaches with its emphasis on cognitive, personal and social development (Airasian and Walsh, 1997; Bonstetter, 1998; Richardson, 1997; Vadeboncoeur, 1997), the students and the instructors seemed to adopt the cognitivist aspect of constructivist approach more compared to its humanistic aspect. This may be because both the students and the instructors were exposed to or practiced humanistic learning activities less compared to the cognitivist ones in their previous school experiences.

Another point was that a few students and instructors declared their preference for more than one conception. This may signify their preference for eclectic approach in learning and teaching rather than depending on a single approach.

5.1.4. Conclusions Related to Difference in Students' Perception of Constructivist Classroom Characteristics According to Certain Variables

In order to answer research question 4. "Do the constructivist classroom characteristics perceived by the students in ELT Methodology II courses differ

according to **certain variables?**”, the data, collected through questionnaires administered to the students taking ELT Methodology II course, was analyzed using one-way ANOVA. The results revealed that students’ perception of constructivist classroom characteristics differed significantly from each other ($p < .05$). The students from METU ($x = 3.69$) and Gazi University ($x = 3.68$) perceived the classroom characteristics to be more constructivist than the students from Dicle University ($x = 3.33$). Further analysis of the subdimensions of the classrooms revealed that there was a significant difference in all subdimensions except in **Negotiation**. In 5 of the 8 subdimensions the highest mean scores belonged to METU students while in 7 subdimensions the lowest mean scores belonged to the students from Dicle University.

While selecting the universities included in the study, the percentile ranks of the ELT departments in the universities in the latest university entrance exam were considered. The results indicated that percentile ranks of the departments may be considered as good indicators for revealing the difference in perception of classroom characteristics. except for negotiation among students. The difference in perceptions may also be attributed to the unique characteristics of the universities and their effects on classroom characteristics. The study conducted by Raudenbush et al. (1993) also revealed that systematic structural and organizational variations among different school levels influenced instructional goals and practices. Since there was no adequate relevant literature related to the potential reasons for the differences in perception of classroom characteristics across universities, this issue should be further analyzed.

The study revealed no significant differences in students’ perception of constructivist classroom according to sex and type of high school the students graduated from. However, students’ perception differed in **Evaluation** according to sex in favor of female students and according to type of high school in favor of the graduates of Anatolian Teacher HS. In addition, the graduates of other schools were more positive with regard to the contribution of the course to development reflective thinking skills compared to the graduates of Anatolian Teacher HS.

Students’ perception of constructivist classroom characteristics differed according to the expected average score received from the course ($p < .05$). The students with the expected average scores of 80-100 ($x = 3.76$) perceived classroom characteristics to be

more constructivist compared to the students with average scores of 0-69 ($x = 3.47$). In all subdimensions except in **Reflective Thinking**, students' perceptions differed from each other and the students with average scores of 80-100 had the highest mean scores. In 5 out of 8 subdimensions the students with average scores of 0-69 had the lowest mean scores while in three subdimensions (**Leadership, Empathy and Support**), the students with average scores of 70-100 had the lowest mean scores indicating that these students perceived the instructors' roles in the classroom to be less constructivist.

Finally, students' perception differed according to perceived competency in English ($p < .05$). The students who perceived their English to be "very good" ($x = 3.67$) perceived the classroom characteristics to be more constructivist compared to the students who perceived it "average" ($x = 3.38$). In **Reflective Thinking** and **Leadership**, there were no significant differences between the students' perceptions. In the rest of the subdimensions, there were significant differences in the mean scores of the students in favor of the students who perceived their English to be "very good".

The research studies related to the effects of student characteristics on the classroom environment were few and as far as the researcher could reach and the existing studies revealed conflicting results. They usually indicated that teachers' beliefs about students' characteristics affected their instructional choices (Newman et al., 1996; Raudenbush et al., 1993; Smerdon et al., 1999). Therefore, it could be inferred from the results of the study that the instructors' belief about students' capacity and competency may have affected the classroom characteristics. In other words, the instructors who perceived their students to be successful and competent in English may have preferred constructivist learning activities and evaluation strategies more, compared to the ones who did not perceive their students to be like that. Kesal's study (1996) also revealed that high achievers perceived the classroom characteristics more positively compared to the low achievers and students' perceptions did not differ according to sex. However, unlike the present study, in that study it was found out that students' perceptions differed according to the type of school they were attending.

Moreover, it could be inferred from the results of the study that the students who were from ELT departments with higher percentile ranks in the university exam expected to get higher average scores from the course and perceived themselves to be more competent in

English. Therefore, perception of classroom characteristics according to universities, expected average scores and competency in English could be interrelated to each other.

5.2. Implications

Based on the results of the study and the relevant literature, the implications for improving ELT Methodology courses and future research are provided in the following parts.

5.2.1. Implications for Improving ELT Methodology Courses

This part presents the implications for improving ELT Methodology courses to make them more constructivist in nature including the implications for learning activities and experiences, evaluation strategies and instructor roles.

Implications for Learning Activities and Experiences

1. The students should be acquainted with alternative learning activities such as journal writing, keeping portfolios, case studies and drama that are not frequently used in the classrooms.
2. The learning activities should be student-centered and encourage creative and critical thinking and independent learning.
3. The time allocated to lecturing should be reduced and lecturing should be supported with such activities as discussions, cooperative work and student presentations more.
4. Like lecturing, question and answer techniques should also be made more interactive and evoke higher-order thinking rather than requiring a single and a correct answer. Such techniques as fill-in-the-blanks and dictation should be replaced by the activities which encourage the students to use their higher-order thinking.
5. Students should have more microteaching practices. Moreover, not only in Methodology courses, but also in all courses the students should have the opportunity to make presentations.
6. The students should have the opportunity to observe and practice teaching in real classroom during ELT Methodology II courses.

7. ELT Methodology courses should be improved through receiving feedback from the students related to their teaching experience in the practicum course.
8. Macroteaching practice, that is teaching in real classroom environments, should start earlier.
9. Classroom management during microteaching should be emphasized by the instructors more. However, the prospective teachers should develop an understanding of constructivist classroom management based on managing the classroom through engaging students in the tasks that arouse their interest rather than through forcing them (Dewey, 1916, cited in Erdem, 2001; Marlowe and Page, 1998).
10. Students should have more opportunity for using various learning aids such as materials and audio visuals in their microteaching.
11. Students should practice more developing their own materials or adapting the current ones considering the probable limitations of teaching conditions or classrooms.
12. Coursebooks should be supplemented more by the instructors with a variety of materials and resources such as supplementary textbooks, articles, handouts and so on.
13. Students should have more opportunity to improve their oral communication skills in various courses.
14. Physical and technical facilities of the ELT departments should be improved.
15. The courses should be designed flexibly with regard to its objectives, content and evaluation strategies considering the characteristics of the students and the instructors in each classroom.
16. Negotiation among the instructors teaching the course should be maintained and students' suggestions for improving the learning activities should be considered more.
17. Instructors' work load and the class size should be decreased while their office hours and the class hours of ELT Methodology courses should be increased.
18. Low achievers and the students who are not competent in English should be provided by constructivist learning activities and evaluation strategies more.
19. Students should have more experience in teaching literature or using it in teaching so that they can perceive literature courses more relevant to teaching profession.
20. Students should practice using and improving their higher-order thinking skills, especially reflective and creative thinking through relevant learning activities.

21. Students should have more opportunity for analyzing and criticizing their previous school experiences and thinking over how to improve the present conditions in the schools.
22. Students should practice questioning their previous conceptions of learning and teaching and challenging them through various learning activities.
23. In order to enhance negotiation, cooperation rather than competition among the students and the learning activities requiring cooperative work such as group or pair work, discussions, group projects and so on should be emphasized more.
24. To promote negotiation, on-line communication among the students and between the students and the instructor could be arranged.
25. Students should have more opportunities to take part in social activities to improve themselves and to come together with their classmates outside the classroom..

Implications for Evaluation Strategies

1. Written exams should be replaced or supplemented by more meaningful evaluation techniques such as term-papers, reports, projects, assignments and portfolio assessment.
2. In order to assess students' higher thinking skills through written exams, essay exams based on problem-solving and application of the knowledge in concrete cases should be given rather than multiple choice tests or exams with short answers assessing lower level thinking skills.
3. The instructors should be less grade-oriented and emphasize the process of learning rather than the achievement at the end of the course.
4. Assessment of oral performance through microteaching should have a greater weight in evaluation compared to written exams.
5. Students' performance could be evaluated through negotiation of the instructors teaching the course or the criteria and methods for evaluation can be decided through negotiation between the students and the instructors.
6. Students should take part more in evaluating their own and peers' performance.
7. Students should take part more in evaluating the course and their instructor. The evaluation should be done informally rather than through official forms.

8. Students' class participation in addition to their cognitive and affective characteristics including their abilities, capacities, motivation, interest, personality and so on should be considered in evaluation more.
9. Students' social development such as their ability to work cooperatively, negotiate ideas and so on should also be considered in evaluation.

Implications for Instructor Roles

1. Instructors should be able to establish a balance in their classroom management and relationship with their students. In other words, they should be neither authority figures for the students nor too familiar with them.
2. Instructors should be able to think like students and to understand their points of view for empathizing with them effectively.
3. Instructors should leave their roles as lecturers and knowledge dispensers and should be facilitators and guides in students' learning. They should encourage the students to learn through searching, discovery and depending on their friends rather than depending on them.
4. Instructors should provide more freedom, autonomy and responsibility for students' learning.
5. Instructors should be models of effective teachers and learners for the students. However, they should not expect the students to imitate themselves, but encourage them to develop their own way in teaching and learning.
6. Instructors should provide a learning environment for the students that is free from stress and relaxed for supporting students' learning.
7. Instructors should be more tolerant towards students' mistakes emphasizing that making mistakes is natural in learning process.
8. Instructors should regard the learner differences and design the learning activities in a way to address the students with diverse learning styles. .
9. Instructors should contribute to students' social development to prepare them for their future life as well as contributing to their personal and cognitive development.
10. Instructors should have more opportunities and time to develop themselves professionally through in-service-training programs.

5.2.2. Implications for Research

1. In future studies, constructivist classroom characteristics could be assessed through observation of the classes over a more extended period of time including multiple observers. Moreover, in a similar study, the classes could also be observed before the students start doing microteaching; that is, at the period when the students receive instruction on teaching skills.
2. In future studies, more qualitative data collection and analysis could be conducted through analysis of documents such as students' journals, portfolios, home assignments, lesson plans and so on.
3. More survey studies on constructivist classroom characteristics should be conducted at the different levels of education, fields and courses in Turkish schools.
4. More experimental studies could be conducted to compare the relative effectiveness of constructivist and traditional learning environments with regard to their contribution to students' learning outcomes and conceptual change in learning and teaching. In such studies, the effect of some student characteristics (e.g. sex, achievement, perceived competency in the course) and instructor characteristics (e.g. sex, teaching experience, and perceived competency in the subject matter and teaching skills) on the results of the study could also be explored.
5. A longitudinal study could be conducted to analyze the differences in students' teaching competency and conceptions of learning and teaching before and after taking method courses. Student teachers' instructional practices in their first years of teaching could also be explored to find out to what extent they are constructivist and why.
6. The questionnaire which was used by the researcher in this study could be used in similar studies through adapting or revising it for the purpose of the particular studies so that its validity and reliability could be further assessed.

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APPENDICES

APPENDIX A

CHARACTERISTICS OF CONSTRUCTIVIST CLASSROOMS

The constructivist classrooms designed to train the teacher candidates mainly have the following characteristics:

1) Learning Activities

- The time allocated to lecturing is reduced to allow more time for group-based teaching and self-directed learning and lectures are made interactive through the use of small group activities (Gibbs and Habeshaw, 1989, Newble and Cannon, 1989).
- Learning activities to facilitate learning include journal writing, collaborative learning (group work or pair work), student presentations / performances, teaching practice, peer teaching, preparing portfolios, role-playing, simulation, dramatization, individual or group projects, whole class or group discussion, problem- or case-based learning, library research, discovery learning, developing concept maps or diagrams and learning activities which require the students to use creative thinking skills (Andrew and Issacs, 1995; Casey and Howson 1993; Crowther, 1997; Rainier and Guyton, 1994; Tynjälä, 1999; Wilson, 1997).
- Students are provided with multiple modes of representation such as video, computer, books, photographs and so on to enrich learning experiences (Wilson, 1996).
- Students take part in planning the learning activities (Wilson, 1996).

2) Evaluation

- Students' performance are not evaluated through traditional exams such as multiple choice and short-answer tests (Airasian and Walsh, 1997; Biggs, 1996; Farr, cited in Mohktari et al., 1996; Martha and Deborah, 2000; Wilson, 1995; Windschitl, 1999).
- Students' written performance is evaluated through essay exams, term-papers (Gergen, 1994, cited in Akar, 2001) research reports, projects, journals and portfolios (Cates, 1992; Wilson, 1995; Windschitl, 1999).
- Students' oral performance (discussions, presentations, group work, microteaching etc.) is evaluated informally, that is through teacher observation (Collins and Brown, 1982; Wilson, 1995; Windschitl, 1999).
- Students are provided with regular feedback on their performance (Hannafin and Land, 1997; Kerka, 1997; Lajoie & Lesgold, 1992).
- Students' development during the learning process rather than the learning product is evaluated (Biggs, 1996; Jonassen, 1991; Tynjälä, 1998, 1999; Yackel et al., 1992, cited in Hendry, 1996).
- Alternative evaluation strategies such as self-evaluation, peer evaluation are used (Biggs, 1996; Jonassen, 1991).
- Students are engaged in critical course evaluation and evaluation of the efficacy of the teacher as a promoter of understanding (Crowther, 1997; Tynjälä, 1999).
- Students take part in determining strategies for evaluation (Airasian and Walsh, 1998; Windschitl, 1999).

3) Professional Relevance

- Students should perceive their learning relevant to their prospective profession and aspirations and should be able to relate their learning with what they previously learnt (Fisher et al., 1996; Maor, 1997; Taylor, 1995; Taylor et al., 1995; Taylor and Maor, 2000).

4) Reflective Thinking

- Students should have the opportunity to reflect critically on background knowledge, new ideas and one's own learning experiences (Fisher et al., 1996; Maor, 1997; Taylor, 1995; Taylor et al., 1995; Taylor and Maor, 2000).

5) Negotiation

- Students should have the opportunity to communicate ideas with other students through cooperative and collaborative work. (Fisher et al., 1996; Maor, 1997; Taylor, 1995; Taylor et al., 1995; Taylor and Maor, 2000).

6) Leadership

- The instructor should be an effective leader and organize, initiate and manage the classroom activities effectively (Fisher et al., 1996).
- The instructor should be enthusiastic about teaching and act confidently (Fisher et al., 1996).
- The instructor should teach effectively (Fisher et al., 1996).

7) Empathy

- The instructor should trust the students (Fisher et al., 1996).
- The instructor should understand students' difficulties and expectations (Fisher et al., 1996).
- The instructor should listen to the students attentively and be patient (Fisher et al., 1996).
- The instructor should accept students' ideas or points of view (Fisher et al., 1996).

8) Support

- The instructor should help students with their work (Fisher et al., 1996; Taylor and Maor, 2000).

- The instructor should show the students friendship and concern (Fisher et al., 1996; Taylor and Maor, 2000).
- The instructor should be someone that students can depend on (Fisher et al., 1996; Taylor and Maor, 2000).
- The instructor should provide a learning environment for the students that facilitates learning (Fisher, et al., 1996; Taylor and Maor, 2000).

9) Constructivist Conception of Learning

In constructivist classrooms students acquire a conception of learning which favor construction of knowledge construction of knowledge as a result of students' own activities and interaction with the environment (Andrews and Isaacs, 1995, cited in Fardouly, 2001; Dana et al., 1997).

10) Constructivist Conception of Teaching

In constructivist classrooms students acquire a conception of teaching based on facilitating knowledge construction process and guidance in learning (Andrews and Isaacs, 1995, cited in Fardouly, 2001; Dana et al., 1997).

APPENDIX B

QUESTIONNAIRE FOR STUDENTS

OLUŐTURMACI SINIF ÖZELİKLERİ ANKETİ (Öğrenci versiyonu)

Sevgili Öğrenciler,

Bu anket Eğitim Fakültesi İngilizce Öğretmenliği bölümlerinde verilen *Özel Öğretim Yöntemleri II (ELT Methodology II)* dersini çeşitli boyutlarıyla incelemek amacıyla hazırlanmıştır. Sizden istenilen, ankette yer alan her maddeyi dikkatle okuyarak, size en uygun seçeneği işaretlemenizdir. Lütfen boş madde bırakmayınız. Ankete geçmeden önce kutu içindeki bilgileri eksiksiz yanıtlayınız. Adınızı yazmanız gerekmektedir. Anketteki bilgiler sadece araştırma amacıyla kullanılacaktır. Katkılarınızdan dolayı şimdiden teşekkür ederim.

Fusun Kesal

ODTÜ Eğitim Bilimleri

Doktora Öğrencisi

1. Cinsiyetiniz: ☐ Kız ☐ Erkek
2. Üniversiteniz _____.
3. Bu dersten almayı beklediğiniz ortalama not (100 üzerinden) _____.
4. Mezun olduğunuz okul
 ☐ Anadolu Lisesi
 ☐ Anadolu Öğretmen Lisesi
 ☐ Devlet Lisesi
 ☐ Özel okul / Kolej
 ☐ Diğer (Lütfen belirtiniz) _____.
5. İngilizce düzeyiniz sizce ne derece iyi ?
 ☐ İyi değil
 ☐ Orta
 ☐ İyi
 ☐ Çok İyi

1-8. bölümlerde aşağıda verilen anahtara göre size uygun gelen seçeneğe ait boş kutuya **çarpı (X)** koyarak yanıtınızı veriniz.

HER (Her zaman) **S** (Sık sık) **B** (Bazen) **N** (Nadiren) **HİÇ** (Hiçbir zaman)

1) Öğrenme Etkinlikleri	HER	S	B	N	HİÇ
Bu derste ...					
1) öğretim elemanı ders anlatır.					
2) öğrendiklerimizle ilgili deneyimlerimizi yazmak için günlük (journal) tutarız.					
3) işbirliğine dayalı çalışmalar (grup çalışmaları veya ikili çalışmalar) yaparız.					
4) öğretmenlik deneyimini yaşamak amacıyla sunum (presentation) yaparız.					
5) ders konularını öğrenmede birbirimize yardımcı oluruz.					
6) gelişim dosyası (portfolio) hazırlarız.					
7) değişik öğretim tekniklerini (rol oynama, drama, simulation vs.) kullanırız.					
8) bireysel projeler yaparız.					
9) grup projeleri yaparız.					
10) dersle ilgili çeşitli konularda tartışmalar yaparız.					
11) okullarda yaşanabilecek problemlerle ilgili örnek olayları inceleyip çözümlemeye çalışırız.					
12) dersle ilgili çeşitli konularda araştırma yaparız.					
13) yeni konuları kendimiz keşfederek öğreniriz.					
14) yaratıcı düşünmeyi geliştiren etkinlikler yaparız.					
15) şemalar (kavram haritaları, diyagramlar vs.) geliştiririz.					
16) çeşitli araç gereçler (bilgisayar, tepegöz, video vs.) kullanırız.					
17) ders kitabıyla birlikte çeşitli materyaller (kitaplar, resimler, gerçek nesneler vs.) kullanırız.					
18) öğrenme etkinliklerinin belirlenmesine ve planlanmasına katkıda bulunuruz.					
19) Diğer (Lütfen belirtiniz) : _____.					

HER (Her zaman) **S** (Sık sık) **B** (Bazen) **N** (Nadiren) **HİÇ** (Hiçbir zaman)

2) Değerlendirme	HER	S	B	N	HİÇ
Bu derste ...					
1) öğrenciler sınavlar (yazılı sınav veya test) ile değerlendirilmektedir.					
2) öğrencilerin yazılı çalışmaları (araştırma raporları, projeler, günlük, portfolio vs.) değerlendirilmektedir.					
3) öğretim elemanı öğrencilerin sözlü performansını (tartışma, sunum, grup çalışması, mikro öğretim vs.) gözlemleyerek değerlendirmektedir.					
4) öğretim elemanı öğrencilere gelişimleri hakkında düzenli olarak bilgi (feedback) vermektedir.					
5) öğrenciler değerlendirilirken öğrenme sürecinde gösterdikleri gelişme dikkate alınmaktadır.					
6) öğrenciler kendi kendilerini değerlendirmektedirler.					
7) öğrenciler sınıf arkadaşlarının performansını değerlendirmektedirler.					
8) öğrenciler dersi değerlendirmektedirler.					
9) öğrenciler öğretim elemanını değerlendirmektedirler.					
10) öğrenciler sınavların ne zaman yapılacağına öğretim elemanı ile birlikte karar verirler.					
11) öğrenciler değerlendirmenin nasıl yapılacağına öğretim elemanı ile birlikte karar verirler.					
12) Diğer (Lütfen belirtiniz) : _____.					
3) Mesleki İlişki	HER	S	B	N	HİÇ
Bu derste ...					
1) öğretmenlik mesleği ile ilgili bilgiler öğreniyorum.					
2) öğrendiklerim ilgimi çeken konular üzerinde odaklanmıştır.					
3) öğrendiklerim gelecekteki meslek hayatımla ilgilidir.					
4) öğretmenliğim sırasında karşılaşılabileceğim problemleri çözmeyi öğreniyorum.					
5) öğretmenlik mesleğiyle ilgili ilginç şeyler öğreniyorum.					
6) öğrendiklerim daha önceden bildiklerimle oldukça ilgilidir.					

HER (Her zaman) **S** (Sık sık) **B** (Bazen) **N** (Nadiren) **HİÇ** (Hiçbir zaman)

4) Yansıtıcı Düşünme	HER	S	B	N	HİÇ
Bu derste ...					
1) nasıl öğrendiğimi dikkatle düşünüyorum.					
2) kendi fikirlerimi eleştirmeyi öğreniyorum.					
3) fikirlere kuşkuyla yaklaşmayı öğreniyorum.					
4) nasıl daha iyi öğrenebileceğimi öğreniyorum.					
5) öğrendiklerimi anlayıp anlamadığımı sorguluyorum.					
6) yeni fikirlere açık olmayı öğreniyorum..					
5) Görüş Alışverişi	HER	S	B	N	HİÇ
Bu derste ...					
1) diğer öğrencilerle görüş alışverişinde bulunma imkanım vardır.					
2) öğrendiklerimle ilgili deneyimlerimi diğer öğrencilerle paylaşıyorum.					
3) görüşlerimi diğer öğrencilere açıklarım.					
4) diğer öğrencilerin görüşlerini açıklamalarını isterim.					
5) diğer öğrenciler görüşlerimi açıklamamı isterler.					
6) diğer öğrenciler bana görüşlerini açıklarlar.					
6) Liderlik	HER	S	B	N	HİÇ
Bu derste öğretim elemanı ...					
1) ders vermeye isteklidir.					
2) öğrencilerin dikkatini çekmeyi başarır.					
3) iyi bir liderdir.					
4) sınıfta olan bitenlerin farkındadır.					
5) kendine güvenir.					
6) dersi açık ve anlaşılır bir şekilde anlatır.					
7) Empati	HER	S	B	N	HİÇ
Bu derste ...					
1) öğretim elemanı öğrencilere güvenir.					
2) öğrenciler öğretim elemanı ile aynı görüşte olmadıklarında, bunu söyleyebilirler.					
3) öğretim elemanı konuları yeniden açıklamaya isteklidir.					
4) öğretim elemanı öğrencilerin söylemek istediklerini dikkatle dinler.					
5) öğretim elemanı öğrenciler konuyu anlamadıklarında farkeder.					
6) öğretim elemanı sabırlıdır.					

HER (Her zaman)	S (Sık sık)	B (Bazen)	N (Nadiren)	HiÇ (Hiçbir zaman)
------------------------	--------------------	------------------	--------------------	---------------------------

8) Destek	HER	S	B	N	HiÇ
Bu derste ...					
1) öğretim elemanı öğrencilerin çalışmalarında yardımcı olur.					
2) öğretim elemanı öğrencilere arkadaşça davranır.					
3) öğretim elemanı öğrencilerin güvenebileceği bir kişidir.					
4) anlamadığımız konuları öğretim elemanına söyleyebiliyoruz.					
5) öğretim elemanı öğrencilere kişisel ilgi gösterir.					
6) öğrenmeyi kolaylaştırıcı bir öğrenme ortamı vardır.					

9) Öğrenme Kavramı

Aşağıda öğrenme kavramıyla ilgili çeşitli tanımlar verilmiştir. **En çok katıldığınız sadece bir tanımı** işaretleyiniz.

Sizce öğrenme nedir?

____ 1) Bireyin belirli bir uyarıcıya hedeflenen tepkiyi göstermesi sonucu, davranışlarında meydana gelen gözlemlenebilir değişimdir.

____ 2) Bireyin verilen bilgileri zihninde işleme ve yeniden düzenleme becerisidir.

____ 3) Bireyin kendini tanıması ve gerçekleştirilmesi, yani sahip olduğu potansiyeli kullanarak dilediği alanda kendini geliştirmesi sürecidir.

____ 4) Bireyin; algıladığı nesne, olgu ya da kavrama ilişkin, zihninde kendi bilgilerini oluşturması ya da önceki deneyimlerine dayanarak bilgileri yorumlaması sürecidir.

Bu kavramla ilgili eklemek istediğiniz başka bir tanım varsa lütfen belirtiniz:

10) Öğretme Kavramı

Aşağıda öğretme kavramıyla ilgili çeşitli tanımlar verilmiştir. **En çok katıldığınız sadece bir tanımı** işaretleyiniz.

Sizce öğretme nedir?

____ 1) Bireyin davranışlarını, çeşitli pekiştireçler (reinforcers) ve uyarıcılarla koşullayıp biçimlendirerek, hedeflenen davranışları edinmesini sağlamaktır.

____ 2) Önceden belirlenen etkinliklerle çeşitli zihinsel becerilerin belli bir sırayla kazandırılmasıdır.

____ 3) Bireyin kendini tanımasına ve dilediği alanda potansiyelini geliştirmesine yardımcı olmaktır.

____ 4) Bireyin kendi bilgilerini oluşturmasını ve diğer öğrencilerle işbirliği içinde çalışmasını kolaylaştıracak öğrenme ortamını yaratmaktır.

Bu kavramla ilgili eklemek istediğiniz başka bir tanım varsa lütfen belirtiniz:

CONSTRUCTIVIST CLASSROOM CHARACTERISTICS QUESTIONNAIRE

(Student Version)

Dear Students,

This questionnaire was designed for the purpose of analyzing *ELT Methodology II* course which has been taught in ELT departments at Faculties of Education with its various dimensions. You are expected to read each item in the questionnaire carefully and mark the most appropriate choice for you. Please give an answer for every item. Provide information in the box below before answering the questions. You are not supposed to write your name on the questionnaire. Please be assured that the data collected through the questionnaires will be treated confidentially. Thank you for your contribution.

Fusun Kesal

ODTÜ Eğitim Bilimleri

Doktora Öğrencisi

1. Your Sex: ☐ Female ☐ Male
2. Your University _____.
3. The average score you expected from this course (out of 100) _____.
4. The High School you were graduated
 - ☐ Anatolian High School
 - ☐ Anatolian Teacher High School
 - ☐ Public School
 - ☐ Private School
 - ☐ Other (Please specify) _____.
5. How good do you think your English is?
 - ☐ Not good
 - ☐ Average
 - ☐ Good
 - ☐ Very good

In sections 1-8., please give your answers through putting **cross (X)** into the box which belongs to the appropriate choice for you using the given key below.

A (Always)	O (Often)	S (Sometimes)	R (Rarely)	N (Never)
-------------------	-------------------	----------------------	-------------------	------------------

1) Learning Activities	A	O	S	R	N
In this class ...					
1) the instructor lectures.					
2) we keep journals for writing down our learning experiences.					
3) we do cooperative work (group or pair work).					
4) we make presentation for practicing teaching.					
5) we help each other learn course topics.					
6) we prepare portfolios.					
7) we use different learning activities (role playing, drama, simulation etc.).					
8) we do individual projects.					
9) we do group projects.					
10) we discuss various course topics.					
11) we analyze the sample cases about the probable problems at schools and try to solve them.					
12) we do research on various course topics.					
13) we learn the new topics through self-discovery.					
14) we do learning activities developing creative thinking.					
15) we develop concept maps or diagrams.					
16) we use various equipment (computers, OHP, video etc.)					
17) we use various materials (books, pictures, realia etc.) together with the main course book.					
18) we take part in identifying and planning the learning activities.					
19) Other (Please Specify) : _____.					
2) Evaluation	A	O	S	R	N
In this class ...					
1) students are evaluated through written exams or tests.					

A (Always) **O** (Often) **S** (Sometimes) **R** (Rarely) **N** (Never)

2) Evaluation	A	O	S	R	N
In this class ...					
2) students' written work (research reports, projects, journals, portfolio etc.) is evaluated.					
3) the instructor evaluates students through observing their oral Performance work (discussion, presentation, group work, microteaching etc.).					
4) the instructor gives regular feedback to the students about their improvement.					
5) while evaluating the students, their improvement during learning process is considered.					
6) the students evaluate themselves.					
7) the students evaluate their classmates.					
8) the students evaluate the course.					
9) the students evaluate the instructor.					
10) the students decide on when exams will be given together with their instructors.					
11) the students decide on how evaluation will be done together with their instructors.					
12) Other (Please Specify) : _____.					
3) Professional Relevance	A	O	S	R	N
In this class ...					
1) I learn about teaching profession.					
2) My learning focuses on issues that interest me.					
3) What I learn is related to my future profession.					
4) I learn how to solve the problems I may experience during my teaching career.					
5) I learn interesting things about teaching profession.					
6) What I learn connects well with what I know already.					
4) Reflective Thinking	A	O	S	R	N
In this class ...					
1) I think carefully about how I learn.					
2) I think critically about my own ideas.					
3) I learn to be sceptical.					
4) I learn how to become a better learner.					
5) I think critically about my understanding.					
6) I learn to suspend disbelief in new ideas.					

A (Always) **O** (Often) **S** (Sometimes) **R** (Rarely) **N** (Never)

5) Negotiation	A	O	S	R	N
In this class ...					
1) I get the chance to talk to other students.					
2) I discuss my experiences with other students.					
3) I explain my ideas to other students.					
4) I ask other students to explain their ideas.					
5) Other students ask me to explain my ideas.					
6) Other students explain their ideas to me.					
6) Leadership	A	O	S	R	N
In this class the instructor ...					
1) is enthusiastic about teaching.					
2) hold the students' attention.					
3) is a good leader.					
4) knows everything that goes on.					
5) acts confidently.					
6) explains things clearly.					
7) Empathy	A	O	S	R	N
In this class ...					
1) the instructor trusts in the students.					
2) if students don't agree with the instructor they can talk about it.					
3) the instructor is willing to explain things again.					
4) if the students have something to say, the instructor will listen.					
5) the instructor realizes when students do not understand.					
6) the instructor is patient.					
8) Support	A	O	S	R	N
In this class ...					
1) the instructor helps the students with their work.					
2) the instructor is friendly.					
3) the instructor is someone students can depend on.					
4) it is alright to tell the instructor when we do not understand.					
5) the instructor takes a personal interest in us.					
6) there is an environment facilitating learning.					

9) Conception of Learning

There are some conceptions of learning given below. Please mark **only one definition you agree with the most**.

What do you think learning is?

_____ 1) It is an observable change in an individual's behavior as a result of his desired response towards a stimulus.

_____ 2) It is the individual's ability to process and reorganize the given knowledge in his mind.

_____ 3) It is a process in which the individual recognizes himself and achieves self-realization, that is, the growth in any area using his potentialities.

_____ 4) It is a process in which an individual constructs his own knowledge related to perceived objects, facts or conceptions or interprets the knowledge based on his previous experiences.

If you have another definition related to this conception you want to add, please write it down.

10) Conception of Teaching

There are some conceptions of teaching given below. Please mark **only one definition you agree with the most**.

What do you think teaching is?

_____ 1) It is to enable an individual to acquire the desired behavior through shaping his behavior with various reinforcers and stimulus.

_____ 2) It is to help the individual acquire various cognitive skills through prespecified activities designed in a particular sequence.

_____ 3) It is to help the individual recognize himself and improve his potentialities in any area he chooses.

_____ 4) It is to create a learning environment which facilitates an individual to construct his own knowledge and work cooperatively with other learners.

If you have another definition related to this conception you want to add, please write it down.

APPENDIX C

INTERVIEW SCHEDULE FOR STUDENTS AND INSTRUCTORS

GÖRÜŞME FORMU (Öğrenci Versiyonu)

GİRİŞ

Eğitim Fakültesi İngilizce Öğretmenliği bölümlerinde verilen *ELT Methodology II* (Özel Öğretim Yöntemleri II) dersinin çeşitli boyutları hakkında bilgi edinmek amacıyla sizinle bir görüşme yapmak istiyorum. Görüşmemizin bu dersin daha verimli işlenmesi açısından önemli ipuçları vereceğine inanıyorum. Çalışmada isminiz açıklanmayacak, verdiğiniz bilgiler sadece araştırma amacıyla kullanılacaktır. Katkılarınızdan dolayı şimdiden teşekkür ederim.

1) Öğrenme Etkinlikleri

- 1) Bu derste hangi etkinlikler (aktiviteler) yapılmaktadır?
- 2) Bu derste öğrenme etkinliklerini desteklemek için hangi materyaller ve araç gereçler kullanılmaktadır?
- 3) Öğrenme etkinlikleri, öğrenciler ve öğretim elemanı arasındaki görüş alışverişi sonucunda mı planlanmaktadır?
- 4) Sınıftaki öğrenme etkinlikleri öğrenmenizi kolaylaştırmak için yararlı mıdır ?
 - Sınıftaki hangi öğrenme etkinlikleri daha yararlıdır / yararlı değildir? Neden?
- 5) Şu anda yapılan öğrenme etkinliklerinin geliştirilmesi için önerileriniz var mı?

2) Değerlendirme

- 1) Öğrencileri değerlendirmek için hangi değerlendirme stratejileri kullanılmaktadır?
- 2) Size başarı düzeyinizle ilgili nasıl dönüt (feedback) verilmektedir?
- 3) Bu derste dersi ve öğretim elemanını değerlendiriyor musunuz? Nasıl?
- 4) Bu derste kullanılan değerlendirme stratejileri yararlı mıdır?
 - Hangi değerlendirme stratejileri daha yararlıdır / yararlı değildir? Neden?
- 5) Değerlendirme stratejileri öğrencilerle öğretim elemanı arasındaki görüş alışverişi

sonucunda mı planlanmaktadır?

6) Sınıfta kullanılan değerlendirme stratejilerini geliştirmek için önerileriniz var mı?

3) Mesleki İlişki

- 1) Bu derste öğrendikleriniz öğretmenlik mesleği ile ilgili midir? Neden?
- 2) Daha önce aldığınız dersler ELT Methodology II dersi ile ilgili midir? Eğer öyleyse bu dersler hangileridir?

4) Yansıtıcı Düşünme

- 1) Bu ders öğrendikleriniz hakkında düşünmeye katkıda bulunuyor mu?
- 2) Bu ders kendinizin ve sınıf arkadaşlarınızın performansı üzerinde düşünüp eleştirmeye katkıda bulunuyor mu?
- 3) Hangi öğrenme etkinlikleri yansıtıcı düşünme becerilerinizi geliştirmeye katkıda bulunmaktadır?
- 4) Bu derste öğrencilerin yansıtıcı düşünme becerilerinin geliştirilmesi için önerileriniz var mıdır?

5) Görüş Alışverişi

- 1) Bu derste sınıf arkadaşlarınızla görüş alışverişinde bulunabiliyor musunuz?
- 2) Hangi öğrenme etkinlikleri öğrenciler arasındaki görüş alışverişini daha çok geliştirmektedir?
- 3) Öğrenciler arasında görüş alışverişinin geliştirilmesi için önerileriniz var mıdır?

6) Öğretim Elemanı Rolü (Liderlik / Empati / Destek)

- 1) Öğretim elemanının sınıfta bir lider olarak rolü nedir?
- 2) Öğretim elemanı sınıfta size empati gösteriyor mu? Nasıl?
- 3) Öğretim elemanı öğrenmenize destek oluyor mu? Nasıl?
- 4) Sizce bir öğretim elemanı sınıfta hangi rolleri üstlenmelidir?

7) Öğrenme ve Öğretme Kavramları

- 1) Sizce öğrenme nedir?
- 2) Sizce öğretme nedir?

INTERVIEW SCHEDULE (Student Version)

INTRODUCTION

I would like to conduct an interview with you for the purpose of collecting information about ELT Methodology II course (Özel Öğretim Yöntemleri II) with its various dimensions. I hope this interview to provide valuable implications for the improvement of the course. In the study, your name and the information you give will be treated confidentially. Thank you for your contribution.

1) Learning Activities

- 1) Which learning activities are present in this classroom?
- 2) Which materials and equipment are used in this class to support learning activities?
- 3) Are the learning activities designed as result of a negotiation between the students and the instructor?
- 4) Are the learning activities or practices in the classroom useful for facilitating your learning?
 - Which learning activities or practices are more useful / not so useful? Why or why not?
- 5) Do you have any suggestions for improving the current learning activities or practices in the classroom?

2) Evaluation

- 1) Which evaluation strategies are used for evaluating the students?
- 2) How do you receive feedback on your achievement level?
- 3) Do you evaluate the course and your instructor in this classroom? If yes, how?
- 4) Are the evaluation strategies designed as result of a negotiation between the students and the instructor?
- 5) Are the evaluation strategies used in the classroom useful?
 - Which evaluation strategies are more useful / not so useful? Why or why not?
- 6) Do you have any suggestions for improving current evaluation strategies?

3) Professional Relevance

- 1) Is what you have learnt in ELT Methodology II course relevant to teaching profession? Why or why not?
- 2) Are the previous courses relevant to ELT Methodology II? If yes, which ones?

4) Reflective Thinking

- 1) Does this course contribute to reflecting upon what you have learnt?
- 2) Does this course contribute to critically thinking about your own and your classmates' performance?
- 3) Which learning activities or practices contribute to development of reflective thinking skills?
- 4) Do you have any suggestions for enhancing students' reflective thinking skills in this course?

5) Negotiation

- 1) Are you able to negotiate with your classmates in this classroom?
- 2) Which learning activities or practices in the classroom promote negotiation among the students?
- 3) Do you have any suggestions for enhancing negotiation among the students?

6) Instructor Roles (Leadership / Empathy / Support)

- 1) What is the role of your instructor in the classroom as a leader?
- 2) Does your instructor you empathy in this classroom? If yes, how?
- 3) Does your instructor provide support for your learning? If yes, how?
- 4) What kind of roles do you think an instructor should assume in the classroom?

9) Conception of Learning and Teaching

- 1) What do you think learning is?
- 2) What do you think teaching is?

GÖRÜŞME FORMU (Öğretim Elemanı Versiyonu)

GİRİŞ

Eğitim Fakültesi İngilizce Öğretmenliği bölümlerinde verilen *ELT Methodology II* (Özel Öğretim Yöntemleri II) dersinin çeşitli boyutları hakkında bilgi edinmek amacıyla sizinle bir görüşme yapmak istiyorum. Görüşmemizin bu dersin daha verimli işlenmesi açısından önemli ipuçları vereceğine inanıyorum. Çalışmada isminiz açıklanmayacak, verdiğiniz bilgiler sadece araştırma amacıyla kullanılacaktır. Katkılarınızdan dolayı şimdiden teşekkür ederim.

1) Öğrenme Etkinlikleri

- 1) Bu derste hangi etkinlikler (aktiviteler) yapılmaktadır?
- 2) Bu derste öğrenme etkinliklerini desteklemek için hangi materyaller ve araç gereçler kullanılmaktadır?
- 3) Öğrenme etkinliklerini planlarken, öğrencilerle görüş alışverişinde bulunuyor musunuz?
- 4) Bu derste yapılan öğrenme etkinlikleri öğrenmeyi kolaylaştırmak için yararlı mıdır ?
 - Hangi sınıf etkinlikleri daha yararlıdır / yararlı değildir? Neden?
- 5) Şu anda yapılan öğrenme etkinliklerinin geliştirilmesi için önerileriniz var mı?

6) Değerlendirme

- 1) Öğrencileri değerlendirmek için hangi teknikler kullanılmaktadır?
- 2) Öğrenciler başarı düzeyleriyle ilgili olarak nasıl dönüt (feedback) alıyorlar?
- 3) Bu derste öğrenciler dersi ve öğretim elemanını değerlendiriyorlar mı? Nasıl?
- 4) Değerlendirme stratejilerini planlarken öğrencilerle görüş alışverişinde bulunuyor musunuz?
- 5) Bu derste kullanılan değerlendirme stratejileri yararlı mıdır?
 - Hangi değerlendirme stratejileri daha yararlıdır / yararlı değildir? Neden?
- 6) Şu anda kullanılan değerlendirme stratejilerini geliştirmek için önerileriniz var mı?

3) Mesleki İlişki

- 1) Öğrenciler ELT Methodology II dersini öğretmenlik mesleği ile buluyorlar mı? Neden?
- 2) Diğer eğitim dersleri ELT Methodology II dersi ile ilgili midir? Eğer öyleyse bu dersler hangileridir?

4) Yansıtıcı Düşünme

- 1) Bu ders öğrencilerin yansıtıcı düşünme becerilerinin gelişimine katkıda bulunmakta mıdır?
- 2) Hangi öğrenme etkinlikleri yansıtıcı düşünme becerilerinin gelişimine daha çok katkıda bulunmaktadır? Neden?
- 3) Bu derste öğrencilerin yansıtıcı düşünme becerilerinin geliştirilmesi için önerileriniz var mıdır?

5) Görüş Alışverişi

- 1) Sınıfınızdaki öğrenciler birbirleriyle görüş alışverişinde bulunuyorlar mı?
- 2) Hangi öğrenme etkinlikleri öğrenciler arasındaki görüş alışverişini daha çok geliştirmektedir?
- 3) Öğrenciler arasında görüş alışverişinin geliştirilmesi için önerileriniz var mıdır?

6) Öğretim Elemanının Rolü (Liderlik / Empati / Destek)

- 1) Sınıfta bir lider olarak rolünüz nedir?
- 2) Öğrencilerinize empati gösteriyor musunuz? Nasıl?
- 3) Öğrencilerin öğrenmesine nasıl destek oluyorsunuz?
- 4) Sizce sınıfta bir öğretim elemanı olarak hangi rolleri üstlenmeniz gerekmektedir?

7) Öğrenme ve Öğretme Kavramları

- 1) Sizce öğrenme nedir?
- 2) Sizce öğretme nedir?

INTERVIEW SCHEDULE (Instructor Version)

INTRODUCTION

I would like to conduct an interview with you for the purpose of collecting information about ELT Methodology II course (Özel Öğretim Yöntemleri II) with its various dimensions. I hope that this interview will provide valuable implications for improvement of the course. In the study, your name and the information you give will be treated confidentially. Thank you for your contribution.

1) Learning Activities

- 1) Which learning activities are present in this class?
- 2) Which materials and equipment are used in this class to support learning activities?
- 3) Do you negotiate with the students while designing the learning activities?
- 4) Are the learning activities or practices in the classroom useful for facilitating students' learning?
 - Which learning activities or practices are more useful / are not so useful? Why or why not?
- 5) Do you have any suggestions for improving the current learning activities or practices in the classroom?

2) Evaluation

- 1) Which evaluation strategies are used for evaluating students' learning?
- 2) How do the students get feedback about their achievement level?
- 3) Do the students evaluate the course and you in this class? If yes, how?
- 4) Do you negotiate with the students while designing the evaluation strategies?
- 5) Are the evaluation strategies used in this classroom useful?
 - Which evaluation strategies are more useful / not useful? Why or why not?
- 6) Do you have any suggestions for improving current evaluation strategies?

3) Professional Relevance

- 1) Do the students find ELT Methodology II course relevant to teaching profession? Why or why not?
- 2) Are the other teacher education courses relevant to ELT Methodology II course?

If yes, which ones?

4) Reflective Thinking

- 1) Does this course contribute to development of students' reflective thinking skills?
- 2) Which learning activities or practices contribute to development of reflective thinking skills more? Why?
- 3) Do you have any suggestions for enhancing reflective thinking in this course?

4) Negotiation

- 1) Do the students in your classroom negotiate with each other?
- 2) Which learning activities or practices in the classroom promote negotiation among the students more?
- 3) Do you have any suggestions for enhancing negotiation among the students?

6) Instructor Roles (Leadership / Empathy / Support)

- 1) What is your role in the classroom as a leader?
- 2) Do you empathize with your students? If yes, how?
- 3) How do you provide support for your students' learning?
- 4) What kind of roles do you think you should assume in the classroom as an instructor?

7) Conception of Learning and Teaching

- 1) What do you think learning is?
- 2) What do you think teaching is?

APPENDIX D **OBSERVATION FORM**

University _____
 Section _____

Instructor _____
 Date _____

TIME	TASK / ACTIVITY (What is being done?)	INSTRUCTOR BEHAVIOR (What is the instructor doing?)	STUDENT BEHAVIOR (What are the students doing?)	LEARNING AIDS (Which learning aids are being used?)

APPENDIX E

The Structure of the New Teacher Education System

APPENDIX F

TURKISH SUMMARY

Bu çalışmanın amacı, İngilizce Öğretmenliği bölümlerinde verilen *Özel Öğretim Yöntemleri II* derslerinin ne derece oluşturmacı (constructivist) sınıf özelliklerine sahip olduğunu araştırmaktır. İkinci olarak amaç, oluşturmacı öğrenme etkinliklerinin ve değerlendirme stratejilerinin öğrenciler ve öğretim elemanları tarafından ne derece yararlı bulunduğunu araştırmaktır. Üçüncü olarak bu çalışma, İngilizce Öğretmenliği bölümlerindeki öğrencilerin ve öğretim elemanlarının oluşturmacı öğrenme ve öğretme kavramlarını ne derece benimsediklerini bulmaya çalışmaktadır. Son olarak, öğrencilerin oluşturmacı sınıf özellikleriyle ilgili algılarının üniversite, cinsiyet, mezun olunan lise türü, dersten beklenen ortalama not ve İngilizce yeterlilik algısı gibi değişkenlere göre değişip değişmediğini bulmak amaçlanmıştır.

Bu çalışmada sınıf özellikleri incelenen *Özel Öğretim Yöntemleri* dersi, İngilizce Öğretmenliği bölümü öğrencilerinin 3. yıllarında iki dönem aldıkları (*Özel Öğretim Yöntemleri I ve II*) bir öğretmenlik formasyonu dersidir. Ders, konu alanında öğretim yöntemleri, öğrenme-öğretme süreçleri, genel öğretim yöntemlerinin konu alanı öğretimine uygulanması, konu alanındaki ders kitaplarının eleştirel bir açıyla incelenmesi, özel öğretim yöntemleri ve stratejileri ile ilişkilendirilmesi, mikroöğretim uygulamaları ve öğretimin değerlendirilmesini içermektedir (YÖK, 1998b).

Veri toplama aracı olarak anket, görüşme ve gözlem kullanılmıştır. Çalışmada kullanılan anket (Oluşturmacı Sınıf Özellikleri Anketi), 8 alt boyuttan oluşmaktadır ve öğrencilerin sınıf özelliklerini ne derece oluşturmacı nitelikte algıladıklarını ölçmeyi amaçlamaktadır. Bu alt boyutlar, *Öğrenme Etkinlikleri*, *Değerlendirme Stratejileri*, *Mesleki İlişki*, *Yansıtıcı Düşünme*, *Görüş Alışverişi*, *Liderlik*, *Empati*, *Destek*, *Öğrenme Kavramı* ve *Öğretme Kavramı*'dır. Bu alt boyutlardan dördü (*Öğrenme Etkinlikleri*, *Değerlendirme Stratejileri*, *Öğrenme Kavramı* ve *Öğretme Kavramı*), ilgili literatür taranarak araştırmacı tarafından geliştirilmiştir. Diğer alt boyutlar ise, Fisher ve arkadaşlarının (1996) geliştirdiği *The University Social Constructivist Learning*

Environment Survey (Üniversite Sosyal Oluşturmacı Öğrenme Ortamı Anketi) anketinin araştırmacı tarafından Türkçe'ye tercüme ve adapte edilmesiyle geliştirilmiştir. Bundan sonraki aşamalarda anket, uzman görüşlerini ve yapılan iki pilot uygulamanın sonuçlarını dikkate alarak yeniden gözden geçirilmiş, geçerlik ve güvenilirlik çalışmaları yapılmış ve son şeklini almıştır.

Anket üç bölümden oluşmaktadır. İlk bölüm, öğrencinin cinsiyeti, öğrencisi olduğu üniversite, dersten beklediği ortalama not, mezun olduğu lise türü ve İngilizce yeterlik algısı gibi öğrenci özellikleri konusunda bilgi toplama amacını taşımaktadır. İkinci bölüm, anketin ilk 8 alt boyutunu içeren 5 dereceli Likert tipi ölçektir. Ölçek, *Her zaman* (5)'dan *Hiç* (1) derecesine kadar gitmektedir. Son iki alt boyutta ise (*Öğrenme Kavramı* ve *Öğretme Kavramı*), öğrencilerin verilen Davranışçı, Bilişsel, Hümanist ve Oluşturmacı kavramlardan, en çok katıldığı bir kavramı seçmesi beklenmektedir.

Görüşme formu ise, sınıf özellikleri hakkında daha ayrıntılı veri toplamak ve sınıf özelliklerinin geliştirilmesi ile ilgili öğrencilerin ve öğretim elemanlarının önerileri hakkında bilgi edinmek amacıyla geliştirilmiştir. Alt boyutları bakımından ankete paraleldir ve birbirine paralel öğrenci ve öğretim elemanı formları vardır. Görüşme sırasında sorulabilecek ek soruları da dikkate alarak, esnek hazırlanmıştır. Görüşme formu, uzman görüşleri ve bir öğrenciyle yapılan pilot uygulama sonucunda yeniden gözden geçirilmiş ve geliştirilmiştir.

Gözlem formu ise öğrencilerin mikroöğretim sırasında kullandıkları öğrenme etkinlikleri ve araç-gereçlerin, mikroöğretim sonrası dönüt verme sürecinin ve öğrenciler arasındaki görüş alışverişi ve işbirliğine dayalı çalışmanın gözlenmesi gibi boyutları içermektedir. Gözlem formu, her gözlemin yapıldığı zamanı, öğrencilerin ve öğretim elemanlarının o sırada ne yaptığını ve kullandıkları araç gereçleri not etmek üzere beş sütundan oluşmaktadır. Gözlem formu da uzman görüşleri dikkate alınarak geliştirilmiş ve gözden geçirilmiştir.

Çalışmanın denekleri, 2001-2002 akademik yılında, dört üniversitenin (Ortadoğu Teknik Üniversitesi, Gazi Üniversitesi, Çukurova Üniversitesi ve Dicle Üniversitesi) İngilizce Öğretmenliği bölümlerinde *Özel Öğretim Yöntemleri II* dersini alan 410 öğrenciyi ve bu üniversitelerde bu dersi veren 15 öğretim elemanını kapsamaktadır.

Çalışmada yer alacak üniversiteleri seçmek için belirlenmiş olan ölçüt, İngilizce Öğretmenliği bölümlerinin 2001 üniversite giriş sınavındaki yüzdeleridir. İngilizce Öğretmenliği bölümü bulunan üniversiteler, üniversite giriş sınavındaki yüzdelerine göre dört gruba ayrılmış ve her gruptan bir üniversite seçilmiştir.

Çalışmada yer alan öğrencilerin yarısı Gazi Üniversitesi öğrencisi ve çoğunluğu kızdır. Öğrencilerin çoğunluğu dersten 80-100 arasında bir not almayı beklemektedir ve İngilizce düzeylerini “iyi” olarak algılamaktadır. Anadolu Öğretmen Lisesi mezunu olanlar ile diğer lise mezunlarının oranı ise, birbirine yakındır. Öğretim elemanlarının çoğunluğu ise İngilizce Öğretmenliği ya da İngiliz Dili Eğitimi alanında eğitim görmüşlerdir. Öğretim deneyimleri ise daha çok 16-20 yıl arasında değişmektedir.

Veri toplama süreci, Mayıs – Temmuz 2002 boyunca devam etmiştir. 410 öğrenciye anket uygulanmış, 40 öğrenci ve 15 öğretim elemanı ile görüşülmüş ve 12 sınıfta 73 öğrenci toplam 36 saat gözlenmiştir.

Veri analizi, hem nicel (frekans analizi, ortalamalar, standart sapmalar ve tek yönlü varyans analizi) hem de nitel analiz teknikleriyle gerçekleştirilmiştir.

Çalışmaya katılan öğretim elemanı sayısı az olduğu için, kendilerine anket uygulanamamıştır. Ayrıca, görüşmeler ve anketlerin sonuçları, katılımcıların algılarını ve kişisel görüşlerini yansıttığı için, bir derece öznel olabilir. Gözlemler ise, sadece ODTÜ ve Gazi Üniversitesi’nde gerçekleştirildiği ve öğrencilerin mikroöğretim uygulamalarının gözlenmesini içerdiği için sınırlıdır. Bununla birlikte, gözlemler yalnızca araştırmacı tarafından yapılmış, başka gözlemciler çalışmada yer almamıştır.

Çalışmanın dört üniversitede *Özel Öğretim Yöntemleri II* derslerini alan öğrenci ve öğretim elemanlarını içermesi ise, çalışmanın boyutlarını sınırlama gereğinden kaynaklanmaktadır. *Özel Öğretim Yöntemleri II* derslerinin sınıf özelliklerinin araştırılmasının sebebi ise, öğrencilerin bu derste ve önceki derslerde öğrendiklerini mikroöğretim deneyimi sırasında geniş ölçüde uygulama imkanına sahip olmaları ve sonraki öğretmenlik formasyonu derslerine, özellikle *Öğretmenlik Uygulaması* dersine hazırlanmalarıdır. Bu anlamda bu dersin, önceki ve sonraki öğretmenlik formasyonu dersleri arasında köprü görevi gördüğü söylenebilir. Aşağıda, çalışmanın sonuçları alt başlıklar altında özetlenmiştir.

Oluşturmacı Sınıf Özelliklerine İlişkin Sonuçlar

Özel Öğretim Yöntemleri II derslerinin ne derece oluşturmacı sınıf özelliklerine sahip olduğunu bulmak için, öğrencilere anket uygulanmış, öğrenci ve öğretim elemanlarıyla görüşmeler yapılmış ve öğrencilerin bu derste yaptıkları mikroöğretim çalışmaları gözlemlenmiştir. Anketler, öğrencilerin sınıf özelliklerini *sıklıkla* oluşturmacı nitelikte algıladıklarını göstermiştir. Daha ayrıntılı veri elde edebilmek için, sınıf özelliklerinin derste yapılan öğrenme etkinlikleri, kullanılan değerlendirme stratejileri, dersin öğretmenlik mesleğiyle ilişkisi, öğrencilerin yansıtıcı düşünme ve diğer öğrencilerle görüş alışverişinde bulunmaya katkısı ve öğretim elemanlarının sınıf içindeki rolleri gibi alt boyutları da incelenmiştir. Anketler, öğrencilerin sınıftaki öğrenme etkinlikleri ve değerlendirme stratejilerini *bazen*, diğer alt boyutları ise *sıklıkla* oluşturmacı nitelikte algıladıklarını ortaya çıkarmıştır.

Öğrenme Etkinlikleri: Anketler, oluşturmacı öğrenme etkinliklerinin *bazen* ya da *sıklıkla* yapıldığını, günlük ya da gelişim dosyası (portfolio) tutulmasının ise *hiç* yapılmadığını ya da *nadiren* yapıldığını göstermiştir.

Öğrencilerle yapılan görüşmeler, düz anlatım, grup ya da ikili çalışmalar, tartışmalar, mikroöğretim, öğretim elemanlarının öğretim yöntemlerinin kullanılmasını göstermek için yaptıkları örnek demolar, derste çeşitli materyallerin kullanımı gibi etkinliklerin ya da uygulamaların sınıfta daha yaygın olduğunu göstermiştir. Öğretim elemanları ise, bunlara, öğretme sırasında karşılaşılabilecek örnek olayların çözümü ve araştırma ödevlerini de eklemişlerdir. Öğrencilerin mikroöğretim sırasında çeşitli öğrenme etkinliklerini kullandıkları gözlemlenmiştir. Bunlar arasında, grup ya da ikili çalışmalar, soru-cevap ve dersin konusunu ya da içeriğini tahmin etmeye yönelik etkinlikler daha yaygın olarak kullanılmıştır.

Oluşturmacı öğrenme anlayışına göre, sınıfta hangi öğrenme etkinliklerinin yapıldığından çok, bu etkinliklerin nasıl kullanıldığı önem taşımaktadır. Bu nedenle, öğrenme etkinliklerinin çoğunluğunun oluşturmacı öğrenmeye katkıda bulunduğu söylenebilir. Düz anlatım ise, öğrencilerin ve öğretim elemanlarının çoğunluğunun belirttiği gibi, etkileşimi artırıcı ve öğrenci katılımını teşvik edici olduğunda oluşturmacı öğrenmeye katkıda bulunmaktadır. Bazı sınıflarda olduğu gibi, sınıfta en çok yapılan

etkinlik olduđu takdirde dersin öğretmen-merkezli olmasına ve öğrencilerin derse katkılarının azalmasına neden olmaktadır. Ayrıca görüşmelerde, soru-cevap tekniğinin öğrenciyi düşünmeye teşvik etme ve derse hazırlık düzeyini ölçme amacını taşıdığı, soruların tek doğru yanıtı olmadığı ve iki yönlü (öğretim elemanından öğrenciye ve öğrenciden öğretim elemanına) olduğu belirtildiği için, oluşturmacı öğrenmeye katkıda bulunduğu söylenebilir.

Anketler sınıfta çeşitli araç ve gereçlerin *sıklıkla* kullanıldığını ortaya çıkarmıştır. Ancak, ek materyaller görsel-işitsel araçlara göre daha çok kullanılmıştır. Oluşturmacı sınıfların teknolojik imkanlar bakımından zengin olması gerektiği için, teknolojik sınırlılıkların, sınıfların oluşturmacı olmayan yönü olduğu söylenebilir. Mevcut tepegöz, slayt ve diyagram gibi araç ve gereçlerin çoğunlukla öğretim elemanları tarafından kullanılması ise, sınıfların oluşturmacı olmayan diğer bir yönüdür. Ancak, mikroöğretim sırasında öğrencilerin kendi hazırladıkları materyalleri kullandıkları gözlemlenmiştir. Öğrencilerin öğrenme araç ve gereçlerini kendilerinin seçmesi, hazırlaması ve kullanması oluşturmacı öğrenmeye katkıda bulunmaktadır.

Öğrenme etkinliklerini belirlenip planlanmasında ise, öğrencilerin katkılarının sınırlı olması ise, geleneksel sınıfların bir özeliğidir.

Değerlendirme Stratejileri: Anketler, beş değerlendirme stratejisinin (yazılı sınavlar ya da testler, yazılı ve sözlü çalışmaların değerlendirilmesi, öğretim elemanının düzenli olarak verdiği dönüt ve öğrencinin kendini değerlendirmesi) *sıklıkla* kullanıldığını, öğrencilerin öğretim elemanının değerlendirmesinin, sınavların şekli ve zamanı ile ilgili öğrenciler ile öğretim elemanı arasındaki görüş alışverişinin ise, *nadiren* mevcut olduğunu göstermiştir.

Hem öğrencilerin hem de öğretim elemanlarının sınıfta sıklıkla kullanıldığını belirttikleri değerlendirme stratejileri ise, yazılı sınavlar ve mikroöğretim ile ders planlarının değerlendirilmesidir. Ayrıca, görüşülen tüm öğrenciler ve öğretim elemanları, öğretim elemanlarının öğrencilere performanslarıyla ilgili dönüt verdiğini, öğrencilerin kendilerini ve sınıf arkadaşlarını değerlendirdiğini belirtmişlerdir. Yapılan gözlemler ise, öğretim elemanının öğrencileri değerlendirmesinin sınıfta en sıklıkla kullanılan değerlendirme stratejisi olduğunu göstermiştir.

Sınıflarda tek bir değerlendirme tekniğinden çok, çeşitli teknikler kullanıldığı için, değerlendirme stratejilerinin oluşturmacı olduğu söylenebilir. Ancak, yazılı sınavların değerlendirmedeki ağırlığı ve sene sonunda gösterilecek performansa (ürün değerlendirmesi) ve nota dayanması geleneksel sınıfların özeliğidir. Sınıfta verilen dönütler ise nota dayanmadığı ve süreç değerlendirilmesine katkıda bulunduğu için, oluşturmacıdır.

Anketlerde öğrenciler, ders ve öğretim elemanının *nadiren* değerlendirildiğini belirtirken, görüşmelere katılan öğrencilerin yarısı ve öğretim elemanlarının tamamı bu değerlendirmenin sıklıkla yapıldığını belirtmektedirler. Ayrıca, gayriresmi ders ve öğretim elemanı değerlendirmesinin anket ya da standart formlarla yapılan resmi değerlendirmeye göre sınıfta daha yaygın olması, oluşturmacı sınıfların diğer bir yönüdür. Değerlendirme stratejilerinin belirlenmesinde ve düzenlenmesinde öğrencilerin katkılarının azlığı da geleneksel sınıfların bir yönünü yansıtmaktadır.

Mesleki İlişki: Çalışmaya katılan öğrencilerin ve öğretim elemanlarının çoğunluğu *Özel Öğretim Yöntemleri II* dersinin öğretmenlik mesleğiyle ilgili olduğunu belirtmişlerdir. Öğrenciler daha önce almış oldukları dersler ile bu ders arasında ilgi kurabildiklerini belirtirken, öğretim elemanları *Özel Öğretim Yöntemleri II* dersinden hem önce hem sonra alınan mesleki derslerin bu dersle ilgili olduğunu belirtmişlerdir. Bir öğrenci edebiyat derslerinin bu dersle ilgili olmadığını belirtirken, öğretim elemanları öğrencilerin deneyim eksikliğinin, gerçek sınıflarda ideal öğretim şartlarının bulunmamasının ve geleneksel olmayan öğretim etkinliklerinin derste kullanılmasına karşı olumsuz bakış açısının, öğrencilerin meslek hayatlarında karşılaşılabilecekleri zorluklardan olduğunu vurgulamışlardır.

Yansıtıcı Düşünme: Çalışmanın sonuçları öğrencilerin ve öğretim elemanlarının çoğunluğunun yansıtıcı düşünme becerilerini geliştirdiğini düşündüğünü ortaya çıkarmıştır. Öğrenciler bu dersin, öğrendikleri üzerinde düşünmeye ve kendileri ile sınıf arkadaşlarının performansını değerlendirmeye katkıda bulunduğunu belirtmişlerdir. Bunlara ek olarak, öğretim elemanları bu dersin, öğrencileri ders ve derste kullanılan yöntemlerle materyaller ve profesyonel yazarların görüşleri üzerinde düşünmeye teşvik ettiğini açıklamışlardır. Dersin yansıtıcı düşünme becerilerini geliştirmediğini düşünen öğrenciler ve öğretim elemanları ise, zaman kısıtlılığını ve öğrencilerin önceki öğrenim

hayatlarında aldıkları geleneksel eğitimi buna sebep olabilecek etkenler olarak açıklamışlardır.

Öğrenciler tartışmaların, mikroöğretimin ve kendilerini değerlendirmenin yansıtıcı düşünmeye daha çok katkıda bulunduğunu açıklarken, öğretim elemanları bunlara ek olarak, sınıf arkadaşlarının ve dersin öğrenciler tarafından gayriresmi olarak değerlendirilmesinin yansıtıcı düşünmeyi geliştirdiğini belirtmişlerdir.

Görüş Alışverişi: Öğretim elemanlarının ve öğrencilerin çoğunluğu, dersin öğrencilerin birbirleriyle görüş alışverişinde bulunmalarını kolaylaştırdığını belirtmişlerdir. Yapılan gözlemler, bir sınıf hariç tüm sınıflarda öğrencilerin birbirleriyle görüş alışverişinde bulunduklarını ve işbirliği içinde çalıştıklarını göstermiştir. Öğrenciler arasında görüş alışverişi bulunmadığını belirten öğrenciler ve öğretim elemanları ise, bunu öğrenciler arasındaki rekabet, bireysel çalışma isteği, öğrencilerin kişiliği ve ders dışında biraraya gelebilme fırsatının kısıtlılığı gibi faktörlere bağlamışlardır. Hem öğrenciler hem de öğretim elemanları tartışmaların, mikroöğretimin ve grup ya da ikili çalışmaların görüş alışverişine daha çok katkıda bulunduğunu vurgulamışlardır.

Öğretim Elemanın Rolü: Öğretim elemanlarının ve öğrencilerin çoğunluğu, öğretim elemanlarının öğrenim etkinliklerinin düzenlenmesi ve yönetiminde liderlik yaptığını, mikroöğretim sırasında ise, gözlemci rolünü üstlendiklerini belirtmişlerdir. Sınıf yönetimi bakımından öğretim elemanlarının çoğunluğunun oluşturmacı liderler oldukları söylenebilir, çünkü görüşmeler genellikle öğretim elemanlarının sınıfta tek otorite olmadıklarını, öğrencilere sorumluluk yükledikleri ve öğrencilerle ilişkileri bakımından esnek olduklarını ortaya çıkarmıştır.

Ancak bazı öğretim elemanlarının sınıfta olan biteni sıkı bir şekilde kontrol etmesi ve öğrencilere ne öğreneceklerini söylemesi, oluşturmacı liderlik rolünden daha çok geleneksel lider rolünü üstlendiklerini göstermektedir.

Öğrencilerin ve öğretim elemanlarının çoğunluğu, öğretim elemanlarının öğrencilere empati gösterdiğini ve öğrenmelerini kolaylaştırmak için destek verdiğini belirtmiştir. Öğrenciler çoğunlukla öğretim elemanlarının anlayışlı olduğunu, öğretim elemanları ise, kendilerini öğrencilerin yerine koymaya çalıştıklarını, öğrencilerin kişisel görüşlerini kabul ettiklerini ve dikkate aldıklarını açıklamışlardır. Hem öğrenciler hem de öğretim

elemanları çoğunlukla, öğretim elemanlarının öğrencilerin öğrenmesine destek olmak için kolaylaştırıcı ve rehberlik rollerini üstlendiklerini belirtmişlerdir. Öğrenciler genel olarak, öğretim elemanlarının öğrencilere rehberlik etme konusunda esnek olduklarını ve öğretim elemanından bağımsız olarak bir şey öğrenmeye çalışmalarını teşvik ettiklerini belirtirken, bir öğrenci ise öğretim elemanının öğrencileri dilediği gibi yönlendirdiğini açıklamıştır.

Öğrenme Etkinliklerinin Yararlılığına İlişkin Sonuçlar

Yapılan görüşmelerde, öğrenciler ve öğretim elemanlarının çoğunluğu sınıftaki öğrenme etkinliklerinin yararlı olduğunu belirtmişlerdir. Öğrenciler daha çok mikroöğretimin, sınıftaki tüm etkinliklerin, tartışmaların, derste çeşitli araç ve gereçlerin kullanılmasının, eğitimle ilgili makalelerin incelenmesinin, düzenlatımın, günlük yazmanın ve dramının yararlı olduğunu belirtmişlerdir. Öğretim elemanları ise, belirli öğretim etkinliklerinden daha çok, genel olarak etkinliklerin yararından söz etmişlerdir.

Sınıftaki öğretim etkinliklerinin genel olarak oluşturmacı öğrenmeye katkıda bulunduğu söylenebilir. Öğrenciler ve öğretim elemanları, öğretim etkinliklerinin yaparak ya deneyimleyerek öğrenmeyi, öğrenilenleri uygun ortamlarda kullanmayı, kuram ile uygulama arasında ilgi kurabilmeyi kolaylaştırdığını, öğrenmeden alınan zevki, motivasyonu ve kendine güveni artırdığını, düşünme (özellikle yansıtıcı ve yaratıcı düşünme), öğretme, yazılı ve sözlü iletişim becerilerini geliştirdiğini, öğrenci-merkezli etkinliklerin öğrencilerin öğrendiklerini sahiplenmesine katkıda bulunduğunu, farklı öğrenme tarzlarındaki öğrencelere hitap ettiğini, öğrenilenlerin daha kolay hatırlandığını ve unutulmadığını, öğrenilenlerle öğretmenlik mesleği arasında ilgi kurmayı kolaylaştırdığını ve bilişsel gelişimle birlikte kişisel gelişime de katkıda bulunduğunu belirtmişlerdir.

Öğrenciler ve öğretim elemanları, öğretmen-merkezli düzenlatım, kullanılan ders kitabı, dersin sözlü iletişim becerilerine katkıda bulunmaması, mikroöğretimin deneyiminin gerçek sınıf ortamlarında yapılmaması, kalabalık sınıflar, ders saatlerinin yetersizliği, derslerin içeriğinin ve işleniş tarzının her sınıfta standart olması, fiziksel olanakların sınırlılığı gibi etkenleri, derslerin olumsuz yönleri ya da sınırlılıkları arasında

saymışlardır. Öğretim elemanları bunlara ek olarak, öğretim elemanlarından ve öğrencilerden kaynaklanan etkenleri de belirtmişlerdir. .

Değerlendirme Stratejilerinin Yararlılığına İlişkin Sonuçlar

Yapılan görüşmelerde, öğrenciler ve öğretim elemanlarının çoğunluğu, sınıftaki değerlendirme stratejilerinin yararlı olduğunu açıklamışlardır. Öğrenciler yazılı sınavlardan çok, mikroöğretimin değerlendirilmesinin, dersteki performanslarıyla ilgili aldıkları dönütün ve hem sözlü hem yazılı sınavlarla öğrencilerin değerlendirilmesinin yararlı olduğundan sıklıkla söz etmişlerdir. Bunlara ek olarak öğretim elemanları, öğrencilerin metot derslerinde aynı öğretim elemanları tarafından değerlendirilmesi, gayriresmi ders değerlendirmesi ve yazılı sınavları yararlı değerlendirme stratejileri olarak saymışlardır.

Çalışmanın sonuçları özellikle, yazılı sınavların yararlılığı konusunda görüş ayrılığı ortaya çıkarmaktadır. Yazılı sınavları yararlı bulan öğretim elemanları, sınavların hem kuramsal hem de uygulamaya yönelik bilgiyi ve üst basamaktaki düşünme becerilerini ölçtüğünü düşünmektedirler. Yazılı sınavları yararlı bulmayan öğrenciler ise, yazılı sınavların öğrencilerin sadece kuramsal bilgisini ölçtüğünü, nesnel bir değerlendirme aracı olmadığını, öğrencilerin öğrendiklerini yansıtmada yetersiz olduğunu, öğrencileri dersi öğrenmekten çok ezberlemeye yönelttiğini, değerlendirmedeki ağırlığının diğer değerlendirme stratejilerine göre daha fazla olduğunu belirtmişlerdir. Bazı öğretim elemanlarına göre ise, sınavdaki çoktan seçmeli sorular, tüm sınıflara aynı soruların sorulması ve sınavın özgün bir değerlendirme şekli olmaması yazılı sınavların olumsuz yönleridir.

Değerlendirme stratejilerinin olumsuz yönleri ile ilgili olarak, yazılı sınavlarla birlikte, öğretim elemanlarının verdiği dönüt, sınıf arkadaşlarını değerlendirme, resmi ders değerlendirmesi, öğrencilerin derse katılımının ve kişiliğinin değerlendirmede dikkate alınmaması, kalabalık sınıflar, zaman kısıtlılığı, değerlendirmenin nesnel olmaması, çok fazla değerlendirme tekniği kullanılması gibi etkenler sayılmıştır.

Öğrenciler ve öğretim elemanlarının dersin geliştirilmesiyle ilgili önerileri, genel olarak oluşturmacı öğretim etkinlikleri ve değerlendirme stratejilerinin sınıfta daha çok yer alması ve mevcut olanların ise geliştirilmesi doğrultusundadır.

Öğrenme ve Öğretme Kavramlarına İlişkin Sonuçlar

Öğrencilerin ve öğretim elemanlarının ne derece oluşturmacı öğrenme ve öğretme kavramlarını benimsediklerini bulmak için, öğrencilere anket uygulanmış ve öğrenciler ile öğretim elemanlarıyla görüşülmüştür. Anketler öğrencilerin oluşturmacı öğrenme ve davranışçı öğretme kavramlarını daha çok benimsediklerini ortaya çıkarmıştır. Görüşmeler hem öğrencilerin hem de öğretim elemanlarının bilişsel öğrenme kavramlarını benimsediklerini göstermiştir. Diğer taraftan öğretme kavramları açısından öğrenciler davranışçı, öğretim elemanları ise oluşturmacı yaklaşımı benimsemektedirler.

Öğrenme kavramlarıyla ilgili sonuçlar, öğrencilerin ve öğretim elemanlarının oluşturmacı anlayışın hümanist ilkelerinden çok, bilişsel ilkelerini benimsediklerini ortaya çıkarmıştır. Öğretim elemanlarının öğretme kavramı açısından öğrencilere göre daha oluşturmacı olması ise, konu alanı bilgisi ve öğretim deneyimi bakımından daha yetkin oldukları için, çağdaş öğrenme ve öğretme kavramları hakkında daha çok bilgi sahibi olmalarına bağlanabilir.

Bazı Değişkenlere Göre Öğrencilerin Oluşturmacı Sınıf Özellikleri Algılarındaki Farklılıklara İlişkin Sonuçlar

Çalışmanın sonuçları, sınıf özelliklerinin öğrenciler tarafından algılanmasını etkileyen bazı değişkenler olduğunu ortaya çıkarmıştır. Öğrencilerin sınıf özellikleri algıları, bulundukları üniversitelere, dersten bekledikleri ortalama nota ve İngilizce yeterlilik algısına göre değişmektedir. Ancak, cinsiyete ve mezun olunan lise türüne göre bir farklılık bulunamamıştır. Çalışmanın sonuçları, ODTÜ ve Gazi Üniversitesi öğrencilerinin, dersten bekledikleri ortalama not 80-100 arası olanların ve İngilizce'lerinin “çok iyi” olduğunu düşünen öğrencilerin, diğer öğrencilere göre sınıf özelliklerini daha oluşturmacı nitelikte algıladıklarını göstermektedir. Çalışmayla ilgili bu bulgulardan, üniversitelerin İngilizce Öğretmenliği bölümlerinin üniversite giriş sınavındaki yüzdelik sıralarının öğrencilerin algısını etkileyen bir etken olabileceği

söylenabilir. Ayrıca üniversitelerin kendine özgü yapıları da sınıf özellikleri algısını etkilemiş olabilir. Dersten yüksek not almayı bekleyen ve İngilizce düzeylerini “iyi” olarak algılayan öğrencilerin diğer öğrencilere göre sınıf özelliklerin daha oluşturmacı nitelikte algılama sebebi ise, öğretim elemanlarının bu öğrencilerin oluşturduğunu düşündükleri sınıflarda, oluşturmacı öğrenme etkinliklerini ve değerlendirme stratejilerini kullanmayı daha çok tercih etmelerinden kaynaklanabilir.

Sonuçlar, İngilizce Öğretmenliği *Öğretim Yöntemleri II* derslerinin nitelik bakımından oluşturmacı olabilmesi için, sınıftaki öğrenme etkinliklerinin, değerlendirme stratejilerinin, öğrencilerin öğrenme yaşantılarının ve öğretim üyelerinin rollerinin yeniden gözden geçirilmesi ve geliştirilmesi gerektiğini göstermektedir.

VITA

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