INVESTIGATION OF EARLY-CAREER FACULTY MEMBERS' TEACHING RELATED NEEDS AND EVALUATION OF AN ONLINE ENVIRONMENT DESIGNED TO SUPPORT THE INSTRUCTIONAL DEVELOPMENT OF PROSPECTIVE FACULTY

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ABSTRACT

INVESTIGATION OF EARLY-CAREER FACULTY MEMBERS' TEACHING RELATED NEEDS AND EVALUATION OF AN ONLINE ENVIRONMENT DESIGNED TO SUPPORT THE INSTRUCTIONAL DEVELOPMENT OF PROSPECTIVE FACULTY

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The purpose of this study was to explore early-career faculty's needs on teaching related issues and examine the effectiveness of an online environment that was designed as a support to a graduate course on teaching in higher education. The study was carried out through two phases including a needs analysis and evaluation of the online environment. Findings of the needs analysis were used as input data in designing the online environment. An exploratory mixed design was employed to investigate graduate assistants' perceptions about the effectiveness of the online environment in general, and the components specifically.

Results of the first phase revealed that early-career faculty (n=53) were highly willing to participate in faculty instructional development activities, mostly through workshops and internet-based systems. Having students' active participation into class was found to be one of the biggest concerns of new faculty.

The second phase of the study provided descriptive data related to graduate assistants' (n=10) use of an online environment incorporating a discussion forum, exemplary

teaching case and informative videos. Interaction with people from different academic fields helped the graduate assistants to experience and gain different perspectives about teaching.

The graduate course itself raised graduate assistants' awareness with regard to the teaching aspect of their profession. Online components generally provided the graduate assistants with different perspectives on teaching, and contemplate their future teaching. Based on the findings of the study, it can be concluded that online technologies have a potential to support faculty instructional development through incorporating visual media and communication tools.

Keywords: Faculty Instructional Development, Early-Career Faculty, Online Learning Environments

ÖZ

GÖREVE YENİ BAŞLAMIŞ ÖĞRETİM ÜYELERİNİN ÖĞRETİMLE İLGİLİ İHTİYAÇLARININ BELİRLENMESİ VE ÖĞRETİM ÜYESİ ADAYLARININ ÖĞRETİME YÖNELİK GELİŞİMLERİNİ DESTEKLEMEK AMACIYLA HAZIRLANAN ÇEVRİMİÇİ BİR ORTAMIN DEĞERLENDİRİLMESİ

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Bu çalışmanın amacı, genç öğretim üyelerinin eğitim-öğretim konusundaki ihtiyaçlarını ortaya çıkarmak ve araştırma görevlilerine bu konuda verilen lisansustu bir derse destek olarak hazırlanan çevrimiçi bir ortamın verimliliğini incelemektir. Çalışma, ihtiyaç analizi ve çevrimiçi ortamın değerlendirilmesinden oluşan iki aşamada gerçekleştirilmiştir. İhtiyaç analizi bulguları, çevrimiçi ortamın tasarlanmasında kullanılmıştır. Araştırma modeli olarak, genel olarak çevrimiçi ortam ve özelde ortam bileşenlerinin verimliliği konusunda araştırma görevlilerinin algılarını ortaya çıkarmak amacıyla açıklayıcı karma desen kullanılmıştır.

Çalışmanın ilk aşamasının sonuçları, genç öğretim üyelerinin (n=53) öğretimle ilgili gelişimlerine yönelik aktivitelere katılım konusunda çok istekli oldukları ve bunun için de genellikle çalıştay ve İnternet tabanlı sistemleri tercih ettiklerini ortaya çıkarmıştır.

Ayrıca öğrencilerin derse aktif katılımını sağlama, öğretim üyelerinin en önemli sorunlarından biri olarak ortaya çıkmıştır.

İkinci aşama ise araştırma görevlilerinin (n=10) çevrimiçi bir tartışma ortamı, örnek öğretim durumu videoları ve bilgilendirici videolardan oluşan bir çevrimiçi ortamı kullanmalarına yönelik betimleyici veriler sunmuştur. Farklı alanlardan insanlarla etkileşimin araştırma görevlilerinin öğretim konusunda farklı bakış açılarını görmesini ve deneyimlemesini sağladığı ortaya çıkmıştır.

Çevrimiçi bileşenler genel olarak araştırma görevlilerine farklı bakış açıları sunmuş ve gelecekteki öğretim faaliyetleri üzerine derinlemesine düşünmelerini sağlamıştır. Çalışmaların bulguları ışığında, görsel medya ve iletişim araçlarını birarada kullanıldığı çevrimiçi teknolojilerin, öğretim üyelerinin öğretimle ilgili mesleki gelişimlerini desteklemeye yönelik büyük bir potansiyele sahip olduğu söylenebilir.

Anahtar Kelimeler: Öğretim Üyesi Mesleki Gelişimi, Öğretim Konusunda Mesleki Gelişim, Çevrimiçi Öğrenme Ortamları.

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Design and development of the online environment was a long-term and painful process and could not be accomplished without the cooperation of many people. First of all, I would like to thank the professors at METU who allowed me to record their classes and use in the study. Besides, I am grateful to GISAM employee including Önder Özdem, Özge and Olcay, who did a wonderful job in recording and editing the classroom videos. Another contributor of the development process was the ELIXR Team from the Center for Distributed Learning at California State University. They gave me the opportunity to participate in exemplary teaching cases development process and allowed me to use their video materials in this study. I wish to thank the team members, especially Lou Zweier and Joel Bennett for their cooperation and wonderful work on developing the case stories. Other than the support on developing the online environment, I would like to thank Dr. Brett Christie for his valuable attention and feedback on my study, and contribution to my professional development.

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CHAPTER 1

INTRODUCTION

The quality of teaching in higher education is an issue which takes the researchers' and policy makers' attention especially after the second half of 1990s. Many university teachers all around the world are now working on their courses and curricula to integrate more student-oriented strategies, explore best ways of using new media, and provide opportunities for undergraduate students to experience the real world (Huber, 2004). Among various faculty development approaches, the more flexible, context-oriented, practice-based and social strategies need to be developed to meet the expectations of higher education in the 21st century.

1.1. Background of the Study

In western countries, the universities are under the pressure of change to cope with the increased marketization and managerialism within the broader policy milieux. In this competitive context, the research and other activities of the academicians need to be improved (Hardy & Smith, 2006). The quality of teaching in higher education is becoming a focus of interest for parents, employers, and legislators. Learning outcomes are being extended to the abilities on using technology, applying knowledge and solving open-ended problems in addition to traditional subject matter expertise (Austin, 2002).

Since the teaching aspect of higher education is becoming an important issue, different implications have been started to support the professional development of faculty members in the area of teaching and learning. The higher education institutions provide either formal qualifications or meetings, symposiums, and inquiry communities in which the faculty with different backgrounds participate (Hardy & Smith, 2006;

Hodgson & Whalley, 2006; Kreber, 2006; Pickering, 2006; Trigwell & Shale, 2004).On the other hand, the formal qualification strategies are sometimes criticized by the faculty (Hardy & Smith, 2006; Pickering, 2006). Therefore, instead of the strict and theory-based applications, more flexible and practice-oriented approaches are suggested by the researchers. Effective professional development should be continuing, active, social, and related to practice (Garet, Porter, Desimone, Birman, & Yoon, 2001; Wilson & Berne, 1999).

The target audience of faculty instructional development is another issue examined by researchers. Early-career faculty have usually been a special group of focus for faculty instructional development programs and/or implications, mainly because of the difficulties being faced with at the initial years of the profession (Allain, 2006; Gale, 2011; Sorcinelli, 1994). According to White, Syncox, Heppleston, Isaac, and Alters (2012), teaching assistants should be the real target of faculty instructional development, so that there will be a great impact on the future quality of instruction.

Faculty development programs in higher education institutions are introducing innovative pedagogies to faculty members from different disciplines. However, the efforts on professional development of faculty members usually do not meet the needs of the 21st century (Diaz, Garrett, Kinley, Moore, Schwartz, & Kohrman, 2009).

As an alternative to formal qualification, online technologies may provide effective environments to support faculty instructional development programs or activities (Bettoni, Bernhard, Egges & Schiller, 2011; Brooks, 2010; Hardre et al., 2008; Olsen, Donaldson & Hudson, 2010;Vaughan & Garrison, 2006; Villar & Alegre, 2008a, 2008b; Weschke & Canipe, 2010). Especially a combination of online forums and teaching case videos would support the faculty members' improvement on higher levels such as investigating their beliefs on teaching related issues, which has been applied effectively in teacher education (Barnett, Keating, Harwood, & Saam, 2002; Hewitt, Pedretti, Bencze, Vaillancourt, & Yoon, 2003; Sherin & van Es, 2009).

Strategies as well as the approaches for supporting faculty instructional development have been evolved over years. The new trend of adult education emphasizes critical

reflection and transformative learning (Cranton, 1996; Webster-Wright, 2009), rather than the traditional strategies which focus on improving educators' skills and acquisition of new knowledge and techniques. As a trending approach, transformative learning theory provides a useful framework for faculty instructional development studies by focusing on faculty's approaches, beliefs and assumptions on teaching and learning (Cranton, 2006). Combination of online forums and teaching case videos in an online environment could be explored through the graduate assistants' perspectives.

1.2. Purpose of the Study

The purpose of this study is two-dimensional. Firstly, it aims to present the big picture of early career faculty members' needs on teaching at Middle East Technical University. Secondly, it intends to evaluate the effectiveness of an online environment designed to support a graduate course offered to improve the prospective faculty members' professional development on teaching and learning. Findings of the first phase have been considered in the design to supplement the course on teaching in higher education.The aim is to generate outputs in the forms of knowledge and product. Knowledge is related to the needs analysis and the systematic approach for design, development and evaluation of a tool for supporting prospective faculty in their teaching. Product refers to the tool (online environment) itself, which aims to bring about improvement in prospective faculty members' professional development on teaching. The following research questions guided the study:

1. What are the early-career faculty members' opinions, needs, and expectations about their own teaching?
    a) How important are the teaching-related issues according to the early-career faculty members' opinions?
    b) On which teaching related issues do the early-career faculty face with problems at most?
    c) What are early career faculty members' preferences about possible faculty development activities on teaching and learning?
2. What are graduate assistants' perceptions about the effects of using an online environment in regards to their teaching profession?

a) How do the graduate assistants behave in an online learning environment designed to support their professional development?
b) What are graduate assistants' perceptions about the effects of participating online discussions related to their teaching profession?
c) What are graduate assistants' perceptions about the effects of using exemplary teaching and informative videos related to their teaching profession?
d) What are graduate assistants' expectations/preferences from an online environment regarding their professional development in teaching?

1.3. Significance of the Study

Since many countries move toward 'mass' systems of higher education without significant increases in funding, there is a fear about the decline of teaching quality (Skelton, 2005). In Turkey, the reports of the Higher Education Council (2007) emphasizes an increasing demand for higher education and increasing amount of students, in spite of the stable financial support and amount of faculty. Moreover, Turkey is a partner of the Bologna process, which necessitates quality improvement and accreditation in research and education for universities as well.

Faculty development activities are becoming more and more popular to improve the quality of teaching in higher education institutions. However, this is a relatively new concept for Turkish universities and Turkey has a chance to improve the teaching skills of the new generation of academicians (Odabaşı, 2005).

The findings of this study will be valuable in two aspects. First of all, it will contribute to the faculty development efforts on teaching and learning at METU by presenting the needs of the early-career faculty members and examining an online environment as a support to a graduate course on teaching in higher education. Considering the increasing importance attached to teaching and learning in higher education, results would be beneficial for the policy makers in designing faculty development programs especially in training the graduate assistants as prospective faculty members at METU and other Turkish universities.

The second value is related to the contributions to the knowledge base. First of all, the study reveals the needs of early-career faculty members on teaching and learning, which provide an example from a Turkish university. Besides, findings will contribute to the knowledge base on using an online environment which incorporates exemplary teaching videos of relevant and contextualized cases, and knowledge sharing to improve the teaching profession of prospective faculty members. Although these strategies are successfully employed in preservice teacher education, effective ways for faculty instructional development still need to be investigated. Opinions of prospective faculty members who did not have too much concern on teaching before will provide insights about developing effective strategies for faculty instructional development programs.

1.4. Definition of Terms

Early-career faculty members: Faculty members who have been teaching for at most 12 semesters. The term "new faculty" has been used interchangeably with "early-career faculty" in the study.

Teaching related issues: Issues related to college teaching including educational perspectives, learning styles, course design, teaching methods and strategies, teacher and student behaviors, university culture and ethics and student assessment.

Faculty instructional development: Faculty members' development on the teaching aspect of their profession. The terms "faculty development on teaching" and "professional development on teaching" have been used interchangeably in the document.

Graduate assistants: Graduate students who are employed in the university; focus on both research and teaching duties in their departments. Although the term "research assistant" is the direct translation of this group in Turkish language, "graduate assistant" term is used in the study, since they traditionally conduct both teaching assistance and research duties. Participants of this study have taken part in a faculty development program called OYP which makes them prospective faculty. The term "prospective faculty" has been used interchangeably in the document.

Online environment: A learning environment which uses online technologies. This study employed a Moodle-based environment for this aim.

Online discussion: The discussion forum using asynchronous online technologies.

Exemplary teaching videos: Video materials which include examples from real classroom settings with real students and instructors. They have been used as one of the components of the online environment.

Informative videos: Supplementary video materials which include interviews with different groups from the university and parts of seminars prepared for supporting new faculty's teaching profession.

CHAPTER 2

LITERATURE REVIEW

This chapter presents the review of the related literature. At the first section, teaching in higher education concept is introduced, and a general perspective has been presented through the international perspectives on field of faculty development. Then the literature review focuses on specific issues related to the research questions of the study; theory and research on taking faculty development online and using videos and online discussions for faculty development aims have been reviewed.

2.1. Teaching in Higher Education

The scholarship of teaching and learning movement has fostered the interest on teaching in higher education, and a significant number of research have been conducted (Law, Joughin, Kennedy, Tse, & Yu 2007). Many researchers defined the key elements of good/effective teaching in higher education (Chickering & Gamson, 1999; Law, 2007; Ramsden, 1991; Trigwell, 2001).

In their prominent book, Bergquist & Phillips (1975) declared three main reasons for improving teaching in higher education institutions; 1. Teaching is an important aspect of faculty members' professions and should be valued, 2. Teaching is not seen as a serious aspect of faculty member training, 3. Teaching is often neglected in promotion and tenure.

2.1.1. Faculty Professional Development

Faculty members are at the core of higher education institutions and play an important role in the quality of universities. Centra (1976), defined faculty development as the

"broad range of activities institutions use to renew or assist faculty in their varied roles". According to Sorcinelli, Austin, Eddy, & Beach (2006), faculty development is the key strategy to ensure the instructional quality and support the institutional change. Furthermore Hicks, Smigiel, Wilson, & Luzeckyj (2010) pointed out the high pressure on universities to review many aspects of higher education including teaching practices and delivery methods.

Faculty development has a long history, starting at the end of 1800s when Harvard University began the sabbatical leaves to support the faculty's improvement in their fields (Lawler & King, 2000). During the history, faculty development always played an important role in improving the quality of higher education and acted as a lever to change, while the approaches had evolved over the years. Faculty development programs began with helping the faculty stay updated in their field by supporting conference attendance, internal grants, and sabbatical leaves; then a new focus – instructional development- had emerged in the early 1970s (Isaacs & Parker, 1997, Lawler & King, 2000), where the quality of the teaching was not an issue before (Isaacs & Parker, 1997).

According to Millis (1994), there were five challenges which fostered the faculty development activities to expand in the future; changing expectations about the quality of higher education, changing social needs, changing technology, changing student population and changing paradigms in teaching and learning.

Caffarella and Zinn (1999) examined the factors enhancing professional development of faculty members. According to their classification, there are four main domains which would affect the faculty's professional development in a positive or negative way; 1. People and interpersonal relationships which include supports or barriers from family, friends, colleagues, and administrators. 2. Institutional factors which include provision of ongoing professional development opportunities and availability of the related resources. 3. Personal considerations and commitments which is about the personal side of our lives affecting our emotional or physical energy on our professional endeavors. 4.

Internal motivators and perceptions which is about our own internal motivators on ourselves as scholars and teachers.

Bergquist and Phillips (1975) summarized the past approaches and new approaches to faculty development activities and explained the components of an effective faculty development program. In their proposed model, the organization (structure) and faculty members' attitude toward teaching were examined as important aspects in faculty development programs in addition to instructional (process) improvement. Their study mainly focused on changing the way faculty approach teaching, and this was a starting point for faculty development researches.

2.1.2. Early Career and Prospective Faculty Development

Early career faculty have been one of the focuses of implications and research on faculty development, mainly because the 5-6 years of the profession has some difficulties (Allain, 2006; Gale, 2011; Sorcinelli, 1994). The shift from being a teaching assistant to a faculty member could result in confusion and stress, especially if the expectations for the new career are not defined clearly by the institution (Simmons, 2011). The current study focuses on early career and prospective faculty members for several reasons which were put forward by literature as given on the following paragraphs.

According to Sutherland and Taylor (2011), early career academics are a significant, but not well-defined and researched group in higher education. The term 'new/early-career faculty's has been defined broadly in previous research and publication including faculty who just finished their PhD, faculty with experience but new to a campus, and faculty changing their career from other area to university (Sorcinelli, 1994). Austin (2002) divides the career path into three main periods including early, mid-career, and senior faculty periods; the graduate school period has been seen as part of the early career by some authors, which is not the case in this study.

According to Allain (2006), the first five years of the profession as a faculty member is particularly difficult. On the fifth year of their careers, faculty members indicate an increased comfort about their teaching, and started to balance the demands of research,

teaching and service (Sorcinelli, 1994). Different roles in academic career are suggested to be integrated and overlapped over the years by Simmons' (2011) study (Figure 2.1).

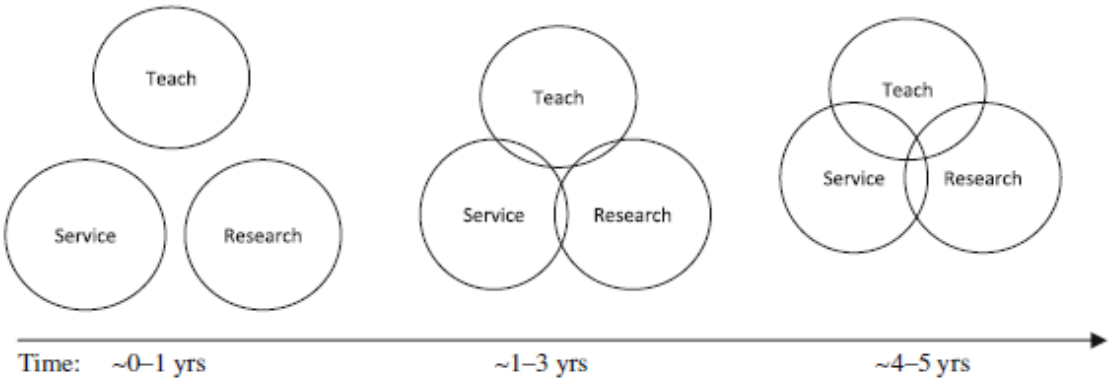

Figure 2.1 Role Integration of Faculty over Time

New faculty have to cope with the heavy teaching loads, adjustment to a new organization, and understand the structures and values of it, getting to know colleagues, and adapting to the new role as a university teacher (Sorcinelli, 1994; Austin, 2002; Gaff, 2002; Simmons, 2011). In one of the prominent studies on early-career faculty development, Sorcinelli (1994) concluded that new faculty seeks support on both research and teaching, especially asking for supportive reviews of their first year which is made by their chairs or seniors for development aims rather than evaluation.

In addition to researcher and administrative roles, teaching is one the main concerns of new faculty as has mentioned on the following paragraphs. Even the main focus is the teaching role at the initial years of the profession (Gale, 2011; Green, O'Connor, Good, Ledford, Peel, & Zhang, 2008). A needs analysis conducted by Opre et al. (2008) showed that early career faculty tend to improve their teaching skills, while tenured faculty are mostly interested in developing their research skills.

New faculty spend a lot of time about thinking what to teach, how to teach, and how to motivate students while facing with difficulties in preparing many different courses, teaching large classes, and dealing with unmotivated/underprepared students (Sorcinelli,

1994) and usually seeks for support through informal relationships to improve their teaching (Gale, 2011; Remmik, Karm, Haamer, & Lepp, 2011).

In a study conducted by the Learning and Student Development Unit (OGEB, 2010) at Middle East Technical University, it was revealed that among various professional development areas, early-career faculty mostly needed activities related to increasing students' motivation. Besides, issues about designing instructional web sites, using instructional technologies, teaching in crowded classes, project-based learning, preparing assessment tools, and giving effective feedback were among the most preferred faculty development activities to participate in.

Weimer and Lenze (1998) consider the novice faculty as the target of instructional faculty development activities because of their little or no teaching experience which results in low quality teaching. According to Austin (2002), Gaff (2002) and Kligyte (2011), new faculty usually do not have any experience in teaching and awareness of learning design, while they have been involved in research activities before starting their career as a faculty member.

The graduate school experience still remains the same, in spite of the changing expectations and requirements for faculty members (Austin, 2002; Gaff, 2002). Teaching assistants are traditionally expected to respond to the departments' needs rather than improving themselves as future professors (Austin, 2002), so they do not have many opportunities to reflect on their teaching practice (Austin, 2002; Nicholls, 2005; Remmik et al., 2011). On the other hand, they should be the real target of faculty instructional development, so that there will be a great impact on the future quality of instruction (White et al., 2012).

Austin (2002) conducted a study about the preparation of graduate students as faculty members. She found out that the teaching assistants did not experience enough guidance and training about teaching, advising, institutional service, and ethical aspects of the faculty role. In addition, Golde and Dore's (2000) study concluded that teaching assistants' training mainly emphasizes research and publishing.

Yıldırım, Sevim, Duman, Gök, Tufan, Erdoğmuş & Kara (2011) conducted a study to explore the graduate assistants' teaching-related needs in a Turkish university. Results indicated that most of the graduate assistants were eager to participate in faculty development activities and improve themselves about teaching and learning, students characteristics and their effects on teaching, measurement and assessment, and syllabus and course design.

Early career faculty have usually been a special group of focus for faculty instructional development programs and/or implications, as has been elaborated on the previous paragraphs. Based on the related literature (Austin, 2002; Sorcinelli, 1994; Allain, 2006; Gale, 2011), the current study has been decided to focus on the instructional development of new faculty who have been teaching for 6 years at most, mainly because of the difficulties being faced with during the early years of the profession.

2.1.3. Faculty Development on Teaching – International Perspectives

Teaching quality agenda of the 1990s for higher education had its earliest and strongest expression in the UK and Australia. These studies usually covered auditing procedures, funding initiatives, and the development of academic and staff development units.

Kreber (2006) examined international policy perspectives on improving university teaching. In her book, she brought together a group of higher education specialists from nine countries to discuss their policy perspectives. These perspectives have been examined on the following paragraphs to provide a general picture of faculty development efforts all over the world.

In 1998, The UK political agenda indicated the need for universities to examine the quality of their teaching in accordance with the changing needs of the learning society (Pickering, 2006). The largest council, the Higher Education Funding Council for England (HEFCE) established a Teaching Quality Enhancement Fund (TQEF). So, higher education institutions in England are required to produce learning and teaching strategies to ensure their vision about how they identify and address learning and teaching issues (Smith, 2006).

In UK, the Staff and Educational Development Association and the Higher Education Academy are actively working on developing a national framework for professional standards. Since 1997, UK government has sought to determine the direction and policy in teaching and learning in higher education (Fry, 2006), and around 300 programs on university teaching development have been accredited by Higher Education Academy (Smith, 2006).

Australia is among the prominents of the 'teaching quality in higher education' studies. After 1970s, units have been started to be established to assist departments and faculty members on issues like course design and curriculum development to support the teaching profession of university teachers in general (Isaacs & Parker, 1997). In 1992, there was a major review of quality in higher education. Then, in the late 1990s, a renewed focus on quality result in the establishment of the Australian Quality Assurance Framework (Dearn, 2006).

Since the major review of higher education in 2002, four major initiatives have been implemented in the area of learning and teaching in Australian universities. First, a national institute (Carrick Institute for Learning and Teaching in Higher Education) has been established, which deals with various programs of national teaching fellowships, funded projects and learning, teaching grants, and so on. In addition, the other initiative is managed by the same institute, which is the Australian Awards for University Teaching scheme. Another initiative is the establishment of Learning and Teaching Performance Fund which aimed at rewarding the universities that demonstrate excellence in learning and teaching. The last initiative is the standards for learning and teaching, which are determined by Commonwealth government. All universities in Australia show great effort to meet those standards to get the high level funding from Learning and Teaching Performance Fund. Formal qualification courses on learning and teaching are being offered for faculty. The courses are given either by the faculties of education or by separate teaching development units (Dearn, 2006).

In US universities, the quality of teaching and learning became important after the mid-1970s. Some private and national foundations have supported education in universities.

Many of the new endeavors focused on professional development of the faculty. Centers for Teaching and Learning, Excellence in Teaching, and Faculty Development, or others have been established on most of the universities, and funded by the institutions themselves (Rice, 2006).

There was a fundamental pedagogical change and transformation of teaching role in US higher education by the second half of 1990s. New methods of teaching have been tried in university classes. The effort which takes the most attention over the past twenty years was the introduction of scholarship for teaching concept. The Carnegie Foundation for the Advancement of Teaching published a book written by Boyer (1990) had a great influence on the issue of improving teaching and learning in higher education. Later, the foundation extended the work with campuses and academic disciplines through the Carnegie Academy for the Scholarship of Teaching and Learning (CASTL). Moreover, the National Science Foundation works effectively to enhance the quality of teaching in American colleges and universities. Institutions are usually working with graduate students on teaching sciences, engineering, mathematics etc, since they believe that enhancing the quality of teaching in higher education should begin there (Rice, 2006).

2.1.4. The Situation in Turkey

In Turkey, there are 163 higher education institutions from which 95 are public and 51 are non-profit foundation universities with 17 additional other type of higher education institutes (YÖK, 2010). In terms of the faculty member and student populations, there are 39560 faculty members with a PhD degree and 34792 research assistants, and almost three million students including open education faculty at Anadolu University and postgraduates (YOK, 2010).

According to the YÖK (2007) report, teaching dimension is the most dominant among all three functions of Turkish universities including teaching, research and public service, since 73% of the faculty members are under heavy teaching loads. So, teaching is one of the most time-consuming activities for faculty members in Turkish universities.

Another important point related to Turkish higher education system is that since 2001 we have taken part in Bologna process which is an attempt to create a comparable, comparative, and transparent higher education space (EHEA) across European countries. The process necessitates quality improvement and accreditation in research and education for universities, so the quality of teaching became an important issue[1.] In Turkey, the Higher Education Council is the main responsible for the implication and control of the process. (YOK, 2010)

As a result of participating Bologna process, and the global changes in economic, social, cultural, and technological contexts, faculty members' instructional development became an important issue for higher education institutions in Turkey. However, the attempts have usually been limited to the quantity issues, rather than quality (Akar, 2010; Odabaşı, 2005). According to Akar (2010), enhancing the quality of education is one of the major issues to be addressed by Turkish higher education system. As a developing country, Turkey has a long way to go about enhancing the quality of teaching through faculty development and owns the advantage of following the lessons learned by developed countries (Odabaşı, 2005).

A study conducted by Odabaşı (2003) explored the opinions of academics about teaching in higher education in Anadolu University. Findings revealed that 85% of the faculty are interested in any activity which will provide them with effective teaching skills. Another important point revealed from the survey was that a faculty development program should be based on the needs of the academics, which to be determined by a regular needs analysis process.

Odabaşı (2005) stated that Turkey has a chance to improve the teaching skills of the new generation of academics, namely research assistants. She explained the new initiative in Turkish higher education system called Faculty Development Program (ÖYP). The program allows some of the research assistants to carry out their graduate studies in one of ten prominent universities including METU. This program necessitates them to take two compulsory courses which contribute to their teaching skills; "Planning and

evaluation of instruction" and "Development and learning". The courses are given by the faculty of educational sciences.

Besides the graduate courses, there have been some recent developments about supporting faculty at Turkish universities. One of the prominent attempts is Academic Development Program (AGEP) which has been established in 2009 by the Chancellor's Office at METU to increase the professional and individual development and productivity of academicians at METU. The aim was to support new faculty's adaptation to the university, and increase the effectiveness of their teaching, research and service related activities (AGEP, 2012). The program was offered to the faculty members who started their profession as assistant professors or lecturers inside the last three years. Faculty members inside the program were provided with a budget and several services as a support to their research and academic development. Among several services, two units are specifically serving to support teaching activities of faculty.

First one is the Learning and Student Development Unit (OGEB) that is offering seminars and workshops on improving teaching for faculty and learning for students. A few other universities including Bilkent, Koç, Sabancı, and TED possess similar constitutions, but they are fairly new establishments. Another attempt to support faculty's instructional development is the instructional technology support centers which are very recent developments at some universities in Turkey (Çağıltay, 2011). Similarly, their aims are improving teaching/learning in universities via supporting faculty about how to use technology.

2.2. Research on Faculty Instructional Development: Theoretical Frameworks and Implications

The quality of instruction in higher education has become a concern, so that several research are being conducted in this area. Theoretical frameworks and different implications to improve the faculty development programs have been discussed by researchers. Literature related to adult learning theory and online implications are reviewed on the following paragraphs.

2.2.1. Adult Learning Theory as a Faculty Development Framework

It's a recent development that faculty development is considered as adult learning (Lawler & King, 2000). According to McQuiggan (2012), faculty development professionals should employ an adult learning perspective, since they work with adults. Recent research on faculty development has shown that using the lens of adult education can be helpful in dealing with faculty development issues and concerns (Lawler & King, 2000; Webster-Wright, 2009). It may provide a useful lens to examine concepts and issues related to faculty development (Cranton, 1996; Isaacs & Parker, 1997; Lawler & King, 2000; Webster-Wright, 2009).

Four concepts within adult learning theory can be identified as significant for faculty development. These adult learning concepts are: to provide a non-threatening environment (Cross, 1981), to provide a context that relates directly to faculty members' work (Knowles, 2005), to allow self-directed learning (Cross, 1981; Knowles, 2005; Merriam & Caffarella, 1999), and to use faculty member's expertise in developing and delivering programs (Lawler & King, 2000).

2.2.2. Transformative Learning Theory and Faculty Development

Traditional strategies of educators' professional development have usually focused on improving educators' skills and acquisition of new knowledge and techniques. Although these activities are still important, the new trend of adult education emphasizes critical reflection and transformative learning (Cranton, 1996; Webster-Wright, 2009). Transformative learning theory has been very central to the adult education literature for the last ten or fifteen years (Cranton, 2006).

The theory of transformative learning – also known as transformational learning- has emerged by the preliminary studies of Jack Mezirow and has been explored by several studies and critiques over the years (Merriam, Caffarella, & Baumgartner, 2007b; Taylor, 1998). Transformative learning is a constructivist theory of adult learning, which provides a structure and process through which to better understand adult growth and development. Adults who are involved in transformative learning are making meaning through their experiences in order to learn. Therefore, if faculty development is

thought as an adult learning activity, transformative learning provides a useful lens by moving concepts and practice beyond the traditions of behaviorism.

Mezirow defines transformative learning as "the social process of construing and appropriating a new or revised interpretation of the meaning of one's experience as a guide to action". One of the most simple definitions of transformative learning was made by Cranton (2006); “transformative learning is a process of examining, questioning, validating, and revising our perspectives” (p.23). The theory is rooted in humanism and focuses on a more far-reaching change compared to other kinds of learning and produces a significant impact or a paradigm shift on learner (Clark, 1993).

Different perspectives on transformative learning theory have emerged during the years. Mezirow’s conception of transformative learning was a cognitive-rational approach (Baumgartner, 2001) and mainly focused on rational thought and reflection (Baumgartner, 2001; Merriam et al., 2007b; Mezirow, 1991; Mezirow, 2000; Taylor, 1997). Mezirow recognizes the importance of the social context and mainly focuses on cognitive aspects of the process emphasizing critical reflection and rational discourse (discussions), while the *emancipatory view* of transformation focuses on social-justice, *developmental approach* examines the lifelong personal development as the goal of transformative learning and emphasizes the teacher’s role as a mentor, and the *spiritual-integrative approach* focuses on spiritual dimension of transformative learning (Baumgartner, 2001; Merriam, Caffarella, & Baumgartner, 2007b).

In this research, the graduate assistants are seen as adult learners. As an adult learning theory, transformative learning provided a good framework with its roots on constructivism and emphasis on perspective transformation through critical reflection and discourse. Transformative learning theory did not guide the study, but provided a lens to discuss the findings. Concepts and assumptions related to the theory have been helpful to interpret and discuss the findings.

Core Concepts in Transformative Learning

Meaning Structures (A Frame of Reference)

A frame of reference is "the structure of assumptions and expectations through which we filter sense impressions" (Mezirow, 2000, p.16). Frames of reference are the results of interpreting experiences and might be within or outside of our awareness. They are usually shaped by the cultural paradigms including unintentional learning assimilated from the culture or personal perspectives derived from primary caregivers.

According to Mezirow (2000), there are two dimensions of our frames of reference: a habit of mind and resulting points of view. A habit of mind is a set of assumptions that act like a filter for interpreting the experience, while a point of view comprises sets of immediate expectations, beliefs, feelings, attitudes, and judgments. A point of view is the result of our habits of mind (Mezirow, 2000) and change more easily compared to the habits of mind, since we can get feedback on our points of view and are more aware of them (Mezirow, 1998). Habits of mind -which are also called meaning perspectives- may include distortions, prejudices, stereotypes, and simply unquestioned or unexamined beliefs (Cranton, 2006). Our frames of reference are transformed by becoming critically reflective of assumptions and the contexts (Mezirow, 2000).

Domains of Learning

When Mezirow (1991) introduced the transformative learning theory to the adult education literature, he defined two different domains of learning which are based on Habermas's (1984) work of classifying knowledge types; instrumental learning and communicative learning. While instrumental learning is about learning to control and manipulate the environment, communicative learning is about learning what others mean when they communicate with you (Mezirow, 2000).

Technical knowledge is a result of instrumental learning which allows us to control and manipulate the environment and take appropriate actions (Mezirow, 2000; Cranton, 2006). Instrumental learning is based on empirical or scientific methodologies and focuses on task-oriented performance, while communicative learning is based on

rational discourse and focuses on negotiating our own purposes, values, feelings, and meanings critically, reflectively, and rationally rather than simply acting like others (Mezirow, 1991; Mezirow, 2000; Cranton, 2006; Taylor, 1998).

According to Mezirow, in transformative learning the most significant learning occurs in the communicative domain which mainly focuses on learners' interaction to make meaning through understanding others. Although Mezirow emphasized only two types of learning, other theorists of transformative learning theory examined one more concept as being important; emancipatory learning. Mezirow has seen the emancipatory learning as being applicable to both instrumental and communicative learning, instead of seeing it as a separate domain of learning (Cranton, 2006).

Critical Reflection

Reflective thinking is generally one of the primary goals in adult education (Cranton, 2006). Critical reflection is a key concept in transformative learning and has always been defined as being central by Mezirow (Cranton, 2006). Reflection is a cognitive process in which one must examine the underlying beliefs and assumptions that give a meaning to his/her experience (Merriam et al., 2007b).

A reflective educator is able to examine his/her own assumptions, values and perspectives and feel free to revise them if they seem to be constraining or invalid. If critical reflection is seen as the key concept to educator development, then this development process should be described in a different way which goes beyond improving techniques and focuses on thinking about and changing our practice which are based on invalid or constraining habits (Mezirow, 1991).

Merriam et al. (2007b) summarized the transformative learning process as “the learner must critically reflect on his or her experience, talk with others about his or her new worldview in order to gain the best judgment, and act on the new perspective” (p. 137). Human development happens after they see that they are constrained by their perspectives and challenged to revise them.

2.2.3. Taking Faculty Development Online

Although all faculty members need support on instructional issues at some point, it is sometimes difficult to seek assistance through face-to-face connections with other faculty because of heavy workloads, time constraints, cultural norms or personal anxieties about communication (Brooks, 2010). Different factors may affect faculty's participation on face-to-face activities of faculty development programs.

Another point is that faculty members usually feel isolated in teaching, since they are not aware of what other faculty members are doing in their classes in terms of pedagogical and technological innovations (Essex, 2004). Most faculty have little time to attend faculty development activities or join in collegial discourse to reflect on their teaching experiences (Essex, 2004).

Various kinds of faculty development programs have been implied by different university systems as explained on the previous paragraphs. Furthermore, the effectiveness of these programs have been discussed by the educators and researchers for years. For instance, Reinhart and Grassini-Komara (2010) state that workshops and seminars offered for faculty are usually not well-attended. According to them, there are two main reasons for low-attendance; Programs are not developed by considering the way how faculty learn and grow, and there are some psychosocial factors which effect their willingness to attend group workshops.

Brooks (2010) summarizes the advantages of using an online communication environment for faculty development aims. First, both new and senior faculty may seek out information on certain issues online, in addition to face-to-face meetings. Second, faculty might be willing to build knowledge beyond office time or may not be willing to make social connections with peers or experts through face-to-face channels. Third, online support might be more useful for new faculty who do not know where or from whom to look for support. Finally, these environments would help to develop a community of the like-minded professionals across different colleges and campuses.

Vaughan and Garrison (2006) suggested blended faculty development environments as a good opportunity for critical reflection and discourse about faculty members' teaching practice. Maldonado and Riman (2009) pointed out a different issue and stated that an online environment would be useful especially for part-time faculty, since they are often not included in on-campus faculty development activities.

In a study conducted by Villar and Alegre (2008a, 2008b), an online faculty development and classroom learning environment course was provided to the faculty. The participants of the course talked about what they have been learning about the selected teaching related concept, wrote about the activities they've participated during the course, related them to their teaching experience and applied to their content area. Results concluded that the online course was an effective tool for encouraging the teaching staff to reflect on their teaching practice. Training the faculty, mentoring collaborative forum discussions with their colleagues, and creating awareness about different learning approaches created a positive environment and helped the faculty members to think about the deeper meaning behind 'teaching'. The learning appeared to be transformational in which the online environment was proactive in creating a process of deconstruction and reconstruction (Villar & Alegre, 2008b).

Villar and Alegre (2008b) concluded that 24 hours a day accessibility of the online system was important in the flexibility of faculty development activities. Academics in that study acquired and transferred knowledge to their classrooms as a result of the collaborative approach followed by the online course by including academics from all university groups.

According to Weschke and Canipe (2010), an ongoing communication, and open forum and a network for improving faculty's performance are the keys to success in faculty development. In that study, the faculty who participated in an online faculty development course reported that they were willing to share their best practices with other faculty and improve their performance through peer-to-peer communication.

Bettoni et al. (2011) examined participative faculty development in which they recommended online environments which support collaborative and experiential

learning, and foster the participants to focus on building social relationships. However , they see the face-to-face meetings as a requirement at least at the beginning and end of the semester.

At the higher education institutions, there are many faculty members who are interested in improving their teaching; however feel somehow isolated and disconnected from like-minded colleagues (Eib &Miller, 2006). Building a community of learners for faculty development aims is suggested as an effective way to improve teaching and overcome the isolation feeling of the faculty by Eib and Miller (2006). Similarly, Palmer (1999) uses the term 'privatization' to describe the isolation of faculty, their research agendas, and teaching activities. According to him, collegial socialization should be a core component of professional development programs. And related research shows that online environments have got the potential to be used for this aim (Vaughan & Garrison, 2006; Villar & Alegre, 2008a, 2008b; Hardre, Ferguson, Bratton, & Johnson, 2008; Brooks, 2010; Weschke & Canike, 2010; Olsen, Donaldson & Hudson, 2010; Bettoni et al., 2011).

In a study conducted by Hardre et al. (2008), the researchers examined available on-site efforts to train teaching assistants. Qualifying tests or professional development activities applied by some institutions, discipline-based training programs, and mentoring programs have been found to have some obstacles on supporting TAs' professional development on teaching.

Hardre et al. (2008) conducted a study to explore the perceptions and preferences of teaching assistants regarding online professional development opportunities. They concluded that teaching assistants' perceptions and preferences were consistent with an online professional development resource, but there is not any publicly accessible resource to meet their needs. Online professional development is suggested as a feasible option for teaching assistants, since it meets teaching assistants' needs for deep preparation for teaching in a limited time by providing remote access and flexible scheduling.

Diaz et al. (2009) suggests that the successful faculty development programs should incorporate flexible schedules and various delivery methods and consider the continuing change in higher education area, while Hardre et al. (2008) suggests an online professional development environment which includes synchronous and asynchronous communication facilities, access to both peers' and experts' feedback, and self-reflection activities.

Some other alternative ways have been suggested for providing improvement in academics' teaching skills, since formal courses or seminars/workshops were usually found to be difficult to follow (Pickering, 2006; Hardy&Smith, 2006). According to Dede (2006), the online professional development has emerged for educators, since the current professional development programs have not been successful in helping teachers to change their teaching practice. Furthermore, any kind of professional development should provide professional learning which is continuing, active, social, and related to practice (Garet et al., 2001; Wilson&Berne, 1999).

A study conducted at Indiana State University (Essex, 2004) revealed that streaming videos to deliver professional development in technological and pedagogical skills and strategies for the faculty members was a more successful strategy compared to face-to-face seminars/workshops. The archived versions of these video talk-shows had 80-300 views, while on-campus workshops had at most around 10 faculty members.

2.2.4. Online Technologies for Faculty Instructional Development

Artifacts like instructional plans, assignments, videotapes of lessons, and samples of student work have been successfully used in the professional development settings (Borko, 2004). These kinds of activities provide an opportunity to see other instructional strategies and discuss ideas to improve teaching (Ball & Cohen, 1999; Little, Gearhart, Curry, & Kafka, 2003).

Although most of the research have been conducted in teacher education and there are not many studies examined the effectiveness of teaching cases for faculty instructional development aims, Levin, He, and Robbins (2006) mentioned that good cases that

represent the complex and situated nature of teaching are useful materials for discussions. They have a potential to foster reflective thinking, engaging in problem solving and critical thinking.

Videos have often been used in teacher education by capturing and representing examples of teaching cases (Hewitt et al., 2003). It's always assumed that watching and reflecting on videos is an effective way of fostering teacher learning, however we still know a little about how videos support teacher learning, in spite of their extensive use in teacher education and professional development (Sherin & van Es, 2009).

Anson, Jolliffe, and Shapiro (1995) emphasize the importance of lived experience in addition to scholarly research about teaching. Using realistic stories for discussions and problem-solving about teaching is a very useful and engaging way of integrating theory and practice in teacher education.

According to Lowenthal (2008), faculty development efforts' success depends on being relevant to faculty members' individual contexts and needs. He stated that online case stories are less expensive ways of supporting faculty development with time and place flexibility to attend. Moreover, cases enforce the teachers to move beyond the "idea" of teaching and see it playing in a real context instead of talking about (Anson et al., 1995). Using cases for faculty development purposes promotes immediate discussion among the faculty and collaboration between novice and experienced teachers (Anson et al., 1995).

A study conducted by Souza et al. (2010) examined the perceptions of faculty members and faculty developers about multimedia case stories which included videos of instructors using innovative pedagogies in the classroom. Most of the participants reported that the case story piqued their interest in trying out a new teaching strategy or in integrating it into a future course or class.

Besides offering exemplary teaching cases, technology can be used to support the communication between faculty members for instructional development aims. Dialog is an essential element to transformative learning, because it helps the community to assess

their assumptions and build new knowledge based on shared meanings and values (Ryman et al., 2010).

According to Simmons (2011), discussions with other faculty, department meetings, feedback from students and administration may influence the new faculty's role development in an institution, which may have an effect on shaping the teaching practice. In a study conducted by Thomas et al. (2011), networking with colleagues and teaching experts have been highly appreciated by instructors and professors, since they were able to exchange ideas to improve their teaching. Online technologies provide great opportunities to establish a continuous communication between the faculty.

In a study conducted by Vaughan and Garrison (2006), participants of a blended faculty development program appreciated the use of online components which facilitated the ongoing communication within the communities at different levels, time periods and access points. They suggest the use of online environments for faculty learning communities, since they will foster the faculty to engage in critical reflection and discourse about their teaching practice by providing a flexible and accessible environment.

2.3. Summary of the Literature Review

Quality teaching is becoming more and more complex by the requirements of new skills for faculty members and developers. Faculty instructional development efforts aim to meet these requirements. However it's a relatively new concept for Turkey, and efforts in Turkish universities are limited compared to American and European universities. Although it's a new concern of Turkish higher education system, universities all over the world are designing programs for years to support their faculty's teaching in accordance with the changing expectations on learning outcomes of higher education in new millennium. They provide either formal qualifications or meetings, symposiums, and inquiry communities in which the faculty with different backgrounds participate.

However, research shows that the traditional approach to faculty instructional development may not be efficient, so different strategies have to be employed. Online

technologies have a potential to support the efforts through the use of different media and communication tools. As an effective strategy which has been used for years in teacher education, exemplary teaching cases may take part in faculty instructional development efforts. Besides the strategies, approach to faculty instructional development may need to be updated. Transformative learning theory – as one of the trending approaches in adult learning and consequently faculty development – may provide a useful framework in faculty instructional development research.

CHAPTER 3

METHODOLOGY

This chapter explains the research method and research procedures of the study. The research questions, rationale for selecting the research method, details of implementation, and the methods of data collection, analysis, and management are explained in-depth.

3.1. Research Questions

The study consisted of three phases including the needs analysis, design and development of the online environment and evaluation. The aim of the study is to present the big picture of teaching needs of early-career faculty members at METU and examine the effectiveness of the online environment of a hybrid course enhanced with exemplary teaching videos and online discussions in regards to the graduate assistants' perceptions on their professional development. The following research questions guided the study:

1. What are the early-career faculty members' opinions, needs, and expectations about their own teaching?
    a) How important are the teaching-related issues according to the early-career faculty members' opinions?
    b) On which teaching related issues do the early-career faculty face with problems at most?
    c) What are early career faculty members' preferences about possible faculty development activities on teaching and learning?

2. What are graduate assistants' perceptions about the effects of using an online environment in regards to their teaching profession?
    a) How do the graduate assistants behave in an online learning environment designed to support their professional development?
    b) What are graduate assistants' perceptions about the effects of participating online discussions related to their teaching profession?
    c) What are graduate assistants' perceptions about the effects of using exemplary teaching and informative videos related to their teaching profession?
    d) What are graduate assistants' expectations/preferences from an online environment regarding their professional development in teaching?

3.2. Research Methodology

Mixed design methodology was employed in the study. For the needs analysis phase of the study, a quantitative approach has been followed. This phase was designed as a survey research which aimed to explore the early-career faculty members' opinions, needs, and expectations about teaching. Participants of this phase consisted of early-career faculty members at METU.

For the evaluation phase of the study, a mixed methodology approach was chosen to evaluate the effectiveness of the online system, so strategies derived from both qualitative and quantitative methods have been incorporated. Participants of this phase consisted of graduate assistants who took a graduate course on teaching in higher education in Spring 2009. Among the various designs of mixed method, the research followed the explanatory simultaneous design driven by qualitative method as the main methodology which was shown as QUAL+quan by Johnson and Onwuegbuzie (2004) and Morse (1991, as cited by Tashakkori & Teddlie, 2003).

Mixed methodology provides an opportunity to better understand different ways of knowing by mixing different inquiry strategies along with different philosophical assumptions (Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 2003). It is "a collective generation of better understanding of the phenomena being studied" through

plural philosophical paradigms, theoretical assumptions, data collection and analysis techniques (Creswell, 2005; Tashakkori & Teddlie, 2003).

Since the evaluation phase was exploratory in nature, the qualitative method was the driven approach for the research. The aim was to evaluate the effectiveness of the online system in regards to participants' perceptions on their professional development. Bogdan and Biklen (1998) stated that the aim of the qualitative study is to better understand human behavior and experience, and the goal of the qualitative researcher is to grasp the processes by which people construct meaning and define these meanings. Participant interviews, responses to the open-ended questions in weekly surveys and discussion logs were the data sources which helped to explore the participants' opinions in-depth. In addition to the qualitative, the research is supported by quantitative data collection and analysis. Weekly surveys provided quantitative data about participants' opinions on each unique online activity. In addition, the web site logs have been collected and analyzed through the quantitative methods to triangulate the qualitative data.

3.3. Research Design Phases

The study composed of three main phases; including the survey about the needs of early-career and prospective faculty members, design and development of the online environment as a support to a graduate course, and implication and data collection to evaluate the online environment.

3.3.1. Phase 1: Surveying the early-career faculty about their needs

Phase 1 of the study was guided by the first research question which aims to explore the opinions, needs and, expectations of the early career faculty about teaching in higher education and descriptive in nature. Early-career faculty members were the target audience for the survey, since graduate assistants did not have real teaching experience. Early-career faculty were considered to represent the future of graduate assistants.

Data were collected during the Fall-2008 semester and findings have been used as an input data for the design of the online environment.

Context

This phase of the study included the early-career faculty members at METU. There have been 5 faculties and 40 undergraduate programs at METU which offer some efforts related to improving teaching profession of faculty members and prospectives. One of the activities to enhance the teaching throughout the university was the effective instruction seminars provided for the new faculty members once in 1-2 years. All of the faculty members who got the position for the last couple semesters were supposed to attend the two-days-seminars which include presentations about personal development of the young adults, effective teaching strategies, instructional technology, and assessment and evaluation topics.

The second effort was a graduate course called Teaching in Higher Education which had been offered to graduate assistants from all departments who belonged to a special faculty development program (OYP) and were going to be faculty members at different universities in Turkey. However, the policy of the Institutions for Graduate Studies had been changed in 2008 to exclude the graduate assistants from the Institute of Social Science and extend the program to include the graduate assistants from the Institute of Natural Science and not a part of the aforementioned faculty development program (OYP).

Another faculty development effort at METU was offered by the Instructional Technology Support Office which was established in 2005 and aimed to provide support to the faculty members especially on using instructional technology (Çağıltay, 2011). The last effort was the Unit for Learning and Student Development which was established in December 2009 at METU.

Participants

A purposeful convenience sampling strategy was used. The aim was to survey the teaching staff at METU who are not very experienced on teaching. Therefore, early career faculty members who have 12 semesters of teaching experience at most have constituted the sample. A convenient sampling strategy was employed and volunteers participated the survey . The assistant professors and lecturers were the intended

participants. The sample included teaching staff from the Faculty of Engineering, Arts and Science, and Business and Administration. The Faculty of Education was not included in the sample since pedagogical courses are is included in their programs, so they're supposed to have the theoretical background about teaching profession.

All of the departments at METU have been visited by the researcher and surveys have been applied to the intended participants who were available at that time and accepted to participate, with a response rate of 88.3%.

The participants included 53 teaching staff, from which 2 were associate professors, 36 were assistant professors, and 15 were lecturers. Nine of the assistant professors have more than 12 semesters of teaching experience, but they have not been excluded.

Instrumentation

Survey on Early Career and Prospective Faculty Members' Perceptions and Needs on Teaching and Learning

In order to collect data about the needs of early-career faculty on teaching related issues, a questionnaire was developed. The objectives for developing this survey were:

- Collect data about the demographics of early-career faculty members and graduate assistants
- Collect data about the participants' perceptions on the importance of teaching-related concepts in higher education.
- Collect data about the participants' needs on teaching-related concepts in higher education.
- Collect data about the participants' previous attendance and perceptions on teaching-related faculty development activities.
- Collect data about the participants' expectations/preferences about possible teaching-related faculty development activities.

The perceptions on the importance of and needs about the teaching-related concepts parts of the questionnaire consisted of 18 items on a 4-point rating scale measuring

perceptions and frequencies (See Appendix A). Since this section of the questionnaire consisted of two parts, two different scales were used for the same 18 items. For the first part, a perception scale about the given importance was used (not at all, a little, fairly, a lot), while the second part used a frequency scale (never, seldom, often, always).

The previous attendance and perceptions on teaching-related faculty development activities part consists of 4, and expectations/preferences about possible teaching-related faculty development activities part consists of 2 questions.

The questionnaire was adapted from the Needs Analysis Survey for Faculty Development (Moeini, 2003) based on the content of teaching in higher education course which covered the whole instructional planning and evaluation subject, indeed the course design process, communication with students, classroom management, assessment and evaluation, ethics, and professional development sub-topics. To ensure the content validity of the questionnaire, it was reviewed by two experts. One of them was an associate professor of Curriculum and Instruction with 10 years of experience in the field, and 20 years of teaching expertise. She had been giving the graduate course "Teaching in Higher Education". The other expert is a professor of Instructional Technology with 12 years of experience in the field and 10 years of teaching experience in higher education.

A pilot study was conducted to check the reliability of the questionnaire and has been applied to 75 early-career faculty members in 2 Turkish universities. After conducting the reliability analysis on SPSS, the coefficient alpha was found to be .86 which indicates to an acceptable reliability in social sciences. The results of item analysis showed a range of correlation values between .27 and .62 which are acceptable in social sciences (Kline, 1986; Creswell, 2003).

3.3.2. Design and Development of the Online Environment

Teaching in Higher Education course was redesigned by adding the online environment without making any change in content and the goals of the course, so the online system was used to support the course objectives. The researcher worked in accordance with the

course instructor while deciding on the types and content of the materials for this aim. Design and development of the environment took two semesters through the 2008 Spring and 2009 Fall.

Design Decisions

Design of the online environment is mainly based on findings of the pilot study, and needs analysis in accordance with course content considerations and course instructor's suggestions. Moreover the materials provided on the online system were selected to foster transformative learning.

Pilot Study on Video Materials and Online Discussion Forum

A pilot study was conducted in 2008 Spring semester, to collect graduate assistants' opinions about using exemplary teaching case and informative videos and online discussion forum as a support to the graduate course on teaching in higher education. In addition to conducting a pilot study, the researcher had a chance to attend the classes during the whole semester and observe the instructor, graduate assistants, and context of the course in general. NetClass was used as the LMS for the pilot study; videos were uploaded and discussion facility of the system was used during the semester. The aim of the pilot study was to find out graduate assistants' opinions about the videos and discussion forum to be used in the design of the environment for the real study.

In 2008 Spring, 21graduate assistants were enrolled from different departments and the online materials were developed and/or collected based on course objectives and course instructor's opinions. The online support of the course incorporating exemplary teaching case and informative videos were used during the semester. At the end of the semester, graduate assistants were asked to fill out an evaluation form which consisted of open-ended questions. Participants were asked to evaluate the online environment in general, and each video material and discussion forum separately in terms of the course objectives, and their professional development (See Appendix C).

The evaluation was voluntary-based and four participants were willing to fill out the forms. The materials and/or components which were evaluated consisted of two kinds of

informative videos, three kind of exemplary teaching videos and an online discussion forum. As a summary, it could be said that participants generally had positive opinions about both the video materials, and discussion forum.

In terms of the informative videos, findings showed that graduate assistants appreciated to see early-career faculty members' thoughts/experiences, with one suggestion about adding interviews with faculty members who graduated from METU and started teaching in another university. In terms of the interviews with foreign undergraduate students, two suggestions have been made by graduate assistants to include Turkish students, so that they will be able to see their lives/experience, too.

In terms of the exemplary teaching videos, participants generally liked to see real teaching from different classrooms, while one participant especially emphasized the importance of seeing instructors other than METU.

In terms of the discussion forum, participants liked sharing ideas, and as stated by a participant especially seeing others' ideas. Two participants stated that it was hard to follow all of the discussions mainly because of the technical issues, while one of them used the term not-user friendly, which was mainly caused by the usability problem of the LMS itself.

Needs Analysis

At the first phase of the study, a survey was conducted to reveal the perceptions of early-career and prospective faculty members on the teaching/learning related subjects and their preferences about possible faculty development activities. Results were evaluated based on mean scores of the questionnaire items. According to the descriptive analysis findings, three top mean scores for each survey category were revealed for each participant group as follows:

Table 3.1 Highest mean scores on teaching-related issues according to the needs analysis survey

How important are the following issues in your opinion?	*M*	*SD*
Skills to establish communication with students	3.72	.5
Having students' active participation in the classes	3.6	.53
Teaching-learning ethics	3.57	.67
How often do you need help you think on the following issues?	***M***	***SD***
Knowing the learning theories	2.54	.96
Having students' active participation in the classes	2.46	.91
Attending professional development activities	2.40	.99

It was revealed that student-related items like interaction with students or their active participation in the classes are among the most important issues according to the early-career and prospective faculty members' opinions at METU. Therefore, the researcher decided to provide materials on students-centered/active learning strategies in classroom as much as possible.

In terms of the survey participants' preferences about possible faculty development activities on teaching/learning, descriptive analysis of two questions in the questionnaire were important in terms of the design decisions of the online environment. Participants were allowed to select more than one option and 102 valid selections were done by the in total. According to the results, 37 participants preferred workshop as a faculty development activity, while 24 preferred Internet-based implications, 19 seminars, 15 asking for expert opinion, and 6 preferred a full-semester course (Table 3.2).

Table 3.2 Participants' Preferred Strategies about Possible Faculty Development Activities.

Strategies for FD	**f**	**%**
Workshops	37	36.3
Internet-based Implications	24	23.5
Seminars	19	18.6
Asking for Expert Opinion	15	14.7
Full-semester Course	6	5.9
Other	1	1
Total	102	100

Besides the preferred strategy for the faculty development activities, there was another question asking for components they would prefer in an online environment which is designed to support their professional development on teaching related subject as given in the survey questions. The participants were asked to select three of the five options which they think most necessary in a web-based support system, and 147 selections were done by the participants. 39 participants preferred video cases, while 35 preferred text-based cases, 35 preferred theoretical knowledge, 18 preferred discussions with other faculty members, and 18 preferred discussions with educational experts (Table 3.3).

Table 3.3 Participants' Preferred Strategies about Possible Web-based Faculty Development Activities

Strategies for Web-based FD	**f**	**%**
Video-Based Exemplary Cases	39	26.5
Text-Based Exemplary Cases	35	23.8
Theoretical Knowledge	35	23.8
Discussions with Other Faculty Members	18	12.2
Discussions with Educational Experts	18	12.2
Other	2	1.4
Total	147	100

Based on the results of the needs analysis, the researcher tried to collect and produce case video examples to enrich the environment with a special focus on students' active

participation into classes. Other design criteria were the course content characteristics and suggestions of the course instructor.

Course Content

EDS660 (Teaching in Higher Education) was a graduate must course to be taken before graduating from the doctoral program for graduate assistants in a Faculty Development Program (ÖYP) at METU. The course was offered by the Department of Educational Sciences on behalf of the Institution of Social Sciences. It was a 3 credit course with NI (Not Included) status, which meant that students were graded, but it was not included in their cumulative GPA calculation. In terms of the grading, the portfolio constituted 80% of the grading, while 10% reserved for in-class participation and 10% for online participation.

The aim of the course was to improve participants' understanding and skills of college level teaching. The course provided an overview of the issues, principles, and practices associated with effective college teaching. The content and strategies used in EDS660 course were designed to contribute to the graduate assistants' skills and perspectives on teaching in higher education. Topics examined are consisted of nine main themes as given below:

1. Becoming a University Teacher: Expectations and Realities
2. Characteristics of University Students and Learning Styles
3. The World of Educational Paradigms and Learning Theories
4. Course Design
5. Instructor-Centered Teaching Strategies
6. Student-Centered and Active Learning Strategies
7. Managing the University Classroom
8. Assessment and Grading in Higher Education
9. Ethics and Professional Development in University Teaching

Rather than straight lectures, the course mostly relied on seminars and workshops in which students engage in search and intensive study of the field of teaching and learning in higher education. Graduate assistants were responsible to search the literature based on themes as stated in the course schedule, and study them to share with class in a discussion format, and carry out team/collaborative activities. Cases and worksheets

were also used for individual reflections and group discussion. Additionally, microteaching was included in the course, in which graduate assistants were asked to prepare a first meeting class or introduction to a new subject, and present it to their peers. In addition to the immediate feedback given by the instructor, the graduate assistants were videotaped during the session, and then provided with the digital recording file and a guideline to self-evaluate their teaching.

Discussions were the main strategy used in the classroom in accordance with learner-centered activities. Discussions were based on the combination of literature and real-life cases. Graduate assistants were forced to reflect through their own discipline and share their own experiences as graduate assistants and students.

Online Supported Course Design

The online part of the course was planned to support the current course design. Organization of the online content followed the course's organization. A discussion environment was added and topics/discussion questions were prepared to provide a reflective discourse opportunity for the graduate assistants. The videos and other sample teaching materials were selected to force the graduate assistants think about different aspects of teaching like the students' perspectives, active learning, classroom management and course evaluation strategies.

Main Components of the Online Environment

The online environment was designed to include three main parts in total; seminar presentations and supportive text materials, sample and informative videos, and discussion (See Appendix B for the whole list of the materials presented on the online environment).

Seminar Presentations and Supportive Text Materials

The online part of the course included the seminar presentations used by the instructor during the face-to-face classes and some additional articles and sample materials related to the course content.

Exemplary Teaching Case and Informative Videos

Exemplary teaching and informative videos have been prepared to support the face-to-face classes by providing real-life examples. This part included two main types of videos. The first group consisted of classroom shots which are presenting specific examples of different teaching styles, classroom management and communication strategies. The second group comprised informative videos like interviews with early-career faculty members and freshmen, and pieces of effective instruction seminars provided by METU for the early-career faculty.

Exemplary teaching videos have been prepared and collected to provide real-life examples related to the teaching aspect of the graduate assistants' future profession. The first resource for video materials was the professors at METU; the top-ranked professors have been found based on the course-evaluation forms for the last 5 years and. The top ranked professors with 100 evaluation forms at least have been contacted by the researcher to make some classroom recordings. Moreover some forums and online resources have been searched to find out the professors about whom the METU students have positive opinions/attitudes. 16 hours of classroom recordings with 9 professors from four colleges including Engineering, Arts and Science, Business and Administration, and Education have been collected during the Fall 2008 semester. Then the videos have been analyzed and edited based on "Teaching in Higher Education" course content.

Figure 3.2 Sample Screenshot of an Exemplary Teaching Video from the Online System

In addition to the videos recorded at METU, the researcher went through the web resources for some additional exemplary teaching videos, especially about using active learning strategies in the classroom, since it was an important item according to the survey results and METU videos did not provide enough examples of those strategies. So the broadcasts by the University of Berkeley (http://webcast.berkeley.edu), MIT OpenCourseware (http://ocw.mit.edu/), and ELIXR project by California State University (http://elixr.merlot.org/) have been discovered and examined how they can meet the EDS660 course objectives. After editing the videos recorded at METU and browsing some online resources, 17 real-life teaching examples (See Figure 3.2 for an example screenshot) and 9 informative video materials (Figure 3.3 for an example screenshot) have been prepared for the online environment. The lengths of the videos were between 1'22"- 7'43".

Figure 3.3 Sample Screenshot of an Informative Video (Interview with an Early-career Faculty Member) from the Online System

Discussion

A discussion part has been added to the online environment to provide a continuous communication and sharing facility between the graduate assistants. The discussion topics were decided by the course instructor and the researcher based on the course content, and the materials presented at the current week (Figure 3.4 for an example screenshot). Discussion topics covered the content of the week and force the graduate assistants to think critically and make comments based their own academic discipline as much as possible.

After the face-to-face class of each week, the researcher sent the topic of discussion to the forum, and graduate assistants were invited to participate in. The instructor and the researcher needed to guide the discussion at some point, if necessary.

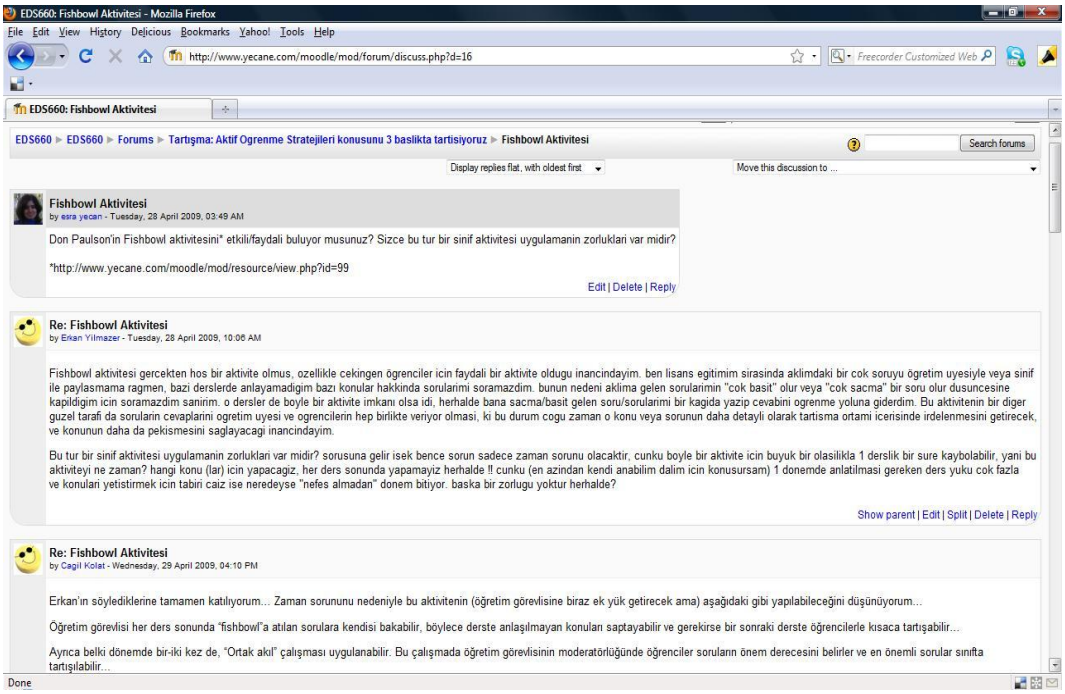

Figure 3.4 Sample Screenshot of a Discussion on the Online System

3.3.3. Phase 3: Implementation and Evaluation

The third phase of the study was implementing the online supported EDS660 course during the Spring 2009 semester, and evaluating the outcomes in terms of weekly responses to small-sized surveys and end- of-the-semester interviews with selected participants.

Context

The EDS660 course was offered during the 2009 Spring semester. The researcher was assigned as the moderator of the online environment and did not have a face-to-face communication with students during the semester. All of the information about the role of the researcher and the online system they were going to use were given on the course syllabus and/or instructor's face-to-face communication with students and/or via emails. All of the technical support related to the use of online system had been provided via emails by the researcher. Students were informed about the online environment and how to use it at the beginning of the semester, and tutorials were prepared and sent to the students about how to use the online environment.

Visiting the online resources and participation in the online discussion were declared as mandatory in the course syllabus, and has been graded for 10% of the total grade.

Participants

24 graduate assistants from 11 different departments of 3 colleges (Engineering, Arts&Science, and Architecture) at METU have been enrolled to the course, but one of them did not attend the classes after 4-5 weeks because of some personal problems and ended up with an "NA" grade, so there were 23 participants in the course and all of them participated into data collection for website visits and discussion logs, and weekly surveys. See Table 3.4 for the participants' characteristics and demographics:

Table 3.4 Demographics and General Characteristics of the Graduate assistants who enrolled the EDS660 course in Spring 2009: Number of Participants and Percentages

Characteristics	n	P
Gender		
Male	10	43.5%
Female	13	56.5%
College Affiliation		
College of Architecture	1	4.3%
College of Arts & Science	6	26.1%
College of Engineering	16	69.6%
Enrolled Semester in PhD Program		
3-6	6	26.1%
7-10	15	65.2%
11-14	2	8.7%

The data on web site visit and discussion logs and the weekly surveys were collected from all of the enrolled graduate assistants, while end of the semester interviews were conducted by selected participants based on some characteristics.

The qualitative inquiry necessitates in-depth information, so focuses on information-rich cases which would help in providing great deal of information (Patton, 1990). Considering this fact, a purposeful sampling strategy was used for the interviews (Table 3.5) . The sample within the whole group was selected based on some criteria which

were important to the study. Maximum variation strategy (Patton, 1990) was used to have a representative group of different characteristics which were as follow.

- Variety in terms of the colleges/departments
- Variety in gender
- Variety in terms of discussion participation and web site visiting frequencies

Table 3.5 Demographics and General Characteristics of the Interview Participants: Number of Participants

Characteristics	n
Gender	
Male	6
Female	4
College Affiliation	
College of Architecture	1
College of Arts & Science	3
College of Engineering	6
Discussion Participation	
More Participation	4
Less Participation	2
Middle	4
Website Visit	
More Visitors	3
Less Visitors	2
Middle	5

Data related to participants' departments/colleges and gender were collected through the Student Affairs system and also face-to-face meetings, while web site visit and discussion participation classifications were calculated by the researcher. Mean scores and standard deviations for both web site visit and discussion participation logs were calculated and each data were divided into three sections namely less, middle and more participantation/visitor groups based on mean scores and standard devitations. Interviewees were selected from each participation/visit group to have a representative sample in terms of the web site visit and participation frequencies.

Data Collection and Analysis

Marshall and Rossman (1999) defined four primary methods for collecting data in qualitative research; participation, observation, in-depth interviewing, and review of documents. For this study, in-depth interviewing, and students' logs gathered by the LMS were the sources of qualitative data collection. Instrumentation and the procedures for the data collection of the second phase are presented at the following paragraphs in detail.

Three different data resources were used to collect data during and at the end of the semester, so data sources were triangulated which improves the reliability as well as the internal validity of the study (Merriam, 1998).

Web Site Visit and Discussion Logs

The frequencies of graduate assistants' web site usage were saved by the Learning Management System through which the course is being delivered. This data aimed to be used as a supplement to the interview and weekly surveys data. It helped to explore the web site usage patterns of the graduate assistants. Moreover, any relationship between the frequency of use and some characteristics of the graduate assistants can be grasped by the web site visit logs if any.

A discussion topic was determined by the collaboration of the researcher and the course instructor and had been sent to the discussion board each week after the class hour. Since the participants were from different disciplines, discussions had always been about general subjects and forced the participants to think through and share from their own disciplines.

The weekly discussion data was saved by the LMS and have been collected and analyzed at the end of the semester. The patterns, amount and content of the participation were explored through the discussion logs. Detailed analysis of the discussion logs provided valuable information about how a discussion forum would work as a supporting environment for a group of prospective faculty's instructional development.

Content analysis has been conducted for in-depth analysis of the content of discussion logs. Most common used methodologies for evaluating the content and outcomes of the discussion forums have been quantitative measures like number of postings, frequency counts etc (Marra, Moore, & Klimczak, 2004). However, some recent studies have incorporated content analyses which would provide deeper insights about the outcomes of discussion forums (Jeong, 2003; Marra et al., 2004; Schrire, 2006; Wever, Schellens, Valcke, & Van Keer, 2006).

In this study, data related to the participants' behaviors in the online environment have been supported by the content analysis of discussion forums. To this aim, the event categories developed by Jeong (2003) have been used as a guide to develop the analysis protocol, after making some adaptations on his categorization. NVivo 8 has been employed for analysis.

These data were triangulated with interview data, so that the researcher was able to see the big picture of how the online discussions were used by the graduate assistants throughout the course.

Weekly Surveys

Weekly surveys had been designed to collect data about the effectiveness of each week's online activities; provided data for what the graduate assistants think about each online activity in terms of their teaching profession. The participants were asked to rate anonymously on online questionnaires sent via emails about how effective each activity was in terms of the current week's objective, and then elaborate his/her rating by the follow-up open-ended question explaining the reason of their answer. Both quantitative and qualitative data were collected by these questionnaires (See the Appendix D for an example survey).

The quantitative data were analyzed through descriptive statistics, so that a general evaluation for each online material has been done. Participants' answers to open-ended questions about the effectiveness of each online material were used to deepen the general evaluation done by rating. The open-ended answers to survey have been

analyzed through NVivo 8, codes and categories have been created in accordance with interview data. They are presented as integrated on the findings chapter.

Interviews

Interviews provide data in the subjects' own words, and allow the researcher to see how they interpret the things (Bogdan & Biklen, 1998). In this study, the graduate assistants' thoughts, feelings and suggestions have been discovered through the interviews. The aim was to collect data about their general impressions on using an online environment for instructional development,and the effects of online materials especially the exemplary teaching and informative videos and discussions on their teaching profession. Interview questions are prepared to force the participants think through their own disciplines as prospective faculty members. It was planned as a self evaluation of themselves on their own words (See Appendix B).

A semi-structured interview schedule was constructed based on research questions. Semi-structured interviews allowed the researcher to respond to the emerging point of view, and new ideas of the respondents as stated by Merriam (1998). Interviews provided a general evaluation of the course and online environment exploring what the graduate assistants think as prospective faculty members. These data are supported with more detailed information related to each online material separately through the weekly surveys. NVivo 8 software was employed for the analysis of interview data.

3.4. Researcher's Role

In qualitative research, researcher is the main tool for collecting data. Her background, and the role she takes during the study are important issues which may have affected the data collection, analysis, and interpretation processes. Therefore, her role needs to be clarified in terms of presenting a detailed description of the study, so that readers would comprehend the situation.

First of all, the researcher has been working as a graduate assistant at the department of Computer Education and Instructional Technology at METU. She has experience in online learning environments via the graduate courses she has taken as a student, and

via undergraduate courses she has been assisting. Moreover, she participated in designing an online course as a part of her master's study which focused on exploring the learning strategies of students in hypermedia environments. Therefore, she has got general knowledge and experience about the use of online learning environments.

On the other hand, the researcher was not an expert on teaching in higher education as of the subject matter of the graduate course that is worked on in the study. Therefore, she decided to observe the graduate course before starting the design, besides the course instructor's participation in the design process and the whole research. Observing the EDS660 Teaching in Higher Education course helped the researcher to get familiar with the context. Qualitative researcher's knowledge about the setting, and people including their routines, and environments would help him/her to conjecture how s/he will fit in (Marshall & Rossman, 1999). In addition to getting familiar with EDS660 context including course instructor, students, content, and climate through one semester participation, knowing the culture at METU generally and graduate assistants through formal and informal relationships helped the researcher to be an insider and fit herself in the context.

3.5. Trustworthiness

The trustworthiness of a research is related to the efforts made for validity and reliability concerns (Merriam, 1998) which are named as *verification* by Creswell (2005) and *credibility* by Patton (1990). Terms like internal and external validity, and reliability which are used in quantitative research have been replaced by credibility, transferability, dependability, and confirmability in qualitative research (Denzin& Lincoln, 2005).

First of all, as a quantitative tradition, reliability refers to the replicability of the research findings (Merriam, 1998), and requires that a researcher using the same methods can obtain the same results as a prior study (LeCompte&Goetz, 1982). Since the nature of qualitative inquiry is not appropriate for requiring the same result with a former study, giving a depiction with enough details of the whole research process and points that are typical to this study would help the readers to compare their situations with the case of the current study as explained by Merriam (1998).

According to Yıldırım and Şimşek (2000) validity issues are very important in qualitative research because of the nature of qualitative inquiry. Therefore, the current study employed the methods to overcome the validity threads, so the reliability would be assured. Validity refers to the degree to which findings are interpreted in a correct way, so it is concerned with the accuracy of scientific findings (LeCompte & Goetz, 1982).

Since this study followed a mixed design as the main methodology being dominated by qualitative approach, the terms related to both qualitative and quantitative approaches will be used to explain the efforts made to strengthen the trustworthiness of the study. They include content validity, triangulation, member checking, and peer debriefing, as explained in detail on the following paragraphs.

To ensure the content validity which is about the content and format of the instruments (Creswell, 2005), expert opinions have been taken. The instruments used in the study were examined by the researcher's advisors, so different point of views have been included in designing the questionnaire, interview schedule and weekly surveys.

Triangulation mainly means combining different ways to look at a situation. Data collection and analysis methods have been triangulated to provide a detailed understanding of the phenomenon under investigation (Miles & Huberman, 1994). Triangulation in data collection methods has been provided through combining weekly surveys, end of the semester interviews, and web site logs, while data analysis has been triangulated through employing a content analysis of the discussion logs, qualitative analysis of interviews and weekly surveys, and quantitative analysis of web site logs and weekly surveys. Triangulation of data sources helped the researcher to see the consistency between the data collected through different methods, as well as presenting different aspects of the phenomenon. Triangulation of data improves the reliability as well as the internal validity of the study (Merriam, 1998).

Member checking is suggested as a validity strategy by Creswell and Miller (2000). With member checking, the validity procedure shifted from the researcher to the participants of the study. After the interviews were transcribed, they were e-mailed to the participants to make them see the whole conversation, so that they could confirm the

credibility of the information, make changes or additions to their data. All of the participants approved the transcripts without any change, while a few needed to make small amount of changes.

Peer debriefing is the process which is being applied to ensure the internal validity of the study (Merriam, 1998; Creswell, 2005) through colleagues' examination of and comments on the findings. A colleague who is a graduate assistant in the same department with the researcher and experienced in conducting qualitative research has conducted the peer debriefing process. Moreover, she is familiar with online learning environments because of her research area, dissertation topic, and undergrad courses she taught and assisted. Researcher informed the colleague about the study, research questions and initial categories emerged during the analysis process. The intercoder reliability was 80.3% which is a satisfactory score according to Miles and Huberman (1994).

An important point about the external validity is generalizability of the results (Merriam, 1998). Since generalizability is not the aim of qualitative research, the points that are typical to the case of this study are emphasized while reporting the results, so that the readers can compare their situations with the current study (Merriam, 1998).

3.6. Limitations and Delimitations of the Study

One of the limitations of qualitative inquiry is that researcher acts as an instrument in data collection and analysis. Therefore, the quality of the research depends on the researcher's background, research skills and competence.

Conclusions of the study are limited by the inherent nature of the qualitative research. Since the study is limited to a case from METU, the results are tightly tied to the context of this case, so are not widely generalizable.

The validity and reliability of the results are limited to participants' honesty and willingness in their responses.

Another limitation of the study was that participation to and use of the online environment was mandatory, which may have affected the content and quality of the participation. Use of online resources took part in grading, so that graduate assistants' participation was ensured.

It should be noted that only one course with one instructor was given in the study, therefore findings are limited to this specific case. Effect of the course and instructor is another limitation of the study.

Table 3.6 Summary of the Research Questions, Data Sources, Instruments, Type of Collected Data, and Data Analysis

Research Questions	Data Sources	Instruments for Data Collection	Type of Collected Data	Data Analysis
3. What are the early-career faculty members' opinions, needs, and expectations about their own teaching?				
a) How important are the teaching-related issues according to the early-career faculty members' opinions?	Early-career faculty	Needs analysis questionnaire	Quantitative	Descriptive Statistics
b) On which teaching related issues do the early-career faculty face with problems at most?	Early-career faculty	Needs analysis questionnaire	Quantitative	Descriptive Statistics
c) What are early career faculty members' preferences about possible faculty development activities on teaching/learning?	Early-career faculty	Needs analysis questionnaire	Quantitative	Descriptive Statistics
4. What are graduate assistants' perceptions about the effects of using an online environment in regards to their teaching profession?				
a) How do the graduate assistants behave in an online learning environment designed to support their professional development?	Graduate assistants	Web site logs Interviews Discussion Forum	Quantitative Qualitative Qualitative	Descriptive Statistics Content Analysis Content Analysis
b) What are graduate assistants' perceptions about the effects of participating online discussions to their teaching profession?	Graduate assistants	Interviews Weekly Surveys Discussion Forum	Qualitative Quan+ Qual Qual	Content Analysis Desc. Stat.+ Cont. An. Content Analysis
c) What are graduate assistants' perceptions about the effects of using exemplary teaching and informative videos to their teaching profession?	Graduate assistants	Interviews Weekly Surveys	Qualitative Quan+ Qual	Content Analysis Desc. Stat.+ Cont. An.
d) What are graduate assistants' expectations/preferences from an online environment regarding their professional development in teaching?	Graduate assistants	Interviews	Qualitative	Content Analysis

CHAPTER 4

RESULTS

In this chapter, the findings of the research are presented. Since the study was conducted in two phases, the results regarding each phase are given separately. The first phase presents the findings of the needs analysis conducted to explore the opinions, needs, and expectations of early-career and prospective faculty members on teaching. The second phase presents the findings related to the graduate assistants'perceptions about the effects of using an online environment in regards to their teaching profession and their behaviors in the online environment.

4.1. Phase 1 – Needs Analysis

A needs analysis was conducted to explore the current situation of the early-career faculty members in terms of their needs and expectations on teaching profession. Fully structured questionnaires were used to collect data, and then transferred into digital environment to conduct descriptive statistics on SPSS. Quantitative analysis techniques including percentages, frequencies, mean scores, median, mode and standard deviations were administered to answer the research questions related to the first phase of the study.

Findings of the needs analysis survey was used to present the current situation of the early-career faculty members' needs, and expectations on teaching. Moreover, they have been used as an input, while designing the online environment.

Participants

Background information of the participants for the needs analysis is important in terms of presenting the big picture. Before examining early-career faculty's needs and expectations about teaching related issues,their background information is given here. Participants' gender, faculty affiliation and academic title data are given as first, and their background related to teaching experience and faculty development activities is presented after. The questionnaire is given on Appendix A.

Gender, Age, Faculty Affiliation and Academic Titles

Descriptive analysis of basic background data showed that 60% of the participants were males, 87% works at Faculty of Engineering, and 68% were assistant professors (Table 4.1). Ages were ranged from 29 to 42 (*M=34.62*, *SD=3.6*).

Table 4. 1 Gender, Faculty Affiliation and Academic Titles of the Participants

Gender	*n*	*P*
Female	21	39.6%
Male	32	60.4%
Total	53	100%
Faculty Affiliation	***n***	***P***
Faculty of Arts & Science	6	11.3%
Faculty of Engineering	46	86.8%
Faculty of Business & Adm.	1	1.9%
Total	53	100%
Academic Title	***n***	***P***
Associate Prof.	2	3.8%
Assist. Prof.	36	67.9%
Lecturer	15	28.3%
Total	53	100%

Teaching Experience and Faculty Development Related Background

In terms of the teaching experience, majority of the participants have been teaching for 3-6 years (Table 4.2). Around half of them designed at least one course before, while the rest have not yet. Furthermore, data showed that most of the participant faculty members (70%) have not attended any faculty development program before.

From the 13 participants who attended a faculty development program before, 8 have participated effective instruction seminars provided by METU, while 5 have taken the graduate course offered by Faculty of Education at METU to the graduate assistants. Open-ended responses revealed that two participants found their experience as unsatisfying because the training was too general and/or superficial. Two participants found them to be valuable in terms of creating an awareness, and one participant found it valuable in terms of providing an opportunity to interact with other faculty. Two participants made suggestions about those programs being long-term or continuous.

Another finding related to faculty development related background is that 74% of the participants were willing to attend possible activities related to instructional development.

Table 4. 2 Teaching Experience and Faculty Development Related Background of the Participants

Teaching Experience	*n*	*P*
1-3 years	15	28.3%
4-6 years	26	49.1%
7 and more	10	18.9%
Missing	2	3.8%
Total	53	100%
Designed a Course	***n***	***P***
Yes	30	56.6%
No	23	43.4%
Total	53	100%
FD Program Participation Before	***n***	***P***
Yes	13	24.5%
No	37	69.8%
Missing	3	5.7%
Total	53	100%
Thinking about FD Activity Participation in Future	***n***	***P***
Yes	39	73.6%
No	7	13.2%
Not Sure	5	9.4%
Missing	2	3.8%
Total	53	100%

4.1.1. Early- Career Faculty Members' Perceived Importance on the GivenTeaching-Related Subjects

The first part of the survey asked the participants to rate how important they find the given teaching related issue in a 4-point scale (1-not at all, 2-a bit, 3-fairly, 4-a lot). The mean scores on Table 4.3 and frequencies on Table 4.4 indicates that the most important issues in teaching are; skills to establish communication with students, having students' active participation in the classes, and teaching- learning ethics.

Table 4. 3 Perceived Importance of the Teaching Related Subjects for Early-Career Faculty Members: Descriptives, Frequencies and Percentages. (1-Not at all, 2-A little, 3-Fairly, 4-A lot)

Teaching-related Subject	M	SD	n	*Not at all* *f(P)*	*A little* *f(P)*	*Fairly* *f(P)*	*A lot* *f(P)*
Skills to establish communication with students	3.72	.5	53	0 (0%)	1 (2%)	13 (25%)	39 (74%)
Having students' active participation in the classes	3.6	.53	53	0 (0%)	1 (2%)	19 (36%)	33 (62%)
Teaching-learning ethics	3.57	.67	53	1 (2%)	2 (4%)	16 (30%)	34 (64%)
Course design-development	3.54	.54	52	0 (0%)	1 (2%)	22 (42%)	29 (55%)
Planning a course based on determined goals	3.52	.61	52	0 (0%)	3 (6%)	19 (36%)	30 (57%)
Attending professional development activities	3.51	.61	53	0 (0%)	3 (6%)	20 (38%)	30 (57%)
Connecting the course content with real life	3.43	.69	53	0 (0%)	6 (11%)	18 (34%)	29 (55%)
Assessment and evaluation of homework, project etc	3.36	.62	53	0 (0%)	4 (8%)	26 (49%)	23 (43%)
Using instructional technologies in class	3.3	.75	53	1 (2%)	6 (11%)	22 (42%)	24 (45%)
Knowing the learning theories	3.22	.7	51	0 (0%)	8 (15%)	24 (45%)	19 (36%)
Designing syllabus	3.19	.81	53	1 (2%)	10 (19%)	20 (38%)	22 (42%)
Preparation of exam materials	3.17	.58	53	0 (0%)	5 (9%)	34 (64%)	14 (26%)
Strategies to cope with crowded classrooms	3.06	.86	53	2 (4%)	12 (23%)	20 (38%)	19 (36%)
Using student-centered strategies in teaching	3	.82	51	3 (6%)	8 (15%)	26 (49%)	14 (26%)
Considering students' individual differences	2.9	.81	51	1 (2%)	16 (30%)	21 (40%)	13 (25%)
Using traditional (teaching-centered) strategies while teaching	2.62	.57	52	1 (2%)	19 (36%)	31 (59%)	1 (2%)
Caring about students' development based on their age	2.46	.94	52	7 (13%)	23 (43%)	13 (25%)	9 (17%)

4.1.2. Early- Career Faculty Members' Perceived Frequency for Facing with Problems Related to the Given Teaching-Related Subjects

At the second part of the survey, participants were asked to rate how often they face with problems related to the given teaching-related subject. The mean scores on Table4.3 and frequencies on Table4.4 indicates that the top three teaching-related issues which faculty members face with problems are; knowing the learning theories, having students' active participation in the classes, and attending professional development activities.

Combining data on Table 4.3 and Table 4.4, it can be claimed that some of the issues have been found to be important, but seemed that early-career faculty members are not facing with many problems about them. Skills to establish communication with students, teaching-learning ethics, and planning a course based on determined goals were among the items which were relatively important teaching-related issues according to the participants, but seems that they do not face with too many problems on these areas.

On the contrary, data revealed that faculty members face with problems on knowing learning theories, and dealing with crowded classrooms, although they did not find them among the most important teaching-related issues.

Table 4.4 Perceived Frequency of Facing with Problems about the Specific Teaching-related Subject: Descriptives, Frequencies and Percentages (1-Never, 2-Seldom, 3-Often, 4-Always)

Teaching-related Subject	M	SD	n	*Never* *f(P)*	*Seldom* *f(P)*	*Often* *f(P)*	*Always* *f(P)*
Knowing the learning theories	2.54	.96	52	8 (15%)	17 (32%)	18 (34%)	9 (17%)
Having students' active participation in the classes	2.45	.91	53	8 (15%)	20 (38%)	18 (34%)	7 (13%)
Attending professional development activities.	2.4	.99	53	10 (19%)	21 (40%)	13 (25%)	9 (17%)
Strategies to cope with crowded classrooms	2.36	1.09	53	14 (27%)	17 (32%)	11 (21%)	11 (21%)
Course design-development	2.35	1.01	49	12 (23%)	15 (28%)	15 (28%)	7 (13%)
Connecting the course content with real life	2.34	.96	53	10 (19%)	23 (40%)	12 (23%)	8 (15%)
Using instructional technologies in class	2.3	1.08	53	15 (28%)	17 (32%)	11 (21%)	10 (19%)
Using student-centered strategies in teaching	2.24	.91	51	12 (23%)	19 (36%)	16 (30%)	4 (8%)
Skills to establish communication with students	2.17	1.03	53	16 (30%)	20 (38%)	9 (17%)	8 (15%)
Assessment and evaluation of homework, project etc	2.13	1.04	53	19 (36%)	14 (26%)	14 (26%)	6 (11%)
Planning a course based on determined goals	2.1	1	52	18 (34%)	16 (30%)	13 (25%)	5 (9%)
Teaching-learning ethics	2.04	1.02	53	20 (38%)	17 (32%)	10 (19%)	6 (11%)
Preparation of exam materials	2	.96	51	19 (36%)	17 (32%)	11 (21%)	4 (8%)
Considering students' individual differences	1.92	.74	51	14 (26%)	29 (55%)	6 (11%)	2 (4%)
Using traditional (teaching-centered) strategies while teaching.	1.88	.68	52	14 (26%)	31 (59%)	6 (11%)	1 (2%)
Designing syllabus	1.86	.96	51	23 (43%)	16 (30%)	8 (15%)	4 (8%)
Caring about students' development based on their age	1.74	.9	50	24 (45%)	19 (36%)	3 (6%)	4 (8%)

4.1.3. Early- Career Faculty Members' Preferences on Faculty Development Activities

The fourth part of the survey was designed to collect data related to the early-career faculty members' preferences on possible faculty development activities. Their preferences for delivery methods for faculty development have been asked and participants were allowed to select more than one option among seminar, workshop, Internet-based system, a semester course, consulting to educational experts and other. All selections of the participants were marked with a "1" sign on a worksheet program and then total scores for each option were calculated. As shown on Table 4.5, 102 selections were made by the participants, from which workshops, Internet-based systems, and seminars have got the three top scores with percentages of 36%, 23.5%, and 18.6%.

Table 4.5 Preferences on Possible Faculty Development Activities for Early-Career Faculty Members

Preferences for FD Delivery Methods	*f*	*P*
Workshops	37	36.3
Internet-based Implications	24	23.5
Seminars	19	18.6
Asking for Expert Opinion	15	14.7
Full-semester Course	6	5.9
Other	1	1
Total	102	100
Preferences for Internet-based System Components	*f*	*P*
Video-Based Exemplary Cases	39	26.5
Text-Based Exemplary Cases	35	23.8
Theoretical Knowledge	35	23.8
Discussions with Other Faculty Members	18	12.2
Discussions with Educational Experts	18	12.2
Other	2	1.4
Total	147	100

4.2. Phase 2 – Evaluation of the Online System

After the needs analysis and design and development of the online environment, the EDS course was offered during the Spring 2009 semester. Data were collected throughout the semester by the use of weekly surveys and web logs including web site visits and usage statistics and discussion participations of learners. Analysis of these data was mainly conducted by quantitative methods except the open-ended questions of the weekly surveys and content-analysis of the discussions.

After the end of the semester, participants have been interviewed as explained on the methodology chapter. Qualitative methods have been used to analyze the interview data. Evaluation of the system data were presented under the following sections, starting with web log analysis, and then weekly survey results, and finally findings related to the end of the semester interviews and discussion logs.

4.2.1. Participants' Behaviors on the Online Environment

The patterns of how graduate assistants used the online environment are important in terms of complementing the big picture. Web site usage would provide useful data for designing similar environments for faculty instructional development aims. Participants' course views on the online environment, and usage of each component were collected through the Learning Management System and are presented on the following paragraphs. In addition, time periods of the day in which the online components have been visited were explored and presented. In addition to all other components, discussion part is examined in a more detailed way through the content analysis of the messages sent.

Web Site Visit Frequencies

Data related to participants' online course views are given on the following diagram on a weekly-based manner (Figure 4.1). The aim is to present the whole process of the course during the semester.

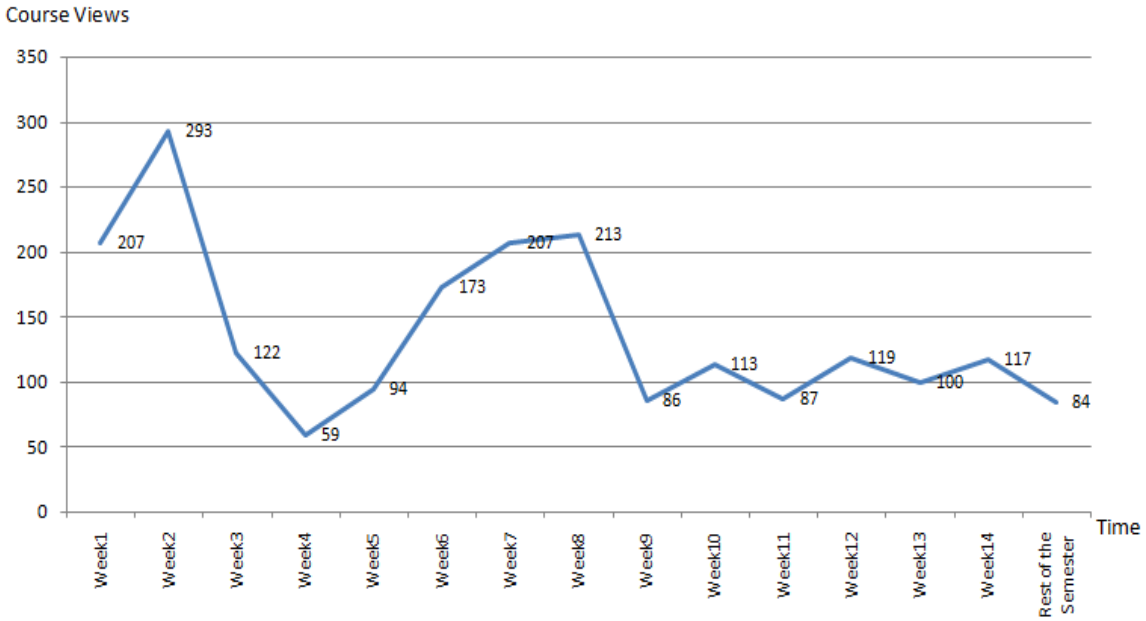

Figure 4.1 Participants' Online Course View Amounts Based on Weeks of the Semester

Week1 refers to the week starting from the first meeting to the second class day. Similarly, week2 covers the period from second to the 3rd class day. Data indicates that the visit rates were generally low for the last weeks of the semester. At the forth week, the class was cancelled because of the instructor's program, so the low rate for that specific week could be explained by the lack of face-to-face class.

Data reveals that the online environment has been viewed 2074 times in total, which means average course view for a participant for the whole semester was 90.17.

Time for Visiting the Online Environment

Periods of time for visiting the online environment were explored to have an idea about the preferred times for a web site designed for faculty development aims. This behavioral pattern would provide insights about the design of online environments for faculty members.

For this descriptive analysis, the days were divided into four parts including morning (6:00-11:59), afternoon (12:00-17:59), evening (18:00-23:59), and night (00:00-05:59).

As shown in Figure 4.2, the most preferred time period for visiting the online environment has been evening time, while morning has got the least number of visit.

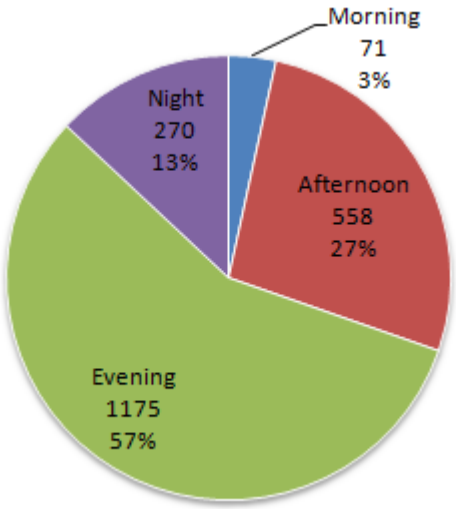

Figure 4.2 Participants' Preferred Time Period for Visiting the Online Environment

Use of the Online Resources

Use of Informative and Exemplary Teaching Case Videos

Web site logs related to the video materials are presented in detail under this heading. The overall visit logs for video materials indicated that they have been visited more frequently at the beginning of the semester, and then fall down slowly until the end. Moreover, it was revealed that the average visits per person for each video material went lower, when the number of videos increased for each specific week. Data was presented in two different tables based on the general types of videos including informative and exemplary teaching videos. Table 4.6 shows the number of informative videos as grouped, their total visits and average visit per person, while Table 4.7 presents the number of exemplary teaching videos as grouped, their total visits and average visit per person.

Table 4.6 Number of Informative Videos, Total Visits and Average Visit per Person for Each Video

Informative Videos	*Number of Videos*	*Total Visit*	*Av. Visit per Person per Video*
Interviews with Early Career Faculty (Week1, Week2 & Week4)	5	215	1.87
Interviews with First Year Students (Week2)	2	53	1.15
Seminar Videos (Week2)	2	68	1.48
Total	9	336	1.62

Table 4.7 Number of Exemplary Teaching Videos, Total Visits and Average Visit per Person

Exemplary Teaching Videos	*Number of Videos*	*Total Visit*	*Av. Visit per Person per Video*
Course Design Considering Students' Individual Differences (Week3)	1	66	2.87
Exemplary First Meeting Cases (Week5)	2	65	1.41
Exemplary Instructor-Centered Teaching Cases (Week5)	3	80	1.16
Exemplary Active Learning Cases (Week6)	7	176	1.09
Exemplary Classroom Management Cases (Week7)	3	79	1.14
Exemplary Classroom Evaluation Case (Week8)	1	27	1.17
Total	17	493	1.26

Looking at average visit per person, data indicated that the first week videos which were interviews with early career faculty members were among the most visited informative video materials. The result was similar for exemplary teaching videos in which the first

published video has the highest visit rate. It might be suggested that the novelty effect might have contributed to the high visit rates for the beginning weeks. In addition, the average visits per person decreased for each video when the number of videos were higher for a week as given on active learning strategies week.

Use of Other Supportive Teaching Materials

The other type of materials provided on the web site was some supplementary documents which were examples of real classroom material used by professors for several courses, and some guides to prepare their own teaching materials (Table 4.8).

Table 4.8 Participants' Visits for other Supportive Teaching Materials

Other Supportive Teaching Materials	*Number of Materials*	*Total Visit*	*Av. Visit per Person per Material*
Sample Materials for Course Design Based on Student Input (Week4)	2	115	2.5
Guide for Syllabus Design (Week4)	1	27	1.17
Sample Syllabi (Week4)	3	67	.97
Guide for Self-Evaluation of Their own Teaching Video (Week5)	1	67	2.91
Guide for Preparing Active Learning Activity for Their own Course (Week6)	1	22	.96
Total	8	298	1.62

Results indicated that the guide to prepare an active learning activity has the highest visit rate, followed by examples of students/needs analysis and course evaluation sheets prepared by other professors to be used for effective course design.

Use of Related Articles

Another type of material provided on the web site was the related articles for certain weeks. Five articles were presented as supplementary materials to enhance participants' knowledge about the subject matter. Table 4.9 shows the data related to the total visits and average visit per person for each article.

Table 4.9 Related Articles, and Data of Total Visits and Average Visit per Person

Related Articles	*Total Visit*	*Av. Visit per Person*
Article on "Great Workplaces for New Faculty" (Week1)	30	1.30
Article on "Learning&Teaching Styles in Engineering Edu." (Week3)	42	1.83
Article on "Style Constructs of the Learning Process" (Week3)	31	1.35
Article on "Challenges for Turkish Higher Education" (Week4)	15	.65
Article on "Ethical Principles in University Teaching" (Week9)	10	.43
Total	128	1.11

Data indicated a dramatic decrease at the end of the semester, which may be explained by busy end-of-semester workloads of the graduate assistants as realized by the interview data as well.

Use of the Discussion Forum

Data related to the use of online discussions have been gathered through the web site logs and related parts of the end of the semester interviews. Interview data were used as complementary to the web site logs, which helped to have a deeper understanding of quantitative data.

Web site logs indicated that the discussion forum has been visited 1634 times by 23 participants, which means that average visit per participant was 71.04 for the whole semester (Figure 4.3). There have been 19 discussion topics around 9 main subjects of the course syllabus.

In terms of the participation to the discussions, 330 messages were sent/updated in total, which means an average of 14.35 messages each participant for the whole semester.

Data related to forum participation (add or update post) are given on the following diagram on a weekly-based manner. The aim is to present the whole process of discussion usage for the whole semester. It should be noted that there have been 6 sub-topics to be discussed under 'Subject 9', while Subjects 3, 7 and 8 have had two sub-

topics, and ‘Subject 6’ had 3 sub-topics. The high visit rate of the last week can be explained by including 6 sub-topics under that week’s main topic.

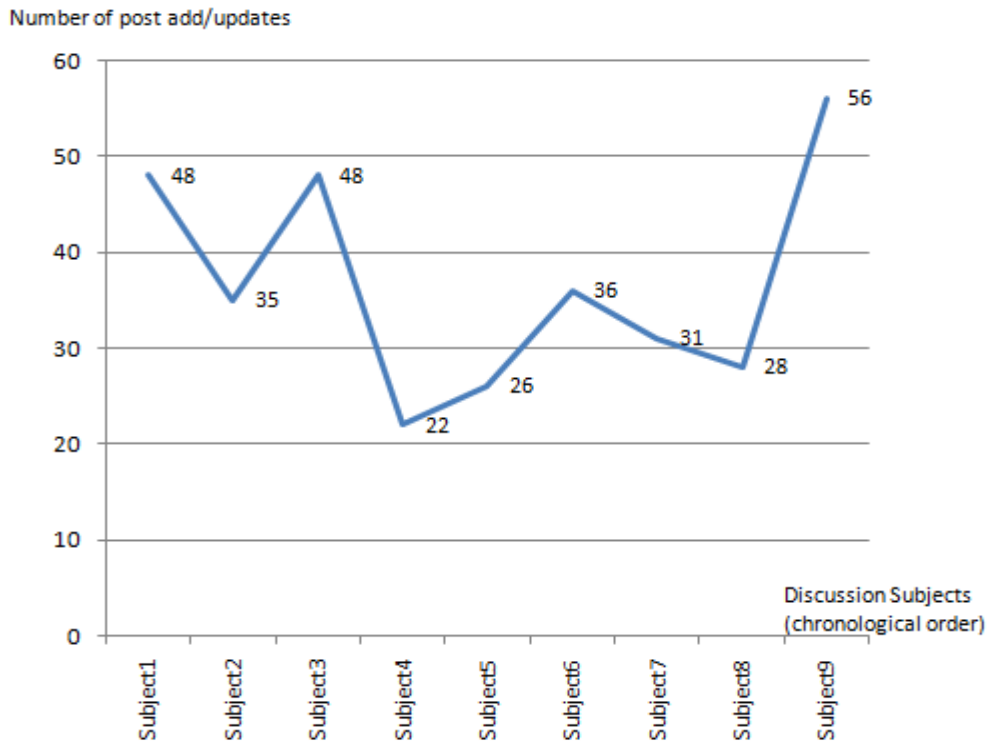

Figure 4.3 Discussion Participation (Number of Sent and Updated Messages) Based on Subjects Related to the EDS660 Course Syllabus.

Excluding the special situation of the last week (including 6 different discussion sub-topics), web site logs indicate a decrease on the participation towards the end of the semester. The high participation rates on the beginning of the semester can be explained by both novelty affect and the increasing workload of the graduate assistants towards the end of the semester.

Interview data related to the participants’ use of the discussion forum revealed that 5 of the 10 participants complained about the difficulty of participating the discussions because of their workload (both dissertation and teaching) which become busier towards the end of the semester. Moreover, two participants shared their observation that people were more eager to participate the discussions at the beginning, then it decreased.

Time Period for Participating Discussions

Periods of time for participating the discussions –namely sending or updating a post- were explored to have an idea about when the graduate assistants prefer to participate the online discussions. This behavioral pattern would provide insights about the design of online environments for faculty members (Figure 4.4). The previous time intervals of the study were used to identify the time periods of the day.

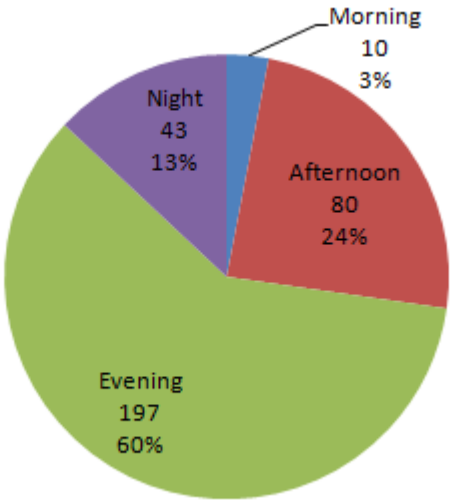

Figure 4.4 Amount and Percentages of the Messages sent to the Discussion Board Based on Time Periods of the Day

197 of the 330 messages were sent during the evening time (18:00-23:59) which has been the most active period of day in terms of the discussion participation, while morning was the least active time with only 10 messages sent to the discussion board. These results were very similar to the web site visit data as presented previously.

One of the participants' interview quotations might be helpful to explain the situation of why the graduate assistants usually participated the discussions at evening: "I had a lot of works to finish, and my head was so busy that I was usually able to write at around 11-12 pm." After-work time might be more useful for graduate assistants to login the web site and participate the discussions.

Content Analysis of the Online Discussions

For further examination of participants' behaviors in the online environment, a content analysis was conducted. To this aim, the event categories developed by Jeong (2003) have been used as a guide to develop the analysis protocol, after making some adaptations on his categorization.

Nine main categories revealed after the analysis of the discussion logs; statement of agreement-disagreement, taking a position on the current discussion topic, affirming an argument to support their position, telling an experience, explaining plans or possibilities for their professional future, making a connection to F2F class, making a summary of other forum messages, asking for other participants' opinions on a subject, and comments about the EDS660 course in general, about the materials used in the online environment or other participants' contributions to the discussion.

Agreement-Disagreement

During the discussions, participants sometimes wrote messages which simply showed their agreement or disagreement to one or more participant's opinion. 64 statements were coded as agreement-disagreement, only if the participant used the phrase 'I agree/disagree with' or 'I've the same opinion with'. Many of these forum posts included agreement with the common idea, while some of them specifically referred to a participant's idea. Another important point is that, although the category is dedicated to direct expressions of agreement and disagreement, only two disagreement statements have been found. It should be noted that even the negative statements were explained in a kindly manner, and participants usually avoided from bold statements like 'I don't agree' or 'I'm against'.

Position Statements

Analysis of the forum messages indicated that the most common action was taking a position on the topic being discussed. The general tendency was to stay with the group's common opinion, while few messages included negative statements against the common idea or extended the scope of the discussion by introducing a different aspect.

For instance, fifth week's discussion topic was asking the participants to compare videos of different instructor –centered teaching cases and almost all of the participants stated that they liked the Physics instructor's lecture most. One of the *positive* statements was:

> For me, the most interesting was the Physics instructor. Although the coruse was instructor-centered, the preparation and presentation were not traditional at all; there was a show. I always felt curiosity while watching, and my interest never went down.
>
> Benim için en etkileyici olan fizik dersini veren yabancı hocaydı. Ders geleneksel öğretmen merkezli olsa da hazırlanışı ve sunuşu hiç de geleneksel değildi, bi gösteri vardı. İzlerken sürekli bi merak duygusu hissettim ve ilgim hiç azalmadı.

While most of the messages' point was similar to the previous quotation, only a few participants were at the negative side, namely against the common idea:

> I think the Physics course was too instructor-centered. It would be better if he makes it in a more interactive way by involving a student in his experiments.
>
> Fizik dersi bence cok hoca odaklı idi. Bence öğrencilerden birini deneylere katıp interaktif yapabilse daha iyi olurdu.

Similar to the negative positions, there were a few posts which added a *different aspect* to the current discussion subject:

> Physics instructor's strategy of explaining the subject through practice made his course more attractive compared to others. I agree with that. But to what extend is it applicable in verbal courses; this should be considered.
>
> Fizik dersini anlatan hocanın uygulamalı anlatışı dersi diğerlerine göre daha çekici hale getirmiş buna ben de katılıyorum ancak sözel bir derste böyle bir anlatım ne kadar gerçekleştirilebilir, bunu da düşünmek lazım.

Arguments

Another category of the discussion was affirming an argument which was usually used to strength participants' position or explain the rationale of their opinions. Three main types of arguments were stated by the participants; *giving examples or making a suggestion about a hypothetical situation; personal beliefs, principles or set of assumptions; and factual information describing events, objects, and circumstances.*

162 quotations were counted as *giving examples or making a suggestion about a hypothetical situation* which a faculty member may face with. One of the topics discussed in third week was the strategies to be used for a course design which address different student profiles. An example forum post was making a suggestion on a predicted teaching case:

> Little differences in teaching changes people's perception. Therefore, we should use course or subject specific strategies for different courses or different subjects in a course.
>
> Dolayısı ile ders işleyişindeki küçük değişiklikler insanların algısını değiştirmektedir, bunun için bizler de farklı derslerde veya bir dersin farklı konuları için, o ders veya konuya özgü yeni ve farklı yöntemler kullanmalıyız.

Or

> Instead of explaining the whole subject by reading it from a book monotonously or from a Powerpoint presentation, it would be a more effective strategy to emphasize the important issues about the subject, and then make some drawings on the board, as A said [referring to a forum post by participant A].
>
> Dersi verirken geçip monoton bir şekilde bir kitaptan okumak yada bir powerpoint sunumundan okumak yerine bahsedilen sunum üzerinden temel noktaları anlatıp gerektiği yerlerde de A arkadaşımızın bahsettiği gibi tahtaya çizip anlatmak belki konuyu daha etkili bir aktarım yolu olabilir.

Another important subcategory of argument was the *statement of personal beliefs, principles or set of assumptions* about their disciplines, students, being an instructor and teaching/learning concepts. Most of the beliefs, principles or assumptions have been made about teaching/learning concepts and course design, while the least were on how they see the students. These beliefs and assumptions are very short sentences in between suggestions and position statements. For instance, one of the participants explained a personal belief about 'being an instructor' and what teaching process means to her while discussing the same topic:

> Understanding those differences and development processes is one of faculty members' responsibilities. Because teaching is not a passive process that is limited to just presenting information.

> Bu farklılıkları ve gelişim süreçlerini anlamak, öğretim üyesinin sorumlulukları içerisindedir. Çünkü öğretim süreci, yalnızca bilgiyi sunmayla sınırlanacak pasif bir süreç değildir.

Another personal belief about 'teaching' is:

> I think that if a subject needs to be told by someone, this should be the instructor, not the students.
>
> Ben aslında eğer bir konu birisi tarafından anlatılacaksa, öğrenciler tarafından değil de öğretim görevlisi tarafından anlatılması gerektiğini düşünüyorum.

Depending on the discussion subject and flow, a few participants needed to explain their discipline-related beliefs like a participant from Architecture department believed that especially in social science, discussions with students should be a part of evaluation strategies.

Although assumptions and personal belief statements were mainly focused on teaching and being a faculty member concepts, limited number of statements exposed assumptions about students:

> In this kind of activities, instructor seems to be excluded. In my opinion, students always want to have communication with the instructor.
>
> Bu tür aktivitelerde instructor biraz devre dışı kalıyormuş gibi görünüyor, bence öğrenci her zaman instructor ile iletişim içerisinde olmak ister.

Factual information describing events, objects, and circumstances was the other type of argument affirmed by the participants. Information related to the students, faculty members, participants' departments, university, and even Ministry of National Education have been given. Similar to the other types of arguments, this category is used by participants to strength or explain the rationale of their positions.

Experience

During the discussions, participants shared their experiences as a graduate assistant, as a student, as a researcher or more general subject. Sharing of the experiences provided a rich database of different strategies which have the potential to open the readers' minds about possible methods an instructor may use.

As a graduate assistant, they gave examples of successful strategies they used in the classroom, some implications they used to apply, but now realized that they were wrong, problems they faced with, and observations about the students and teaching/learning processes.

As a student, they have seen many instructors and different teaching and/or communication strategies during their education. Similar to the experience as a graduate assistant, they shared bad examples or good strategies they observed as students.

Experience as a researcher was another sharing in the discussion forum, which mainly based on the participants' observations rather than their own life experiences. They shared observations from their department, from METU, other universities, and sometimes more general like comparing Turkey with other countries as a researcher.

In addition to the experiences as a graduate assistant, as a student, or a researcher, there were some general experiences which mainly based on observations again; general observations about faculty members, higher education system, governmental issues etc.

Plans-Possibilities for Future

Predictions about the future career, and making some plans was another category revealed while analyzing the discussion forum. Participants imagined their future situation in the profession and explained some of their plans about being a faculty member, teaching, researching etc. these category was common in the forum posts, especially if the discussion topic was necessitating them to think themselves as faculty members. The following quotation is taken from 3rd week's first discussion topic about how to design a course that meets the needs of students with different characteristic.

> To overcome this problem in my own courses in future, I want to apply strategies like technical tours (field trips?), preparing homeworks and projects based on real-life situations, and creating opportunities for students to see the case in an authentic environment and create solutions accordingly. Similarly, I'm planning to use 3-D maquettes to explain some engineering concepts.
>
> Ben de ilerde ders verirken bu sorunun üstesinden gelebilmek için teknik gezi düzenlemeyi, ödevleri ve projeleri gerçek vakalardan hazırlamayı ve öğrencilerin vakayı bizzat yerinde görerek düşünmelerini ve çözüm

> üretmelerini sağlamayı istiyorum. Yine derste bazı mühendislik kavramlarını anlatırken ufak 3 boyutlu maketler kullanmayı düşünüyorum.

Referring to F2F Sessions

Sometimes, participants mentioned the subjects they discussed at F2F session of the course. One of the most common statements was ‘as we talked in the class’. Participants may have needed to provide some proof before they asserted their ideas or remind their peers what was discussed before. Another important point was that most of the references to F2F sessions were made at the third week’s second discussion, with an emphasis on how interesting it was to learn that people have different learning styles. It should be noted that the group work they accomplished at the F2F session was especially referred by some participants.

Comments

In addition to contributing to the discussion topic, participants made some comments about the EDS660 course in general, the materials on the online environment and comments about other participants’ contributions like appreciation or critique.

While some problematic issues related to teaching are stated, participants tended to explain their expectation to find the right answers in this course. In addition to the comments about the course, they commented about the online materials like ‘this video was good in terms of showing the differences between the strategies of social science and applied science’ or made suggestions like ‘it would be better, if there were as many student interviews as the faculty members’.

Finally, there were comments about other participants’ contributions. All of these comments were thanking about the contribution of either specific people or the whole group, except one message saying that “you wrote a very assertive message☺”.

Making a Summary and Asking for Others' Opinions

The last two categories of discussion posts was making a summary and asking for others' opinions. As shown in Table 4.10, 6 messages summarized the main issues emerged from discussion posts, then the participant presented his/her own opinion.

Asking for others' opinion was another category of forum posts. Some participants presented their positions, arguments etc, but were not able to find the answer of a big question like "a student should feel that the instructor respects his/her ideas. But how can an instructor do that?" or "Are the learning styles and related teaching strategies applicable to all contexts?"

Table 4.10 Content Analysis Categories for Discussion Forum and Amount of Quotations

Discussion Analysis Categories		*Amount of Quotations*
Agreement-Disagreement		64
Position		
	Positive	222
	Negative	38
	Introducing different aspects; extending the scope of the discussion	53
Argument		
	Giving examples or making suggestions for predicted/hypothetical situations.	162
	Personal beliefs, principles, or set of assumptions: about their discipline, being an instructor, students, teaching, learning etc.	60
	Factual information describing events, objects, and circumstances	52
Experience		
	As a student	43
	As a graduate assistant	84
	As a researcher	13
	Other	33
Plans-Possibilities for Future		37
Referring to F2F Session		21
Summary		6
Asking for Others' Opinions		6
Comments		
	About the materials	7
	About the participants: appreciation, critique etc	7
	About the course (EDS660)	16
Total		858

Results related to the content analysis of the discussions indicate that participants usually preferred to state a position which usually stayed with the common opinion of

the group. Only 38 of the 313 position statements were against the common idea, while 53 extended the scope of the discussion by asserting a different aspect. Participants were usually moderate; not big conflicts have been observed during the discussions.

Another important point of the content analysis was that participants tended to affirm their arguments mainly as giving examples or making suggestions on hypothetical situations, rather than explaining their personal beliefs or providing factual information. Making suggestions on hypothetical situations to strength the position in the discussion or to explain the rationale for a person's position might be a cultural characteristic or may have caused by not having information or personal beliefs about these issues, since they have not been teaching and even may not thought about 'teaching' seriously before.

User Behaviors Based on Interview Data

One of the emerging main themes of the interview analysis was the participants' behaviors on the discussion forum. Discussion participation patterns based on graduate assistants' interview data were categorized under three main themes including reading, writing, and interaction patterns. While the 'use of online discussion' data under the previous headings were mainly based on Web site logs and content analysis of the discussion logs, the current data is the result of analizing participants' interpretations of their and their peers' behaviors.

Reading

6 of the 10 participants stated that they read other participants' responses before they made a comment on the current discussion topic. 3 of the participants especially stated that they briefly read all of the previous replies before they added their own comment. S9 said that he read the previous messages before writing his comment on 60% of his discussion participation, while for 40% he did not read the previous comments, and just replied the main question posed by the discussion moderator.

Graduate assistants had different strategies to read the previous messages on a discussion topic, like S6 only read the ones which looked interesting to him. He did not

read the messages which start with the phrase “I agree with...”. He was willing to see only the interesting and different comments.

Although most of the participants (6) found it necessary to read the previous comments before making an input to the discussion, S3 said that seeing others’ response had a negative effect on her discussion participation, since she felt that her opinions were shaped by others’ opinions. She may not be able to express her own ideas freely, and write something similar to the common point of view, after reading others’ opinions.

Writing

In terms of the writing habits on the discussion forum, participation has been divided into two groups by the interviewee; seriously written messages and messages written as a duty. Although they think that it was good to have an online discussion environment in general, some participants stated that either they or their peers have posted messages to the discussion forum just because they had to write as a course requirement. Mandatory participation was one of the limitations of this study as it was emerged on the interview data as well. Similar to other 3 participants, S1 shared his observation about the quality of the forum posts:

> Generally it’s obvious who is writing firstly and who is writing mostly… There are some people who generally write on them. There are some people who writes just because participation is a must or it would be nice to participate… Additionally, there are some people who write seriously after thinking a lot.
>
> Genelde insanlar zaten hani başta ilk yazanlar belli oluyo yada çok yazanlar… onların üstüne genelde yazanlar var. Bu hani sadece katılım zorunlu yada katılırsan iyi olur diyip şey olarak yazanlar var.. Bi de ciddi ciddi hani kafa yorup yazanlar da belli oluyor.

In addition to negative effects of mandatory participation on writing to the forum, two participants expressed difficulties in writing, because they felt that discussion lost the focus sometimes. They said that other participants’ posts may have caused the discussion went away from the main topic, and they had difficulty to understand the flow and make a comment.

Besides non-careful messages written because of the mandatory participation, 4 of the graduate assistants mentioned that either they or their peers wrote some messages which

were seriously thought and organized, and clearly declared. S2 stated that she was more involved and sent longer messages to the forum, if the subject was interesting to her.

4.2.2. Thoughts about Faculty Instructional Development Activities

Graduate assistants' thoughts about the "professional development on teaching" subject have been investigated through the interviews to have a general idea about what prospective faculty members think about these kind of activities at METU. Mainly based on the interview data, their thoughts have been examined in three main categories including thoughts about the EDS660 course they have taken last semester, thoughts about professional development on teaching in higher education in general and thoughts about a possible online environment designed to support the faculty members' professional development on teaching.

Thoughts about Participating Faculty Instructional Development Activities

All of the participants agreed with the idea that there must be some kind of support at the universities to help the instructors improve/enhance their teaching. The most common reason for this need as mentioned by the participants was the inappropriate or wrong teaching implications/traditions they observed during their school life. One of the participants stated that;

> Actually, professors need to know the learning styles, I think. Because many of them are not aware of learning styles andthey teach the way how they have been teaching for years and using the same lecture notes. Showing that it's wrong… Actually, professors need some training, too, I think… even though they are faculty members…

> Öğrenme stillerine aslında bence ihtiyaçları var hocaların.. çünkü birçok hoca öğrenme stillerinden habersiz ve yıllardır nasıl anlatıyorsa öyle gidiyorlar ve yıllardır aynı ders notlarını kullanıyorlar.. bunların hani yanlış olduğunu.. aslında hocaların da eğitime ihtiyacı var bence.. üniversite hocası olsalar bile..

Another participant mentioned a similar issue;

> Since many professors didn't take any pedagogical courses, they have a "I'll do my lecturing and than leave tha classroom" kind of mentality. Students learn or not… Moreover, they think that students learn on their own in universities, so there is not even lecturing most of the time… The situation is better at METU, but in smaller universities it's not… Therefore, all universities should provide this kind of in-service trainings.

> Formasyon dersi hiç almadıkları için birçok öğretim üyesi, ben dersimi anlatır çıkarım yani konuyu verir giderim gibi bir zihniyete sahip, öğrenci öğrenirse öğrenir öğrenmezse öğrenmez, ki ayrica universitelerde öğrenci kendi öğrenir mantigi guderler, cogu zaman ders bile anlatilmaz. Yani bir yonteme dayali bir system yok üniversitelerde, bir çoğunda… ODTU'de biraz daha iyi ama taşra üniversitelerinde yok gibi, onun için tüm üniversitelerin aslında bunun gibi hizmetiçi bir eğitim vermeleri gerekiyor. [S10]

Two of the participants stated that they usually learn teaching from each other which they would not prefer actually. On a question about whether faculty members need a support on instructional issues, S7 explained the situation in her department:

> I don't know the situation at other places, but for my department, I can say that in my department –Architecture- we have some kind of master-spprenticehip system. But it doesn't work well all the time.
>
> Bilmiyorum hani başka yerlerde durum nasıl onu da bilmiyorum da, kendi bölümüm açısından bakacak olursam bizde şey var biraz; hani bir mimarlikta usta-çırak ilişkisi gibi bir sistem var ama o da her zaman cok çalışamayabiliyor. [S7]

In terms of the target audience of possible faculty development activities on instructional issues , 6 out of the 10 participants stated that both the graduate assistants and the faculty members who are already teaching need to participate in professional development activities about teaching. As stated by S4, it should not be limited to only graduate assistants;

> There must be this kind of units inside the universities. For providing regular assistance to bilinclendirmek the faculty – I don't know how that system can be established in the universities though -, there must be a unit. I guess this graduate course -EDS660- is also a course provided for this aim for graduate assistants in OYP system.
>
> Üniversiteler içinde böyle birimlerin olması gerekir, hocalara duzenli olarak -tabi o nasıl olur sistemi sistematiği nasıl geliştirilir üniversite içinde bilmiyorum ama- hocaların bu şekilde bilinçlendirilmesini saglayacak bi birim olmasi gerekir.. ki zaten bu eds660 da bizim öypliler için bu amaçla verilen bi ders sanırım zaten.. hani bu ders sadece bizim gibi doktora yapıp da og,gor olabilecek insanlar için değil mevcutları da düzeltmek, mevcutlara da bir perspektif sağlayacak bi sistemin üniversiteler içinde olması gerekir tabi..

However, two of the participants have seen faculty members' seniority as a limitation in terms of their professional development activity participation. S1 said that the target audience for any professional development activity should be early-career faculty members who have an assistant professor title at most;

> It could be possible for faculty members who just started their careers – like assistant professors - but when the titles go higher – for instance a full professor – they become more "ben bilirimci"… So this can turn into a competition about putting pressure on others or behaving stubbornly.
>
> Yani şey olarak hani ilk akademisyenliğe başlamış öğretim üyeleri yar.doc gibi yar.doc. lar için olabilir de kadroları büyüdükçe ne bileyim bi profesör oldukça biraz daha bi şey geliyo hocalara, daha bi ben bilirim havası geliyo hocalara… bu iş artık şeye döner, hani lafını kabul ettirmeye, inatlaşmaya dönebilir.

The common idea retrieved from the graduate assistants' interview data was that all of the university instructors should participate in some kind of professional development activities which could be a training, course participation, seminar attendance, or consultation on specific teaching-related issues.

Seminars are seen as the most effective ways for supporting the faculty members' professional development on teaching by 6 out of the 10 participants. S6 suggested seminars similar to EDS course content, while S4 made a suggestion about certifying the seminar participation;

> For instance, there could be seminars. This course we've attended could be divided into small seminars and given to faculty members. [S6]
>
> Mesela seminer olabilir. Bize verilen bu ders mesela üniversitede hocalara seminerler halinde ufak ufak anlatılabilir yani. Gayet de etkili olur.. Bana faydası oldu yani, onun için diyorum. [S6]
>
> It could be in seminar formats. Attendance could be done compulsory… in my field – engineering-, there are seminars related to our profession.They are being certificated and those certificates are documents that show your qualification on that subject.similar certificated seminars could be arranged in the universities on educational subjects, too. They can be offered frequently and could be about various subjects. [S4]
>
> Seminerler şeklinde olabilir.. bu seminerlere katılma zorunluluğu getirilebilir.. bizim mühendislikte mesleki anlamda bu tur seminerler düzenlenir ve bu tur seminerlerde alınan sertifikalar vardir ve bunlar sizin o konudaki yeterliliğinizi gösteren belgelerdir. Hani üniversiteleler içinde de eğitimle ilgili sertifika veren programlar yapılabilir ama bu sıklıkla yapılabilir, değişik konularda yapılabilir. [S4]

One of the suggestions made by 5 participants was about a consultation system in which faculty can get instant support for their specific needs on teaching. They preferred just-in-time communication with educational science experts, so that they can ask anything about teaching and take instant response. S9 explained what kind of support he may need after starting his teaching career;

> When I'm going to give a course, how am I supposed to prepare the content? For instance, which group is going to take the course, freshmen, junior, graduate students? What kind of psychological situationsam I going to face with? Definitely, before designing a course, a faculty member should go to a center like that and learn about what strategy to follow, how to design the course and about the grade levels of the students.
>
> Ben mesela ders açacağım zaman bu dersin içeriğini nasıl hazırlamam gerekiyor? Mesela kaçıncı sınıf, grad öğrencilere mi vericem, 1. Sınıf, 2. Sınıf? Karşımda nasıl bir psikolojide insanlar bekliyor. Kesinlikle bir hoca ders acmadan once böyle bir merkeze gidip nasıl bir ders acacagini, hangi sınıfa açacağını, nasıl bir yol izlemesi gerektiğini öğrenmeli. [S9]

Thoughts about the Effects of Graduate Course EDS660

Semi-structured interview data were used to explore the participants' general impression about the EDS660 course. The main themes revealed from the interview data were about the *educational perspectives* the participants changed or developed during the course, and contributions of the course to their *future teaching*.

First of all, interviews revealed that all of the participants had positive opinions about the course, although some of them started the semester with very negative attitudes since it was a must course and seen as an extra workload by the graduate assistants. However, at the end of the semester, all of the participants were sharing the same idea that the course was very helpful especially because of its contributions to developing an educational perspective and thinking about the teaching aspect of their profession which they usually ignored before.

Changing Perspectives on Teaching Aspect of the Profession

Interview data revealed that one of the most common contributions of the EDS660 course was that the graduate assistants started to realize the teaching dimension of their future profession and develop an educational perspective.

Teaching dimension of higher education is traditionally not promoted as much as research, however exploration of options for new roles may be introduced to graduate assistants. 7 of 10 participants stated that they started to think about the teaching aspect of their profession. They started to realize a new aspect of being faculty member:

> This course taught me that if I'm gonna be a faculty member, I have to read articles about teaching as well. There are very good strategies and techniques we can get from these articles. I think we need it to improve ourselves. I've learnt this, at least.
>
> Bu ders bana şunu öğretti; öğretim üyesi olursam eğer, eğitim-öğretimle ilgili de makaleler okumak gerekiyor, bunlardan alabileceğimiz çok iyi yöntemler teknikler var. bu kendimizi geliştirmemiz için gerekli olduğunu düşünüyorum. Yani bunu öğrendim en azından. [S10]

Usually people teach the way they learned from their professors. S9 compared the traditional way vs having a professional point of view on teaching, as a result of taking EDS660 course:

> Our peers who are not graduated from the Faculty of Education are treating the students based to their own beliefs and personality, but I realized that it shouldn't be done like that. There are some rules. It could be done related to thoese rules. In terms of learning this, I mean in terms of becoming professional as an educator, this course has been very beneficial.
>
> Eğitim mezunu olmayan arkadaşlarımız bir öğrenciye karsi nasıl davranacaklarini kendi yapisindaki, yani dogasina göre davranıyorlar ama ben şunu anladım ki böyle yapılmaması gerekiyor. Bazı kurallar var. O kurallar çerçevesinde yapılması gerekiyor. Bunlari öğrenmek açısından, yani bir eğitimci olarak profesyonel olmak açısından bu ders çok yararlı oldu diyebilirim.

While S9 made a more general comparison of changing perspectives, S10 explained in a more detailed way how his educational perspective changed during the EDS660 course:

> The course has been very beneficial. It forced us to think about issues like how a student learns, how s/he should learn or how s/he can learn easier… I was not thinking about these issues before. Honestly, I used to have a mentality like I will do my lecturing, some will learn and some will not…
>
> Ders cok faydaliydi, bir öğrenci nasıl öğrenir, nasıl öğrenmelidir, nasıl daha kolay öğrenir gibi konulari kendi kafamizda düşünmemize sebebiyet verdi bi yerde.. daha onceleri bunu pek düşünmüyordum, yani ben dersimi anlatirim, öğrenen öğrenir öğrenmeyen öğrenmez şeklinde bir düşünceye sahiptim açıkçası…

S8 gave more details about the educational point of view she developed:

> After the course, some issues [about teaching/learning] have become obviously appearent in my mind: It should be student-centered, more practice oriented, including more visuals, leaving the students free and also controlling at the same time
>
> Dersten sonra bir şeyler kafama daha iyi vuruldu. Onlar da öğrenci merkezli olması, daha çok uygulamaya yönelik, daha çok görsel şeyler içeren ve öğrenciyi özgür bırakan ama aynı zamanda da kontrol eden… böyle diyebilirim.

Thinking and Planning of Future Teaching

Another common category revealed from the interview data was that participants started to *think about and plan their future teaching*. Course and syllabus design, teaching strategies used in the classroom, communication with students, classroom management, assessment and evaluation and individual differences of the students were the different aspects of teaching they mentioned that they started to think about.

Some (3) of the participants stated that they're feeling more comfortable and self-confident about *designing their own course* after taking the EDS660 course, while some others (2) gave examples about designing the course based on students' characteristics and needs, which was one of the activities of the course. As an activity of EDS660, example surveys of needs analysis and evaluation of the course were given on the web site and graduate assistants were asked to examine these surveys and design their own for their portfolios.

All of the participants stated that the course was very helpful since they learned how to *design a syllabus*, and developed their own for one of the future courses. S1 explained how he was planning to use the syllabus he developed at the EDS660 course, while S10 stated that he became aware of the components of a good syllabus;

> During the EDS660 course, we already designed a syllabus for one of our future courses, some issues have become clear in my mind according to that, but I guess I can use ot for elective courses, since must courses will already be settled down when we start our careers in new places, content will already be decided. [S1]

> Zaten dersi yaparken hani ileride vermeyi düşündüğümüz bir ders için syllabus hazırlamıştık, ona göre işte kafamda birşeyler şekillendi ama bunu daha cok sanırım seçmeli dersler için kullanabilirim çünkü zorunlu verilen derslerde biz gittiğimizde orda zaten oturmuş bir sistem oluyor, işte şunlar anlatılacak… [S1]

> As a specific example, how to prepare a syllabus, how to write the course objectives, learning that the important thing about course objectives is what students obtain [outcomes] rather than what we give, and selecting/guessing the accurate strategies for achieving those ooutcomes… These are what I'm going to care about while designing my own courses in future. [S10]

> Spesifik olarak verebileceğim örnek bi kere dersin syllabus'inin nasıl hazırlanması gerektiği, dersin amaçlarının nasıl koyulması gerektiği, öğrencinin dersin amaçlarında en önemli şeyin verilmek değil de, öğrenci tarafından alınması gereken şeyler olduğunun bilinmesi ve bu alınması gereken şeylerin yöntemlerinin doğru seçilmesi, doğru tahmin edilmesi.. bunlar ileride ders hazırlarken benim gözönünde

bulunduracağım en önemli şeyler. [S10]

Another issue pointed out by 8 of the participants was *thinking of different teaching strategies* for their future classes. S1 stated that he can not change the content, but make a difference in lecturing style by the help of what he learned in EDS660. 6 participants gave specific examples of active learning strategies which they think about using in their future courses. Similarly, 1 participant stated that he was planning to use one-minute quizzes at the end of each class to see how effective the class was. All of the teaching strategies participants were planning to use were among the exemplary teaching videos on EDS660 web site. S1 gave an example of an active learning strategy he was inspired by an application in one of EDS660 classes.

> For instance, there was a case study implication within the active learning strategies subject – we did it in the class, too… I thought about applying a strategy; giving lectures about environmental problems the whole semester, and then giving a case study and asking the people to make [present] it in a theatral format… other than that, graduate courses can be given in a more active learning based approach, group works.
>
> Mesela active learning'de bu - derste de yaptık biz hani – case study olayı vardı, orda biz hani ders boyunca dönem boyu çevre sorunlarını anlatıp dönemin sonunda bi case verip insanlardan bunu teatral bir hale getirip o tarz bir uygulama yapmayi düşündüm. Onun dışında y. lisans, doktora için mesela dersler daha çok böyle grup çalışması şeklinde - hani aktif learning'e dayalı - yapılabilir. [S1]

Another category revealed from the interview data related to graduate assistants' future teaching plans was *communication with students*. 6 participants stated that they gained a different perspective about how to have an effective communication with students. S2 said that;

> About the students who are not interested in the lecture or interrupting… Not inside the classroom environment, but talking later privately… But still by caring about the professional distance… not friendly… Because otherwise, they can abuse it. We talked about issues like this… We gain ideas about issues like how should I behave, how should I stand, etc.
>
> Öğrencilerden mesela derste ilgisiz yada dersi bozmaya çalışan birine hani.. sınıf ortamında değil de, daha sonrasında onu alıp konuşarak.. ama yine de o mesafeyi ayarlayarak… arkadaşça değil ama.. hani çünkü öbür türlü de bunu suistimal edebilirler.. bu tarz şeyler üstüne de konuşmuştuk.. bunlar hakkında da kafamızda şeyler oluştu.. hani ben nasıl davranmalıyım, nasıl durmalıyım, duruşum nasıl olmalı konularında bir fikrimiz oldu..

Classroom management was another area participants talked about. 4 participants stated that they became aware of different strategies about classroom management during the EDS660 course. S3 gave an example of discussions on classroom management strategies;

> Some students are interrupting the classroom order, and block other students' listening and learning. But how can you solve problems like this in your own class, how can you direct their listening, how can you force those students to participate in the class rather than displaying them… How can you gain those students… There were comments about these issues; they were nice for instance.

> Bazı öğrenciler dersin işte işleniş düzenini bozuyorlar, diğer öğrencilerin de dinlemesine, öğrenmesine engel oluyolar.. fakat işte siz bunları nasıl kendi sınıfınızda çözersiniz, dinlemeyi nasıl yönlendirirsiniz, onları sınıf içinde teşhir edici şeyler değil de onları derse katılmaya yönlendirici şeylerde bulunmak.. Onları nasıl derse katabilirsiniz, kazanabilirsiniz konusunda yorumlar vardı, onlar güzeldi mesela…

Other two categories related to *thinking about their future teaching* were about the *assessment and evaluation* strategies and *individual differences* of the students. 3 participants stated that they improved themselves about preparing assessment strategies, and 3 participants stated that they started to think that students may have different learning styles, and as an instructor they have to do something for each student.

Thoughts about Using Online Systems for Professional Development Aims

As another strategy to provide support to faculty about teaching, the participants' thoughts about an online environment were asked during the interviews. 3 of the participants stated that it would be a good idea to have an online environment so that they can access this kind of information easily, while 4 participants thought that it would not work well and one participant mentioned both the positive and negative aspects of an online environment. S3's statement was one of the positive comments about the online environment, while S5 had a negative opinion about it since he was thinking about the possible conflicts between the faculty members on a discussion.

> At least transforming these into writte format…. And being open to all of the faculty members, so that they will look and see what it is… I mean, they will learn from such an environment instead of superficially hearing from each other. That would be nice, in my opinion. [S3]

> En azından bunların yazılı hale dönüştürülmesi.. bunun da işte bütün öğretim üyelerine açık olması, bakacaklar işte ne neymiş ne değilmiş…yani birbirlerinden

> kulaktan dolma değil de bunu bi ortamdan öğrenebilecekler, öyle birşey bence güzel olur.. [S3]

> Let me explain something – although it might be a prejudiced thought – I don't think that faculty members can discuss in such an environment; they will just fight. I don't think that it will work well; especially the ones from the same field.. I mean some definite faculty members.. Everybody belongs to a group and will have confusion with the opposite group.. This is my thought… There won't be too much knowledge sharing.[S5]

> Ben şunu anlatıyım biraz önyargili bi yorum olacak ama bence öğretim üyeleri böyle bir ortamda kesinlikle tartışmaz, sadece kavga ederler. Yani pek şey olacağını zannetmiyorum yani özellikle aynı daldakiler yani kesinlikle belirli öğretim üyeleri.. herkesin bi grubu vardır karşı grupla çatışır yani ben böyle düşünüyorum, pek böyle bilgi alışverişi yapılmaz… [S5]

Another participant, S7 stated both the pro's and con's of a discussion platform for a possible online environment designed to support faculty's teaching profession;

> It didn't come to my mind before, but as I said before, a discussion in which faculty and graduate assistants from my department would participate… Maybe it's not so easy to accomplish this, but sound good as a thought. But as I said before, since my department [Architecture] is more based on practice rather than online discussions, I doubt it can be satisfying for my department.. It would be nice in terms of discussing only a certain type of things, but in our department we specifically need implication [practice] related things..

> Aklıma gelmemişti aslında ama dediğim gibi hani bu şekilde bi tartışma belki kendi bölüm hocalarımızın ve asistanlarin katılacağı… bunu başarmak belki çok kolay değil ama düşünce açısından iyi gelebiliyor hani bizim ama dedigim gibi online tartışmayla değil de daha çok pratiğe dayanan bir bölümümüz olduğu için yeterli olabilir mi ondan emin değilim. Sadece birtakim şeyleri tartışmak açısından iyi olabilir ama gene uygulamaya dönük birşeyler olması gerekiyor bizim bölüm özelinde. [S7]

Participants made suggestions about the discussion environment, resource materials, videos, and interaction with an expert parts. In terms of the content, four of the participants stated that they do not prefer too much theoretical information. The articles and other reading materials which are usually literature-based are seen unnecessary or at least they should be very short so that they can read without getting bored. On the other hand, practice-oriented materials are needed by these participants since they were looking for usable implications for their teaching. For instance, S2 stated that;

> Mentioning shortly… I think it's enough just to get the main idea; it becomes complete after discussing on and viewing other thoughts… Honestly, I'm not too much interested in seeing people's or educators' philosophies… I just want to get the parts which would benefit me.

> Hani kısa kısa değinmek.. böyle özünü, anafikrini kapmak bana yeterliymiş gibi geliyor, üstüne tartışınca, farklı fikirleri görünce tamam oluyor, çok da insanların hani felsefelerini merak etmiyorum açıkçası, eğitimcilerin.. işime yarayacak yönleri böyle seçip seçip almak istiyorum..

In terms of the components of the online environment, 6 participants thought that it would be a good idea to have a discussion environment which is similar to the one they've used in EDS660 course and mainly refers to an environment in which faculty members from different disciplines can discuss about teaching-related concepts and/or their experiences. Moreover, they made some suggestions about having an effective discussion environment between the faculty members. S8 stated that;

> Actually, things just like this course's… I mean things that always stay updated, being discussed; about classroom management, assessment, ethical issues, definite issues about the teaching process… might be discussion environment similar to this… just like this.

> Aslında tıpkı bu dersteki gibi şeyler. Yani sürekli güncelliğini taşıyan, güncel olarak tartışılan; işte sınıf yönetiminde, notlandırmada, etik anlamdaki problemlerde, belirli alanlarda yani eğitim sürecinde gerekli yine boyle tartışma ortamları olabilir, aynen böyle olduğu gibi…

S10 made another suggestion which is about a voluntary-based environment;

> Actually, it could be beneficial, since most of the people hwo use Internet are participating online discussions, including me… But I participate in the subjects which I'm really interested in. For instance about my field – geological engineering – I definitely participate in voluntarily, since I'm curious about the information coming from there or willing to transfer my knowledge. But it could happen naturally, not artificial. It would be very good, if a natural [he means voluntarily based] discussion environment would be created. It would be good inbetween the graduate assistants or as a part of a course… But it should be non-artificial. I mean people are not interested in, if you say "this week is about this subject, that week is about that subject". [S10]

> Yani aslında faydalı olabilir çünkü Internet kullanan insanların birçoğu forum sitelerinde tartışmalara katılıyor, ben de katılıyorum. Ama yani çok çok ilgili olduğum konularda katılıyorum. Mesela anabilim dalımla ilgili bir forum sitesiyle –jeoloji muhendisliği- kesinlikle ve kesinlikle isteyerek katılıyorum çünkü oradan gelecek bilgileri merak ettiğim için ve oraya bilgi aktarmak istediğim için. Ama bu biraz daha doğal olarak gelişmeli, suni değil de doğal olarak bir tartışma ortamı yaratılabilirse tabii ki çok iyi olur. Asistanlar arasında da iyi olur, ders kapsamında da iyi olur.. ama suni olmamalı, yani bu hafta bu konuyla ilgili bu hafta şu konuyla ilgili dediğiniz zaman insanların ilgisi olmuyor belki. [S10]

On the other hand, one participant pointed out possible conflicts between the faculty members in an open discussion environment. Therefore, he thought that an online discussion between the faculty would not work.

Besides the interaction between the faculty members in an online discussion, some of the participants suggested to have interaction with experts from the field of educational science. 3 participants were willing to have either direct communication with an educational science expert via Internet or phone or having someone in the discussion environment to answer participants' questions or even moderate the discussion. S9's suggestion was about a direct communication between the faculty member and expert;

> The best would be like this: There could be a call center kind of online place which has employees working at certain times. A faculty member can interact with them via an instant message software etc and consult about his/her problem. Another option would be consulting through written documents. Experts may read the written text and then send their thoughts and related documents to that person. That will definitely save faculty's time. A third way would be face-to-face meetings through a center, without using the online technologies.
>
> En güzeli şu olur. Belli saatler arasında devamlı çalışan kişiler çağrı merkezi olabilir, internetten online olarak. Bir öğretim üyesi msn veya başka bir şeyle o kişilere bağlanır. Ne istiyorsa, sorusu neyse ya da ne danışmak istiyorsa onu danışır. İkincisi yazı yoluyla olabilir. Karşıdaki uzman kişiler o yazıları okuyup ona göre doküman ya da düşüncelerini yollayabilir. Bu öğretim üyesi için kesinlikle zaman kazancı olur. Üçüncüsü de dediğim gibi hiç online'la uğraşmayıp bir merkez kurulup karşılıklı görüşmeyle olabilir.

Another suggested component for a possible online environment was videos. Before starting to talk about their opinions about the video component, we have to make clear that by the word "videos" participants usually meant videos like they've watched on the EDS660 web site. They were the only examples they can think of, while talking about the videos prepared for professional development on teaching aims.

Among all, 7 participants thought that it is a good idea to enrich the online environment by including some videos. While most of them stated that seeing examples is an effective way to understand the things, S10 emphasized the motivational effect of the videos;

> There was an article about something on the web site; what is that? I wouldn't download and read it without knowing its benefits. First I need to know the benefits, I mean an expert should present it. S/he has to convince us through videos etc.
>
> Sitede işte sununla ilgili bir tane makale; nedir bu yani? Faydasını bilmiyorum ki, onu indireyim okuyayım… Önce bir faydasını bilmem gerekiyor, yani bi uzman kişi, bu işi bilen bi kişinin bunu sunması gerekiyor. Videolarla, birşeylerle yani bizi kandırması gerekiyor.

S1, S6 and S7 stated that a wider variety of the videos would be necessary in this environment. S2 just said that more variety should be provided, while S1 stated that there would be more videos from Turkey context and S7 needed more discipline-specific videos as an architecture department member.

Although most of the participants see the videos as necessary for a possible online environment designed to support faculty's teaching profession, one participant mentioned that it may not be applicable because of the common teaching habits of the instructors;

> Actually I think that they have to be used; but I doubt about how they can be used… Because we have a settled down system… Each faculty member have their own settled down style; s/he comes in, lectures and then leaves. This kind of things should be used, but how? [S3]

> Aslında kullanılması gerektiğini düşünüyorum ama bunları nasıl uygulanabilir, o konuda şüphelerim var yani. Çünkü bizde yerleşmiş birşey var yani… her hocanin yerleşmiş bir stili var, işte geliyo anlatıyo çıkıyo gidiyo. Bu tip şeyler kullanılmalı.. ama nasıl? [S3]

Table 4.11 Summary of the Interview Data about Participants' thoughts on Faculty Instructional Development Activities with frequencies of Quotations

Main Themes	Sub Categories	Summarized Quotations	f
Thoughts about Participating FD Activities	*General Opinion*	Universities must provide some kind of support for faculty's instructional development	10
	Suggested Target Audience	Both graduate assistants and faculty members should be involved	6
		Professors' seniority might be a limitation	2
	Suggested Methods for Possible FD Activities	Seminars	6
		Just-in-time Consultation	5
Perceived Effects of Taking the Graduate Course- EDS660	*Changing Perspectives on Teaching*	Starting to think about the teaching aspect of the profession	7
		Appreciating professional point of view on teaching rather than traditional	1
	Thinking and Planning of Future Teaching	Feeling more comfortable and confident about designing their own course	3
		Learned designing a course based on students' needs & characteristics	2
		Learned how to design a syllabus	10
		Thinking about using different teaching strategies for future classes	8
		Thinking about effective communication strategies for future classes	6
		Thinking about classroom management strategies	4
		Developing assessment strategies for future classes	3
		Caring about students' individual differences in future teaching	3
Thoughts about Using Online Environments for FD Aims	*General Opinion*	Positive	3
		Negative	4
		Both positive & negative	1
	Suggestions	Prefer practice-oriented materials rather than theoretical information	4
		Prefer online discussions with faculty from other fields	6
		Prefer interaction with educ. experts	3
		Prefer case videos	7

4.2.3. Using Exemplary Teaching Case and Informative Videos for Faculty Instructional Development

Data related to the graduate assistants' thoughts on watching exemplary teaching case and informative videos were gathered through the interviews and weekly surveys. The effects of watching the videos on their professional development on teaching have been examined.

Graduate assistants' evaluation of the videos on the weekly survey were presented at first on the following paragraphs. Then their watching patterns based on interview data have been presented. Finally, their opinions on watching exemplary teaching and informative videos were given based on interview data and open-ended questions of weekly surveys.

Before giving the details, findings can be summarized that participants usually had positive opinions about seeing the exemplary teaching and informative videos. They found them useful since they were able to see different examples, and started to think about and plan their own teaching. Moreover, they made some suggestions about improving video materials.

Quantitative Findings Related to the Videos Based on Weekly Surveys Data

Analysis of weekly surveys provided data about how effective graduate assistants found the informative and exemplary teaching case videos in terms of their professional development on teaching. Findings related to the quantitative analysis of survey data for the informative videos are given first, and exemplary teaching cases data are given as second on the following paragraphs.

Informative videos consisted of interviews with early-career faculty members and first year students, and part of a seminar given to early-career faculty members at METU. The early-career faculty member interviewee were selected among the faculty members who have been teaching 1-4 semesters at METU and student interviewee were selected among the first year students who skipped prep school and directly started their

undergraduate education. The criteria for selecting interviewee were determined based on EDSS660 course content, after discussing with the course instructor.

Survey data was useful in terms of providing detailed information on each video separately. Mean scores for each informative video are given on Table 4.12. Participants' answers to the open-ended questions were analyzed by qualitative methods and helped to deepen findings acquired by quantitative data.

Table 4.12 Mean Scores for Informative Videos Based on Weekly Surveys

Informative Videos	*M*	*n*
Interview videos with 1st year students	3.23	22
Seminar videos on student development	3.10	18
Interview videos with early-career faculty members about course design	2.76	19
Interview videos with early-career faculty members about student characteristics	2.65	22
Interview videos with early-career faculty members about the expectations and realities of being a faculty member	2.35	22

Quantitative survey data related to the informative videos indicated that graduate assistants found the student interviews and seminar videos more beneficial compared to the interviews with early career faculty members. For detailed information, participants' responses to the open-ended questions were analyzed, and presented under following headings combined with interview data.

Exemplary teaching case videos consisted of classroom implications and instructor interviews for four different active learning strategies, classroom recordings of two different first meetings, classroom recordings of 3 different exemplary instructor-centered strategies, and instructor interview for a course design example considering students' individual differences. Similar to the informative videos, criteria for selecting and designing the exemplary teaching case videos were determined based on EDSS660 course content and discussions with the course instructor.

Survey data provided detailed information on each exemplary teaching case video separately. Mean scores for each informative video are given on Table 4.13. Participants' answers to the open-ended questions were analyzed by qualitative methods and helped to deepen findings acquired by quantitative data.

Table 4.13 Mean Scores for Exemplary Teaching Videos Based on Weekly Surveys

Exemplary Teaching Videos	*M*	*n*
Viewing the Fishbowl activity that is used by DP in organic chemistry course.	3.45	12
Viewing the video on course design considering students' individual differences.	3.43	15
Viewing the exemplary teaching case videos on instructor-centered strategies.	3.42	19
Viewing the exemplary 'first meeting' videos.	3.37	19
Viewing the group study that is used by DP in organic chemistry course.	3.00	12
Viewing the 'case study' implication used by DR in nursing department.	2.92	12
Viewing the active learning strategy used by KN in Chemistry course.	2.83	12

Qualitative Findings Related to the Videos Based on Weekly Surveys and Interviews Data

Watching Patterns

Seven participants stated that they watched the videos usually once, sometimes a couple times right after they have been uploaded. One participant [S2] said that she usually watched more than once since she liked to watch, and was forgetting some stuff, so needed to check out the videos before preparing something. Another participant stated that he watched the videos of the faculty members more than once if he knows him/her personally.

Seeing Different Examples

All of the participants stated that they were able to see different examples through the videos. They have been found useful especially because of visualizing the subject which would not be understood well through other strategies like listening or reading.

Seeing different examples of teaching strategies helped the participants to have an idea about *how-to* teach in a more effective way. Interview analysis revealed that 5 participants found the videos helpful in terms of showing examples of teaching practices. 2 participants found them useful since they had an idea about how to make the first meetings, while 3 participants stated that they were good in terms of showing how to apply different strategies in the classroom. Indeed, they saw the details of effective strategies. According to S1, seeing examples of first meeting videos gave him an idea about how to do it.

Additionally, survey responses provided some detail information about the videos separately. 2 participants found the first meeting videos very beneficial because they have seen how an instructor can take students' attention and make the course interesting for students. It should be noted that especially one of the first meeting videos [by Dr. Lewin taken from MIT OpenCourseware web site] was highly appreciated by the participants.

Besides the first meetings, details of applying specific teaching strategies were seen in the exemplary teaching case videos. S2 stated that she saw how to apply an activity in which even the shy students can ask their questions;

> If we look separately… For instance, I really liked the fishbowl activity, since we know it from our own experience also; most of the time we hesitate to ask questions… But if something used like that, you can write something and throw into the bowl, and then it can be drawn and and posed.
>
> Tek tek bakarsak mesela o fishbowl aktivitesini ben çok sevdim hakkaten çünkü gerçekten hani kendimizde de görmüşüzdür çoğu zaman soru sormaya çekiniyoruz.. ama öyle birşey olunca takıldığın birşeyi yazıp oraya atabilirsin ve hani ordan çekerekten sorulabilir.

Besides how to using specific strategies, videos may have a general effect on graduate assistants about an instructor's behaviors in the classroom. One of the survey participants found the instructor-centered video examples useful because they showed how to manage voice tonation, communication with students and using the lectern in general.

Seminars among the informative videos have been helpful in terms of showing how to communicate with students effectively, and how to behave as an instructor in general. Analysis of survey data indicated that 4 of the 18 participants gained some ideas about how to behave as an instructor as a result of listening to an educational expert's opinions.

Seeing examples of *different teaching strategies* was one of the most common statements while talking about the exemplary teaching videos. On the web site, there were videos of 5 different examples about active learning strategies, and three examples of traditional lecturing (instructor-centered) videos. 8 participants mentioned that, as prospective instructors, it was good to see examples of different active learning strategies which they have not seen before. S3 gave an example of the videos which she found interesting.

> That one-minute activity in which he asks a question at the last minute of the class and took the answers… It was nice actually. Those were good examples. They were examples which I've never seen before.
>
> İşte o one-minute aktivite dediğimiz şey, dersin son dakikasında soru sorup öğrencilerden cevap alıyor.. aslında güzel yani.. bunlar güzel örneklerdi… Şimdiye kadar benim hiç karşılaşmadığım örneklerdi yani,

In addition, survey responses indicated that participants were able to see different teaching strategies from different disciplines. 15 of the 63 responses stated that the exemplary teaching case videos were valuable in terms of giving ideas on teaching by showing different implications.

Another advantage of seeing exemplary teaching case videos was *seeing examples from real life.* Seven participants stated that the videos were complementary to what have been covered during the face-to-face classes. Moreover, they stated that they had a

chance to observe real classrooms and real instructors while teaching. S7 explained how seeing real classroom implications have affected their improvement;

> I think, seeing the one-by-one classroom implications of the theoretically presented issues helped us to learn more easily. Ok, we discuss the theory, we express our comments, but most of the time we haven't seen implications like on the videos in real life, since we're at the beginning of our career. Seeing what instructors face with while teaching- those visual examples- helped us to understand things more easily and combine the theory and practice in our minds, I think.
>
> Hani şu teorik olarak koyduğunuz başlıkların birebir sınıftaki yansımasını görmek aslında bazı şeyleri daha kolay öğrenmemizi de getirdiğini düşünüyorum ben. Hani teorik tartışıyoruz, kendi yorumlarımızı koyuyoruz ama hani gerçekten videolardaki bu tarz örneklerle, henüz başlangıçta olduğumuz için henüz karşılaşmamış olabiliyoruz.. Ders sürecinde hocaların karşılaştıkları şeyleri görmek hani bazı şeyleri daha da kolay anlamamızıve o teoriyle uygulamayı en azından kafamızda birleştirmemizi kolaylaştırdı diye düşünüyorum o görsel örnekler…

Another participant made a comparison between the examples which are supported by the videos and without videos;

> For instance, while our instructor was explaining active learning in the classroom, everybody comprehend it very quickly, especially if she gave examples from the videos, because we watched it before…. But sometimes, some issues were not included in the videos. We have difficulty, if it was not explained in a video.
>
> Mesela derste active learning anlatırken hoca, özellikle videolardan örnek verdiği zaman tabi herkes hemen kavrıyor… izlediği için daha önce… ama mesela bazı şeyler videoda yok. Videoda açıklamadıklarında daha tabi zorlanıyoruz… [S6]

Survey responses indicated that some participants liked the opportunity to see a real classroom so that they could observe students' reactions, in addition to observing the instructor. That was an important point that graduate students were able to see the outcomes of various teaching strategies and instructor behaviors without going to a real classroom environment.

Another finding of the analysis of open-ended questions on the surveys indicated that seeing impressive instructors on teaching has been found to be beneficial by the graduate assistants. Survey data showed that the emphasize on instructors was only mentioned on instructor-centered videos which may show that the focus is on the strategy rather than the instructor himself/herself on active learning strategies. 5 of the 38 survey responses

on videos of instructor-centered strategies said that they were impressed to see those instructors on teaching.

Besides the exemplary teaching case videos, interviews with first year students among the informative videos were found to be valuable in terms of seeing the real life examples of the theoretical knowledge they acquired in the classroom. 6 of the 22 survey responses pointed out graduate assistants' pleasure to see real students talking about the exact same things they covered in the face-to-face class.

Seeing examples of instructors' lives and experiences was another category revealed under the *seeing different examples* theme. 6 participants referred to the informative videos which included interviews with early-career faculty members. They were glad to see what the instructors are living at the beginning of their career and see the similar worries. S2 stated that she was glad to see that she is not alone;

> There were videos in which early-career faculty members explained their troubles or observations, what they were expecting and what they faced with… Not only related to teaching, but also administrative duties… We were already aware of that situation, we were observing, but seeing them facing with similar situations… We realized that we were not alone.

> Hmm genc öğretim üyelerinin şey yaptığı hani kendi sıkıntılarını yada gozlemlerini aktardıkları şeyler vardı, nasıl beklentilerle geldiler, nelerle karşılaştılar, hani işte sadece dersle ilgili olmadığı, bölümün yükü filan.. onlar hani zaten bizim de farkettiğimiz, gözlemlediğimiz şeylerdi.. hani onların da yaşadığını görünce… yalnız değilmişiz…

Similarly, S5 was glad to see that someone from his department was talking about an issue which he was already worrying about;

> There was a professor from my department, in the video on course design… I remember some of her words about preparing the course content. The exam questions [of previous years] are being distributed somehow, so what she said was updating the exam questions. I realized it too [as a graduate assistant]; students were visiting us to ask some questions which were on the exams we just printed out. That kind of things… it was good to see that at least other instructors are aware of it too. Although we can't stop it, I liked to see that everybody else the same concern.

> Ders hazırlamada bizim inşaattan bir hocamız vardi.. bi onun bazı sözleri aklımda kaldı, ders içeriği hakkında.. hani özellikle sınavlarda bi şekilde bütün [eski] sınav soruları yayılıyor o yüzden işte onun dediği olay soruları güncellemek. O benim asistanken de dikkatimi çekiyordu çünkü hakkaten fotokopisini yaptığımız soruları öğrenci gelip bize soruyordu.. bu tür şeyler mesela, bunların en azından diğer

> hocaların dikkatinde olduğunu da görmek- hani bi önlem alamıyoruz ama- en azından bu endişeyi herkesin taşıması hoşuma gitmişti.

The interview that S5 referred to was about the early-career faculty members' expectations on teaching before they started their profession and how they have been fulfilled. One of the faculty members was from the same department with S5, and mentioned a problem about students getting the course notes and even exam questions from upper classes. S5 was already aware of this problem as a graduate assistant and felt good after seeing that the instructor is aware of it, too and trying to solve the problem.

Furthermore, seeing the problems early career faculty members face with may have given some advantages to the graduate assistants. S9 stated that it was good to see the possible problems in advance;

> It was important to see that it's not easy tobe a new faculty member, being accepted and see the difficulties we would face with.

> Yani yeni bir öğretim üyesi olmanın hakikaten kolay bir iş olmadığını, kendini kabul ettirmenin kolay bir iş olmadığını, ne gibi zorluklarla karşılaşabileceğimizi görmek çok önemliydi.

In addition to becoming aware of the problems they may face with, seeing examples of instructors' experiences may have helped the graduate assistants to see different points' of views, according to S6;

> At the beginning for instance, there were students' and faculty members' thoughts… How other faculty members look, what are their points of views… How they design courses… It was good…

> Hatta en baştaki mesela su öğrencilerin ve öğretim üyelerinin görüşleri vardı mesela… senin dışındaki öğretim üyelerinin bakış açısını, nasıl baktığını… Dersleri nasıl hazırladıkları… mesela o guzeldi.

Analysis of the open-ended questions of the weekly surveys ended up with similar findings about the effects of interview videos. Most of the responses stated that interviews with early-career faculty members were valuable in terms of having an idea about what they would live after they start their career. 23 of the 63 responses emphasized that seeing faculty members' experiences forced them to think about their future as a faculty member, become familiar with possible problems and probably experience similar situations in future.

Another category participants mentioned about seeing different examples was *having a chance to make comparisons*. 2 participants stated that watching the videos gave them a chance to compare different strategies and/or instructors. According to S3, it was interesting to see how different instructors are covering similar content in their courses;

> For instance, you were uploading example videos. We were seeing how different subjects have been covered by different instructors from different perspectives. It's interesting to see that. In some of the video examples, you look at the example and see that things differ from person to person. An instructor is doing something, but other one is not.
>
> Mesela video örnekleri koyuyordunuz internete. Bakıyorduk, işte farklı kişiler tarafından konuların farklı şekillerde farklı açılardan alınması mesela… Ilginç oluyor onu görmek. Koyduğunuz birkaç video örneğinde bakıyorsunuz hakkaten kişiden kişiye değişen şeyelr var. işte bir hocanın yaptığı şeyleri diğeri yapmıyor.

S1 compared instructors from METU and USA universities and said that he had the chance to compare those instructors. He additionally mentioned that it was good to have a chance to compare different strategies;

> In those active learning video cases… How a group study is handled… also, in terms of making comparisons… what kind of differences could occur because of the instructors or students … It was good in terms of giving ideas.
>
> Bu active learning stratejilerdeki videolarda hani grup çalışması nasıl yapılabilir.. onun dışında aradaki farkı kıyaslamak açısından hani öğretim üyesi bazlı hani bi de öğrenci bazlı nasıl arada fark olabilir.. Fikir vermesi açısından iyi oldu..

Analysis of the survey questions revealed similar findings in which 5 of the 38 responses stated that they had a chance to see different instructors and different strategies and compare them. 2 of them stated that seeing different instructors/strategies gave them an opportunity to make an evaluation among the different instructors/strategies and improve themselves accordingly, while one participant compared the different first meeting cases in detail and added his/her comments on the strengths and weaknesses of each case.

Thinking and Planning Future Teaching

Another most common idea about watching the informative and exemplary teaching videos was that the graduate assistants started to *think about and plan their future teaching*. They gave specific examples of what they thought about their own teaching

after watching the videos. Categories revealed under this theme were; thinking and planning about course design, active learning strategies, classroom management strategies, and considering students' perspectives in their own teaching.

Analysis of the responses to the open-ended questions of the weekly surveys indicated that seeing faculty members' experience on course design was appreciated by the graduate assistants. 10 of the 19 participants mentioned that liştening to [relatively] seniors' experiences forced them to think about their future teaching and possible problems in course design.

Furthermore, interview data revealed information related to the graduate assistants' thinking of their future course designs. Two participants mentioned the whole *course design* process and how the videos may have an effect on this issue. S6 explained the effects of seeing other instructors' interviews (informative videos) on course design;

> The perspectives and points of views of the faculty members other than yourself… It was nice… how they prepare courses, course design.. the one with faculty members' opinions… They were good, giving lots of ideas to someone.
>
> Senin dışındaki öğretim üyelerinin bakış açısını, nasıl baktığını… mesela o güzeldi. Dersleri nasıl hazırladıkları… ders tasarımı videosu, hocaların görüşleri olan. Onlar da iyiydi, baya fikir veriyor insana.

In addition, exemplary teaching case videos gave some ideas on future teaching about how to design courses incorporating different strategies, as stated by S1;

> It was good in terms of giving ideas. For instance, if I'll use active learning strategies in my classes, I'll use them in my elective courses. But for must courses, I'll probably use traditional lecturing (instructor-centered), because I realized that classroom management is more difficult in active learning strategies.
>
> Fikir vermesi açısından iyi oldu.. Mesela aktif learning uygularsam ilerde onu böyle seçmeli derslerimde uygularım ama hani zorunlu derslerde büyük ihtimal öğretim-üyesi bazlı uygularım çünkü aktif learning'de sınıf yönetiminin daha da zorlaştığını farkettim.

Another response from weekly survey data revealed how a participant's thoughts have changed after seeing the variety of teaching strategies on videos.

> Since different strategies have been used for different courses, it made me think that I have to develop different strategies for each course or each subject.

> Her bir derste kullanılan yöntemin farklı olması benim de vereceğim her bir ders için veya her bir konu için farklı teknikler geliştirmem gerektiğini düşündürdü.

In addition to the variety of the exemplary teaching case videos, the strategies or implications which graduate assistants never thought about or never seen before seems to have an effect on their *perspectives on course design*. Quantitative data indicated that those videos have had higher mean scores compared to well-known classroom implications (Table 4.13).

One of the videos presenting an example of a course design considering disabled students has been highly appreciated by the graduate assistants. According to the detailed analysis of the open-ended questions, 2 participants mentioned that they never thought about this before and found the videos opening their minds. In that particular video, a professor of Biological Science explained and demonstrated an instructional material she developed considering the principles of universal design for learning and how she is using that material to explain the components of a cell for a visually impaired student. 5 of the 14 participants explained the strengths of this application and stated that this has been a good example and they are planning to consider individual differences while designing their own courses.

Clearly, using active learning strategies while teaching was one of the details given about the graduate assistants' future course design plans on both interviews and weekly surveys. 6 participants gave examples from exemplary teaching videos on *active learning strategies* and said that they think about applying similar strategies in their classes. Apparently, fishbowl activity was one of the most impressive videos among the active learning strategies, since it was mentioned by 5 of the 6 participants who talked about the active learning strategies on the interviews. S10 said that he is thinking about using Fishbowl activity in his classes emphasizing watching a video instead of being told about the strategy;

> I can give the Fishbowl activity as an example. If I have learned something like this by lecturing, I wouldn't apply. But now I can apply; actually I'm planning to apply. This is a contribution of the videos, indeed.

> Fishbowl aktivitesini örnek verebilirim, yani böyle birşeyi anlatılarak öğrenmiş olsaydım ben bunu uygulamazdım ama şimdi uygulayabilirim ve uygulamayı da

düşünüyorum aslında. Bu, videolarin sağladığı bir katkı yani…

Besides, other active learning strategies which were presented via videos took graduate assistants' attention to be used in teaching. S6 made a general comment on active learning case videos;

> Especially, the active learning strategies have been useful. I'll probably use them (not all, but most of them) for my classes. The Fishbowl activity, one-minute activity… Also the group activity.. I liked it, too.

> Özellikle şu aktif learning stratejilerinin faydası oldu yani. Onları büyük ihtimal.. yani hepsini değil tabi de bi kısmını kullanırım derste yani. Az önce de bahsettiğim o fishbowl olabilir, o son dakika değerlendirmesi olabilir. Onun dışında grup çalışması da hoşuma gitmişti..

Additionally, analysis of survey data gave some information about the details of participants' thoughts on watching active learning cases. 10 out of the 48 responses on 4 different active learning case videos made some interpretations on the use and effectiveness of those strategies, and usability in their own classes. One of the comments on case-study active learning strategy is given below:

> In my opinion, it's very beneficial in many ways that kids are combining theory and practice, and then present the findings… I think it's improving their skills on knowledge sharing inside the group, combining theory and practice, and making presentations.

> Bence çocukların teori ve uygulamayı birleştirerek araştırmada bulunması ve sonuçlarını sunmaları bir çok yönden çok faydalı. Hem grupta bilgi alışverişinin sağlanması, hem teori ve uygulamayı birleştirmeleri hem de sunum yapma yeteneklerini arttırdığını düşünüyorum.

Another comment on the same video case reflects the participant's further thoughts about how to apply that strategy and why s/he did not find it interesting:

> It's relatively easier to to prepare this, but the classroom should not be very crowded I guess… Otherwise it may be impossible for the instructor to allocate enough time for each group. In my department, active learning strategies are in use… Therefore, this video wasn't that interesting to me.

> Bunun hazırlanması nispeten kolay ama sınıf mevcudunun cok olmaması gerekiyor sanırım yoksa hocanın her gruba yeterli vakit ayırması mümkün olmayabilir. Bölümümde active learning etkinliği yapılıyor. O yüzden bu video çok ilginç gelmedi.

An important point revealed from the analysis of survey data was participants' discipline-specific comments. Since active learning case videos usually forced the

graduate assistants to think about their future teaching, they tended to think discipline-related issues and obstacles sometimes. Before presenting the findings, it should be noted that 3 of the active learning case videos were from Chemistry field, and one from Nursing.

12 responses in total mentioned discipline-related issues about the use of given active learning strategies. 1 participant made very general comment and stated that although s/he is not working at Chemistry field, it was good to see that group activity in terms of gaining some ideas. Another response mentioned that the case-based group activity of Nursing field would be very helpful in similar departments like nursing or medicine; s/he did not make any comment for his/her field.

One of the respondents found both group learning activities (by professors KN and DP) to be time-consuming, so not applicable for his/her field (*), while Fishbowl activity would be applicable in his/her Organic Chemistry courses, since it's not time consuming and may reinforce learning according to him/her (**):

> * I didn't find that strategy appropriate for organic chemistry class. Since I'm also in the field of organic chemistry, I know how extensive the content of the curriculum is and it takes even 3 semesters instead of 2 sometimes. If you spend your time with this kind of implications, you cannot give all of the content of organic chemistry to students for that semester.
>
> * Hocanın uygulamış olduğu yöntemi organik kimya dersi için pek uygun bulmadım.Çünkü ben de bir kimyacı olduğum için oganik kimyanın ne kadar geniş bir kapsamı olduğunu ve 2 döneme değil bazen üç dönemde anlatıldığını biliyorum.eğer böyle uygulamar ile ders saatlerini harcarsanız organik kimya dersinde o dönem o dersin tüm içeriğini öğrencilere veremezsiniz.
>
> ** As an organic chemist, I find this implication logical fr organic chemistry courses. It's not time-consuming, since the instructor is lecturing 90% of the subject, and then tries to reinforce through question-and-answers.
>
> ** Evet bu uygulama bir kimyacı olarak benim aklıma yattı organik kimya dersi için.hem fazla vakit alıcı değil çünkü hoca 90% ını anlatıyor ve daha sonra soru cevap şeklinde pekiştirme yoluna gidiyor.

In terms of the discipline-related comments/interpretations, 6 of the responses found the strategies to be applicable in their fields. 3 responses on case-based nursing activity, 2 responses on KN's group learning activity, and 1 response for Fishbowl activity were

found to be applicable in graduate assistants' own fields. One of the discipline-related responses about using the case-based Nursing activity is given:

> This is also a very beneficial activity for applied fields. It's improving students problem solving abilities as well as presentation skills. It's also supporting group-work and knowledge sharing. I think the applicability of this strategy is very high in my department.
>
> Bu da uygulamalı alanlar için oldukça faydalı bir etkinlik. Öğrencilerin hem problem çözme becerilerini hem de sunum becerilerini geliştiriyor. Ayrıca takım çalışmasını ve fikir alışverişini sağlıyor. Bölümümde uygulanabilirliğinin yüksek olduğunu düşünüyorum.

Besides thinking to use the strategies given on the videos in future teaching, one participant provided a wider approach and explained how seeing active learning strategy examples affected her perspective about teaching in general:

> And of course the videos on active learning strategies were interesting, too. Because the videos… I never thought something like this before…. As I said before, I had a mentality that instructor gives something to the students in the classroom; nothing more… But after seeing those strategies, I started to realize that the situation is really different than what I was thinking; I realized that it is a two-dimensional, a mutual situation.
>
> Ve tabi active learning stratejilerle ilgili videolar da ilginçti.. videolar cunku daha önce boyle birşey düşünmüyordum asla.. hani sınıfta hep dediğim gibi sanki hoca öğrenciye birşeyler verir ama daha fazlası yok gibi bir bakış açısı varken, hani bu stratejileri gördükçe aslında olayın çok daha farklı olduğunu, ikili, iki boyutlu bir olay olduğunu farkettim. [S7]

Another category mentioned by the participants was that the videos forced them to *think about their own classroom management strategies*. 5 of the participants gave examples of the videos they have watched at the classroom management week of the course. Two example videos of real classroom shoots were given on the web site and the graduate students were asked to watch the videos and discuss about what they should do in a similar situation. All of the 5 participants mentioned only the video of a real case of classroom management problem and solved by the instructor professionally. The video was edited by the researcher so that the graduate students were not able to see his solution and discussed what to do in this case. The classroom management issue on the video made S8 think about a similar experience of her;

> This is a situation which an instructor would not want to face with [talking about the classroom management video]. Most of us face with this kind of situations; it

> happened to me, too. I faced with this not while teaching but while gozetirken a history exam.
>
> Bir hocanın sınıfta hiç olmak istemeyeceği bir durum [classroom management videosundan bahsediyor]. Çoğumuzun da başına gelen bir durum, bi kere ben de ayni durumda kaldim. Ben de tam da ders anlatırken değil ama tarih bölümündeki sınavlardan birinde gözetmenken benzer bir durumu yaşadım.

S10 expressed the lesson he learned for his classroom as a prospective faculty member from the discussion on the specific classroom management video;

> People made different interpretation on those classroom management videos. Some friends said that they wouldn't say anything, some stated that they would exactly solve the problem etc… This situation made me think a lot about what I would do in that case. It was definitely a hard question, since I can't guess what I would do in that case. But I learned that, we are supposed to focus on our teaching, not allowing the lesson to be distrupted, and continue lecturing… Because we're there to teach. I came to a conclusion that if there is a problem, we should solve it later.
>
> Yani o classroom management'la ilgili videoda insanlar farklı yorumlar yapti. Orada bazı arkadaslar hicbirşey demezdim, bazı arkadaslar işte olayi derinlemesine cozerdim gibi yorumlar yapmisti. Bu konu beni cok düşündürdü, yani ben olsam ne yapardim seklinde… gercekten baya cevaplamasi zor bi soruydu cunku o an kesinlikle ne yapacagimizi tahmin edemiyorum … ama sunu öğrendim; bu tur durumlarda sessiz kalmak, yani sessiz kalmak değil, konuyu fazla dagitmamak, dersimizi yapmak – ders yapmak için ordayiz- çözülmesi gereken bir problem varsa onu daha sonra çözmek gibi bir sonuca ulaştım ben.

Another category related to thinking and planning their own teaching was thinking about the students' perspectives. As stated by 3 participants, the videos of interviews with the first year students at METU were helpful in terms of *thinking more about the students' side*. S4 explained how he realized that he should provide different teaching strategies for different grade levels.

> Here, as a person looking at freshmen from outside, I realized that they are facing with the similar problems that I faced with. After realizing this, your point of view about freshmen changes [means that there are a lot of people who are facing with the same problems]. And I definitely realized that your approach to freshmen could be different than the approach to other students who are at different levels in school.
>
> Ben burda dışarıdan birinci sınıf öğrencilerine bakan insan olarak, benimle aynı sorunları yaşayan insanlar olduğunu farkettim.. Hani bunu farkedince, birinci sınıflara olan bakışınız -demek ki birçok insan var aynı sorunlarla karşılaşan- ve birinci sınıflardaki, birinci sınıflara olan yaklaşım, kullanılacak olan yaklaşım tarzıyla -bu öğretim stratejileri açısından]-birinci sınıflara göstereceğimiz yaklaşımla daha üst sınıflara göstereceğimiz yaklaşımlarin farklı olabileceğini çok net anladım o videolarda.

Videos of the interviews conducted by first grade students had an effect on graduate assistants to think more about student profile, their points of views, experiences, and difficulties, when they first started their undergrad education. Analysis of survey data revealed that 8 of the 22 responses in total mentioned that the interview videos helped them to have a closer look at first year students' lives. One of the responses given below;

> I think that viewing student interview videos have been very helpful in terms of helping me to understand what kind of environments do the student face with on their first year, what they feel, and what are the issues they face with problems about at most…
>
> Öğrenci videolarını izlemenin, öğrencilerin okula ilk başladıklarında nasıl bir ortamla karşılaştıklarını, neler hissettiklerini, hangi konularda zorlandıklarını anlayabilmem için oldukça faydalı oldugunu düşünüyorum.

Another video material that helped the graduate assistants to have an understanding of students' perspectives and development was the partial seminar videos taken from Effective Instruction Seminars provided by METU. Survey data indicated that seminars given by educational experts were very useful in terms of creating an awareness about students' development, giving ideas about how to communicate with students effectively, and how to behave as an instructor in general.

4 of the 18 participants found the videos important in terms of creating an awareness about student development, since they have not either been trained or thought on this issue before, as expressed one of the participants:

> As I mentioned on my previous explanations, I had a superficial point of view on these subjects. Videos have been helpful in terms of showing me different aspects and the importance of them…
>
> Daha önceki değerlendirmede de belirttigim gibi, pedagojik eğitim eksiğim nedeniyle, bu konulara çok yüzeysel bakıyordum. Farklı boyutlarını, önemini anlamama videolar yardımcı oldu.

3 participants stated that they had an idea about student development, their behaviors and difficulties they face with, while 4 presented a faculty member point of view and stated that they gained some ideas about how to treat students in general.

> They helped us to remember that university students are still adolescents, and they will complete their development probably during the four years undergrad education process, and see that we are important participants of this process.

> Üniversite öğrencilerinin üniversiteye ilk girdiklerinde henüz ergenlik döneminde olduklarını unutmamamız gerektiğini ve bu gelişimlerini muhtemelen 4 yıllık üniversite dönemleri içerisinde tamamlayacaklarını ve bu gelişimde bizim de payımızın büyük olduğunu görmemizi sağladı.

Clearly, listening to an expert have been found useful, so most of the participants found the number and/or length of seminar videos being inadequate, as explained under the suggestions heading below.

Critique and Suggestions about the Videos

Participants suggestions about the videos on the web site have been investigated through the interviews and weekly surveys . It was revealed that all of the participants thought that the videos have been helpful and appropriate for the course aims. However, it was revealed that they have not seen any examples of videos for faculty development aims before, so their suggestions may have been limited.

Variety

Both the interview data and answers to the open-ended questions of weekly surveys exposed the variety of the videos as an important suggestion to improve the online system.

Increasing the variety of the videos of interviews with early-career faculty members was one the suggestions mentioned by 3 comments among 63 survey responses in total. These comments indicated that the interviewee faculty members were limited to METU and since the participant graduate assistants were going to study at other universities after their graduation, they thought that the problems and situations they are going to face with might be different than the interviewees'.

Another suggestion about the variety of the interview videos was about the seniority of the interviewees. 3 survey responses suggested that more experienced instructors should have been included in the interviews too, so that graduate assistants would see the experienced faculty members' point of views. One of the quotations from the survey responses explained clearly why an experienced instructor's thoughts would be more valuable to see:

> I think that it would be better, if more experienced and educated faculty members are being interviewd. Ultimately, early career faculty present their own ideas, and since they are not experts about these issue, we can easily create counter arguments.
>
> Bu konuda daha deneyimli ve eğitimli öğretim görevlileri ile görüşülürse daha iyi olur diye düşünüyorum. Sonuçta genç öğretim üyelerinin anlattıkları kendi görüşleri ve hakim olduklari konu olmadığı için bizim buna karşı argüman üretmemiz çok kolay.

In addition to the suggestion for increasing the variety of the interviews with early-career faculty members, increasing the variety of the student interviews were suggested by 2 of the 22 survey responses. Both participants found the student interview videos being impressive and stated that including more students would be more effective, while one of them specifically suggested to include students from different levels so that they can observe students' change/development during the years.

Analysis of the weekly surveys provided additional data to be used for improving the variety of the exemplary teaching case videos. Mainly positive opinions were revealed about these videos, however, detailed analysis indicated that the videos with lower mean scores have got participant comments about being well-known from their previous experience. Videos of three different active learning strategies mainly presented well-known active learning applications and each of them got 2-3 comments about being widely-used and 1 comment for being not applicable in a participant's academic field. This data might be helpful in terms of determining the variety of the exemplary teaching case videos.

Interview data provided some detailed suggestions to increase the variety of the exemplary teaching case videos. Three participants stated that a wider variety of the exemplary teaching videos would be better for the EDS660 course. According to S1, it should be enhanced by more examples from Turkish context. He stated that since most of the examples were from different countries/cultures, the graduate assistants have been thinking that "this might be applicable in their classes, but would not work in Turkish universities".

S6 said that variety of the content for the exemplary teaching case videos should be increased, while S7 has complained about the limited variety of the disciplines on the videos. S7 was from the department of Architecture and stated that most of the videos

were from the fields of engineering and natural sciences, so she could not find the things from her own field sometimes. So at least examples from social sciences should be provided according to S7.

Besides the suggestions about exemplary teaching case videos, analysis of the open-ended questions of the weekly surveys included some critique and suggestions about the informative videos including seminars, interviews with early-career faculty members and first year undergraduates. Responses to the open-ended questions for lower raters provided valuable to be interpreted as critique and suggestions about the informative videos.

In addition to the variety of the exemplary teaching videos, some participants suggested to increase the number of the seminar videos. Survey analysis indicated that 4 of the 18 participants asked for more seminar videos, since they appreciated to listen to educational experts and gain some ideas based on expert opinion and experience.

Content.

Analysis of the open-ended questions revealed that participants who gave lower points to the interviews with early-career faculty members thought that the interviewees' thoughts were too personal, so they may not be the same for everybody, and they did not agree with all of the thoughts presented in the videos. 7 of the 63 open-ended responses in total stated that thoughts on the videos were too personal and they do not agree with some of them, so it was not exactly beneficial to see. One of the quotations for the first week's interview video is given below:

> In the web site, the information transferred by the faculty members are reflecting the experience that are gained as a result of applying various activities. Specializing on a profession – without taking care about which field it is – can only be achieved through individual implementations. I think, the videos we watched cannot be more than advice, since each faculty member reflects their own troubles and experiences.
>
> Sitede çeşitli öğretim üyeleri tarafından aktarılan bilgiler, yapılan etkinlikler sonucu edinilen deneyimleri yansıtmaktadır. Mesleği kavramak, alanına bakmaksızın ancak kişisel tatbikle mümkün olacaktır. Izlediğimiz videolar tavsiyeden öteye gidemez diye düşünüyorum. Çünkü her öğretim üyesi adayı kendi sıkıntılarını ve tecrübelerini yansıtmaktadır.

Another critique about the interview videos was that faculty members' thoughts/statements were not related to the content. 5 of the 63 survey responses found the interviewees' responses being unrelated. It should be noted that the interview videos were edited after a simple content analysis and divided into three main topics based on course content and instructor's opinions. So 5 of the 63 responses mentioned that some points of the interview content was not related to the main topic of the video.

In terms of the content of the informative videos, survey data revealed that graduate assistants found watching the expert opinions very valuable in terms of their professional development. Survey responses on seminar videos showed that 3 of the 18 participants liked those videos just because they were given by educational experts.

Moreover, there was a suggestion about increasing either the number or the length of the seminar videos. 3 of the 18 participants found the amount inadequate, and since they found the videos very useful, suggested to add some more seminar videos.

Additionally, analysis of the survey data for exemplary teaching case videos revealed some valuable information to be used as suggestions for improving the content of the videos. First of all, quantitative data indicated that exemplary teaching videos which participants were not familiar with the presented strategy have had higher mean scores compared to well-known classroom implications (Table 4.13). Graduate assistants clearly found the innovative strategies more impressive and/or inspirational compared to well-known learning/teaching activities. See Table 4.14 to see the summary of the findings related to the use of exemplary teaching case and informative videos.

Table 4.14 Summary of the Interview and Survey Data about Participants' Thoughts on Using Exemplary Teaching Case and Informative Videos for Instructional Development Aims

Main Themes	Sub Categories	Summarized Quotations	Data Source	f	Out of
Seeing Different Examples	*Gaining Ideas about how-to Teach Effectively*	Seeing how-to do first-meetings, apply different strategies etc.	Interview	5	10
		Seeing how-to take students' attention, manage voice tonation, communication etc.	Survey	3	18
		Gaining ideas about how to behave as an instructor by listening to an educational expert	Survey	4	18
		Seeing examples of different active learning strategies	Interview	8	10
		Seeing classroom cases from different disciplines	Survey	15	63
		Seeing examples from real life	Interview	7	10
		Seeing impressive instructors on teaching	Survey	5	38
		Having a chance to compare different instructors/strategies	Interview	2	10
			Survey	5	38
	Preparation for the New Profession	Seeing examples of instructors' lives and experiences	Interview	6	10
		Become familiar with possible problems in future via the interviews with early- career faculty	Survey	23	63
Thinking about & Planning Future Teaching	*Course Design*	Thinking about future teaching and possible problems in course design via interviews with early-career faculty	Survey	10	19
		Gaining ideas about incorporating different teaching strategies	Interview	1	10
	Active Learning Strategies	Thinking to apply similar active learning strategies in future teaching	Interview	6	10
		Interpreting the given active learning cases through their own discipline	Survey	10	48
	Classroom Management Strategies	Thinking about their own classroom management strategies in future as a result of seeing exemplary cases	Interview	5	10
	Thinking about Students' Perspectives	Thinking more about students' side; their profile, points of view, experiences, and difficulties	Interview	3	10
		Having a closer look at first year students' lives	Survey	8	22
		Understanding student development as a result of seeing seminar videos given by educational experts	Survey	4	18

Table 4.14 continued Main Themes	Sub Categories	Summarized Quotations	Data Source	f	Out of
Suggestions	*Variety*	Increasing the variety of early-career faculty interviews (in terms of the universities and experience of the interviewees)	Survey	6	63
		Increasing the variety of student interviews (in terms of the grade levels of the interviewees)	Survey	2	22
		Increasing the variety of exemplary teaching case videos (to include Turkish cases and different disciplines)	Interview	3	10
		Increasing the number of seminar videos	Survey	4	18
	Content	Seeing examples of instructors' lives and experiences	Interview	6	10
		Become familiar with possible problems in future via the interviews with early-career faculty	Survey	23	63

4.2.4. Thoughts on Online Discussion

One of the main emerging themes of the interview analysis was effects of following or participating the discussion forum on graduate assistants' teaching profession. Based on the content analysis of the interview data, participants mostly mentioned positive effects of having continuous communication with peers, discussing with people from various disciplines, having an opportunity to share ideas, thinking about their own teaching, and gaining different perspectives in general.

Before presenting the related findings, it should be noted that none of the participant graduate assistants have been involved in a course which necessitated a regular online participation before. Moreover, interview data showed that most of them did not have enough time to participate the discussions as it deserves because of their workloads as graduate assistants.

Continuous Communication with Peers

As one of the strongest aspects of online learning environments, some participants appreciated the continuous communication feature of the online system in EDS660 course. It simply kept them connected to the course during the days without a class. According to S7 and S9, it was an easy-access environment in which you can share your ideas anytime you want and get immediate response. S4 considered the discussion forum as an important component for their improvement.

> This strategy was really good. Having a web site like this, participating in discussions interactively, having a continuous communication with peers – whom we took the course together- during the weekdays… They were all among the most important factors that supported our development process.

> Yöntem çok güzeldi böyle bi web sitesinin olması ve bu web sitesinde interaktif bi şekilde bizim tartışmaya katılmamız, arkadaşlarla sürekli hafta içinde diyalog içinde bulunmamız [dersi alan arkadaşlar için] gelişme sürecini aslında sağlayan en büyük faktörlerden biri buydu.

Discussing with People from Various Disciplines

One of the most common ideas about the discussion forum was that discussing with people from diverse disciplines had a positive effect in terms of giving an idea about other departments and/or disciplines as a prospective faculty member, becoming aware of other perspectives, and seeing a wide variety of cases/experiences.

Interview data indicates that almost all of the participants appreciated having a discussion environment incorporating people from different departments. As mentioned on the methodology chapter, most of the graduate assistants (16 of 23) attending the course had an engineering background, 6 participants were studying at the College of Arts&Science, and one participant was from the College of Architecture.

One of the advantages of discussing with people from various academic fields as explained by S1 is that he was able to see how teaching is happening in other departments so that he felt more comfortable about his possible future service courses to other departments. According to him, it was good to have an idea about the teaching mentality, and student characteristics of other academic fields, in case of offering courses for them.

Another effect of discussing with people from other disciplines is that participants were able to see different perspectives shaped by participants' backgrounds. 3 participants found it very important to see thoughts of others from different fields. S10 said:

> Since graduate assistants from the same department usually spend time with the same faculty members and same students, they look through the same perspective. But since people from other departments are with other faculty and other student profiles, they may have different ideas and thoughts, they can interpret differently. Learning this made me really happy.
>
> Aynı bölümdeki araştırma görevlileri aynı öğrencilerle aynı hocalarla içiçe yaşadıkları için aynı perspektiften bakıyorlar fakat farklı bolumlerdeki insanlar farklı öğrenci profilleri, farklı hocalarla içiçe oldukları için farklı bir yorum yapabiliyorlar aynı olay veya konu üzerinde farklı fikir ve düşüncelere sahip olabiliyorlar. Bunları öğrenmek gerçekten memnun etti.

S5 stated that he did not have a chance to see the ideas of people from other disciplines before. This environment provided an opportunity to see how non-engineer people think:

> How does a non-engineer person think? I've never been to such an environment before – I mean an environment in which everybody express their ideas… an environment in which people from social sciences and engineering department are mixed. I saw how people from social sciences think…
>
> Muhendis olmayan bi insane nasıl düşünur? daha onceden hic boyle bir ortamda – hani herkesin fikrini belirttigi bir ortamda bulunmamistim hani.. boyle sozel ve muh. bolumlerinin karisik oldugu… sozel insanlar nasıl düşünur onu gordum

According to S2, seeing other points of views even forces you to change your own perspective:

> It was good that people were from different departments, since you may also be directed to think differently after seeing other people's point of view, therefore. If a person thinks something which you didn't think, so are also forced to think differently. It was really good because of these reasons..
>
> Herkesin farklı bölümlerden olması iyiydi çünkü diğer insanların olaylara bakış açılarını görüp sen de farklı düşünmeye itilebiliyorsun. senin düşünmediğin birşeyi başkası düşününce haa sen farklı bi şekilde düşünmeye itilmiş oluyosun, hakkaten öyle diyebiliyosun yani. O açılardan gayet iyi oldu..

A discussion forum incorporating people from various disciplines brought about sharing a wide variety of cases and experiences. According to S4 and S6, it was good to hear very different cases and experiences from other departments which were usually not

possible to experience in their own department. It can be claimed that the diversity of shared teaching-related cases and experiences coming from various academic fields enriched the discussions.

According to S8, since there were people from other departments, there was more to share and probably more interesting to listen:

> You wonder about each other. You really wonder about what s/he will say, because s/he comes from another field. So you listen to her/him…
>
> Birbirini merak ediyorsun. Onun ne diyeceğini gerçekten merak ediyorsun, çünkü farklı bir alandan geliyor, dinlemeyeceksen bile dinliyorsun.

Sharing Ideas

Most of the interviewees stated that the discussion forum was a good environment to share and elaborate ideas. S2 explained how a follow-up discussion would support learning:

> Discussing about the effects of these strategies, thinking about their results… We don't think about these issues. In my opinion, it has been good to talk and think about these issues in discussions.
>
> Hani bu yöntemlerin etkisini tartışmak, nasıl şeylere yol açtığını düşünmek… bunun uzerine düşünmüyoruz biz.. tartışmalarda bunları düşünüp konuşmak, bunların üstüne düşünmek iyi oldu bence.

Other 5 participants said that they and their peers usually shared their experiences and some ideas on given cases. According to S4, EDS660 was a course mainly based on the sharing of ideas, and online discussion environment was very appropriate for this aim and especially for the content of this course; it would not work well in other contents like mathematics of physics.

Besides the positive effects of sharing ideas on the discussion environment, S5 stated that it was good to improve himself somehow, but he thinks that other people did not contribute to his improvement because of the lack of individual feedback or comments on his thoughts (forum posts). Similarly, he did not give individual responses to other participants' messages. As presented on the "Participants' Behaviors on the Online

environment" heading of the findings, participants usually tended to stay with the group's common opinion, so the posted comments or ideas were usually not elaborated.

According to another participant, S7, although the online discussion forum was a more effective way of sharing information and ideas, she and her peers could not spend enough time on this part of the course, since there were lots of home works for every week of the course. Discussion participation clearly was seen as an extra workload for graduate assistants.

Change in Perspectives

Interview data revealed that discussion forum helped the participants to share their experiences and some ideas, and seeing other thoughts. Clearly, the main reason for a perspective change was the variety of participants' backgrounds.

Seeing others' thoughts on a given problem or situation was very important for discussion participants as stated by S10:

> Everybody tried to explain their thoughts; many different thoughts have emerged, therefore I saw many benefits actually. I don't know, maybe it's because of my personality; but I like to learn what people think. That satisfied me maybe?
>
> Herkes elinden geldiğince kendi düşüncesini anlatti, birçok farklı düşünceler ortaya çıktı, onun için çok faydasını gördüm aslında. Yani ben belki kendimden kaynaklanıyodur bilmiyorum, insanların ne düşündüğünü bilmek benim çok hoşuma gider, belki o kısmı beni memnun etmiştir…

S9 and S10 gave examples of discussion topics, which were examining sample cases. Both participants stated that it was good to see others' possible behaviors on some specific situations, so that they can gain develop their own point of view and decide on their behavior in a similar situation in real classroom/teaching environment.

Beyond talking on specific teaching cases and thinking on behaviors as prospective faculty members, sharing of ideas, and noticing peers' points of views on teaching-related issues would help to extend a graduate assistant's perspective in general, as stated by S7:

> Actually, this interdisciplinary discussion was really important to me because of

> seeing different aspects of the subject. I mean, we were able to look through a wider perspective as a result of discussions. we were able to see different aspectsand think about how we can apply those in our own disciplines.
>
> Aslında konunun farklı boyutlarını görmek açısından bu kadar disiplinlerarasi bir tartışma çok önemli geliyodu bana. Hani çok daha geniş perspektifle bakabiliyoduk tartışmalar sonucunda. Farklı boyutlarını da görebiliyorduk ve kendi bölümümüz üzerine de bunları nasıl aktarabiliriz, aslında nasıl düşünülebilir o boyutlar diye düşünmemizi sağlıyordu.

Similarly, S9 explained how someone's perspective could change as a result of interacting with people:

> Seeing what people with different mentalities think about an issue is also very important in terms of improving your perspective. Since there were people from social sciences and other fields, I saw different points of views. That was a wonderful experience.
>
> Farklı kafa yapısına sahip kişilerin bir konu hakkında neler düşündüğünü öğrenmek senin de perspektifini geliştirmek açısından çok önemli. Sözelden, diğer bütün bölümlerden insanlar olduğu için farklı bakış açılarını gördüm. O müthiş bir deneyimdi yani.

Thinking about Future Teaching

Discussing on teaching-related issues and sample teaching cases forced most of the participants to think about their future teaching. 6 of the participants stated that they started to think about what they will do, while reading others' responses and writing their own thoughts. Especially discussing on sample cases caused the graduate assistants to think about themselves as instructors.

Interview data indicated that participants mostly talked in general about their future teaching. Especially, posting on discussion forum necessitated serious effort of thinking themselves as a faculty member:

> There is something about discussions; before writing a comment, I was seriously thinking about what could be done about this issues, what could happen etc… if this is the case, people think about what they may do as an instructor. It's some kind of brain exercise.
>
> Tartışmaların yani şöyle birşey var, ben comment yazmadan once oturup düşünüyordum hani hakkaten bu konuda ne yapılabilir ne olur filan… böyle olunca hani ister istemez insan kendi yapabileceklerini düşünüyor bir hoca olarak. bi beyin jimnastigi yapıyor. [S5]

Besides the general explanations, S3, S9 and S10 gave specific examples of how discussions forced them to think about their future teaching. S3 mentioned how she thought about the accurate assessment techniques to be used in her classes as a result of discussing with peers, S9 and S10 gave examples of ethic case discussions and their effects on their future teaching:

> Especially… in ethic case discussions, it will stay in my mind how people have treated in which way; and if I face with a similar situation in future, I'll use that information - how other people behaved in that situation, which one was right and which one was wrong- while deciding on my behavior.
>
> Özellikle şey mesela, etik case olayında kim neye nasıl davranmış o benim kafamın bir ucunda kalır ve ileride öyle bir durumla karşılaştığımda, şöyle yapmıştı, bu doğru veya yanlıştı diye karar verirken işime yarayacaktır yani. [S9]

Although participants usually mentioned their future teaching, two participants stated that they had a chance to look at their past teaching experience as a graduate assistant and assess themselves. Discussing with peers caused S5 to look backwards and criticize his teaching by thinking about how better it could have been done, while S8 felt happy after realizing that she has done some right things before.

Suggestions about Discussion Forum

Interview analysis exposed participants' suggestions about the discussion forum especially for use in faculty instructional development aims. First of all, it should be noted that participating in online discussions, sharing ideas with peers, and especially seeing thoughts on teaching from other disciplines were appreciated by most of the participants and suggested as a necessary component of a possible online faculty development environment.

On the other hand, some suggestions were made for designing a more effective discussion environment. One of the most common suggestion was discussing in a synchronous environment rather than asynchronous messaging. 3 participant stated that they would benefit more if it's designed in that way. According to S1 and S10, a synchronous environment would improve the interaction between the participants because of the immediate response.

S2's concern was about the discussion participation as a course requirements. She thought that she would feel more safe, if the discussion was held on a certain time, so that she would not feel the necessity to visit the discussion forum and check out people's responses every time.

Mandatory participation is one of the limitations of this study, so may have caused this kind of problems. Another participant (S10) said that it would be good to have such a discussion environment either in this course or in an online faculty development environment, however it should be voluntary-based and discussions should be done on a more natural way, not attached to the course content. S9 emphasized the content of the discussion topics, and said that he would prefer topics which are not closely related to the course content. Clearly, a discussion environment which gives more freedom to the participants and allow them to discuss what they want/need would work better in a professional development environment. S10's comment was especially important, since he compared voluntary-based discussion forums to the course's discussion environment:

> It depends on a specific subject; we were not allowed to naturally put a subject for discussion. We were writing about some artificial subjects.. I think that was the reason… yes… I share my thoughts at discussion forums, read other thoughts, and I really enjoy it, I spend many hours to almost read all of them; hundreds of comments. That kind of environment could be beneficial, but I honestly don't think that an artificial environment could be like that..
>
> Belli bir konuya bağlı, kendimiz doğal olarak bir konu ortaya atamıyorduk. Suni şeyler üzerine birşeyler yazıyorduk. Bence onun içindi.. evet… forum sitelerinde ben de cok tartışmalarda düşüncelerimi belirtiyorum, düşünceleri okuyorum ve cok da keyif alıyorum, saatlerimi harcıyorum aşağı yukarı hepsini okumak için, yüzlerce yorumu… Böyle bir ortam faydalı olabilir ama suni bir ortamın olacağını düşünmüyorum açıkçası.

Another finding related to the suggestions to improve the discussion forum was made by S3, in which she was asking for more private space and private answering to the discussion topic. She prefers everybody to send their replies to the discussion topic privately, and then see everybody else's responses, so that people will not make comments on others' thoughts and just simply reply the discussion topic.

Table 4.15 Summary of the Interview Data about Participants' thoughts on Using Online Discussions for Instructional Development Aims

Main Themes	Sub Categories	Summarized Quotations	f
Discussing with People from Various Disciplines	*Gaining Ideas about Other Departments/ Disciplines*	Seeing how teaching is happening in other departments – preparation for possible service courses in future	1
	Becoming Aware of Other Perspectives	Seeing others' thoughts from different disciplines is appreciated	3
	Seeing a Wide Variety of Cases/Experiences	Hearing different cases and experiences which were usually not possible to experience	2
Sharing Ideas	*A good environment to share & elaborate ideas*	Opportunity to share experiences and ideas is appreciated	5
		Supported self-improvement	1
Change in Perspectives	*Variety of Participants' Backgrounds Resulted in Changing Perspectives*	Seeing others' possible behaviors on given cases helped to develop a point of view	3
		Noticing peers' points of view on teaching-related issues helped to extend the perspectives	1
Thinking about Future Teaching	*Discussing on Teaching-related Issues and Sample Teaching Cases Forced to Think about Future Teaching*	Thinking about what they will do, while reading others' responses and writing their own thoughts; about assessment techniques, ethic cases etc.	6
		Evaluation of the Past Teaching	2
Suggestions	*Synchronous Communication*	Synchronous environment would improve interaction between the participants because of the immediate response	3
		Discussion participation should be voluntary-based	1
		Discussion topics should be independent from the course content	1
		Private space needed for communication	1

4.3. Summary of the Findings

Phase 1 - Needs Analysis

Research Question 1: What are the early-career faculty members' opinions, needs, and expectations about their own teaching?

a. How important are the teaching-related issues according to the early-career faculty members' opinions?

Analysis of the survey data indicated that according to the early-career faculty, most important issues related to teaching were *skills to establish communication with students, fostering students' active participation while teaching*, and *ethics related to teaching & learning*.

b. On which teaching-related issues do they face with problems at most?

In terms of the problems they face with related to the given teaching-related subject most frequently, *knowing the learning theories, fostering students' active participation while teaching,* and *attending professional development activities* have got the highest mean scores.

The least important teaching-related issues according to the survey had the lowest mean scores on problem frequencies in general. *Paying attention to student development* based on their age-levels, *considering individual differences* among the students, and *using traditional teaching strategies while teaching* have been among the *least important* and *least problematic* teaching-related issues for early-career faculty.

c. What are their preferences about possible faculty development activities on teaching/learning?

In terms of the early-career faculty members' *preferences* on faculty development activities on teaching/learning, *workshops*, *internet-based systems* and *seminars* have got

the highest ranking in a descending order. In case of any Internet-based faculty development environment, *exemplary video cases*, *exemplary text cases* and *theoretical knowledge* were the most preferred components in a descending order.

In the study, needs analysis data including early-career faculty's *perceptions* on how important particular teaching related subject is and how often they face with problems on each specific issue have been used as an input for designing the online environment, in addition to presenting the big picture of early-career faculty members' teaching needs and preferences at METU.

Phase 2: Evaluation of the Online Environment

Research Question 2: What are graduate assistants' perceptions about the effects of using an online environment in regards to their teaching profession?

a. What are graduate assistants' thoughts about faculty instructional development concept? [Data Source : End-of-the-Semester Interviews]
    i. Thoughts about participating faculty instructional development activities in general
        - Faculty instructional development activities are found to be necessary
        - Target audience for possible faculty instructional development activities should not include only graduate assistants, but also senior professors.
        - Effective ways for faculty instructional development have been suggested as; seminars, courses like EDS660, consultation systems, and on-demand communication with educational experts
    ii. Thoughts about the effects of graduate course EDS660
        - Changing Perspectives on Teaching Aspect of the Profession
            - They started to think about the teaching aspect of the profession
            - They started to compare traditional (learned from their instructors) vs. professional ways of teaching
        - Thinking and planning of future teaching

- Course design: Feeling more *comfortable* and *self-confident* about *designing their own course*. Thinking about *course design* based on *student characteristics*. Learning how to design their own *syllabi* correctly and developing one as a course requirement.
- Teaching strategies: Thinking about changing lecturing style and using active learning strategies in their future classes (mainly caused by seeing the exemplary teaching videos).
- Communication with students: Gaining different *perspectives* about *effective communication* with future students.
- Classroom management: Getting aware of different classroom management strategies to be used in their future teaching.
- Assessment and evaluation: Improvement about their own assessment strategies.
- Students' individual differences: Realizing 'learning styles' concept to be used in their teaching.

b. How do the graduate assistants behave in an online learning environment designed to support their professional development? [Data Source – Web Site Logs and End-of-the-Semester Interviews]

i. Amount and characteristics of their visits to the online environment

- *Web Site Visit Frequencies* showed a decrease towards the end of the semester. The web site has been visited 2074 times in total, which means 90.17 average views per participant for the whole semester.
- *Time for Visiting the Online Environment.* Participants *mostly* preferred to visit the web site at *evening time*; *57%* of the 2074 visits in total have happened between 18:00-23:59. The *least* preferred time was *morning* (6:00-11:59) with a *3%* portion of all visits.
- *Use of the Online Resources.* Average visit of a video for each person was 1.62 for informative videos, and 1.26 for exemplary teaching case videos. Videos published on first weeks of the semester usually had

higher visit rates. Besides, the visit rate per video was lower if there were more than one video on a week.

In terms of the other materials shared on the online environment, supportive teaching materials have been visited 298 times with an average of 1.62 for each material, while content-related articles have been visited 128 times with an average visit rate of 1.11 per article.

- *Use of the Discussion Forum.* 330 messages have been sent to 19 discussion topics under 9 main subjects, which means 14.35 messages for each participant for the whole semester. Discussion participation decreased towards the end of the semester. Most preferred time for forum message posts has been evening time (60%), while mornings were least preferred (3%).

ii. Amount and quality of online discussion participation.

- Types of the forum messages in descending order: Position statements, affirming an argument, sharing experiences, agreement-disagreement statements, explanations on plans/possibilities for future, referring to F2F classes, making summary, and other.
- Reading or not reading previous messages before writing on forum.
- Effects of seeing others' responses to the discussion question.
- Writing messages seriously (sincerely?) or just as a duty.

c. What are their perceptions about the effects of participating online discussions to their teaching profession? [Data Source : End-of-the-Semester Interviews and Weekly Surveys]

i. Continuous communication with peers

- Feeling connected to the course during none-class days.

ii. Discussing with people from various disciplines

- Gives an idea about other departments and/or disciplines
- Makes them aware of other perspectives
- Brought about a wide variety of cases/experiences

iii. Perspectives on teaching change in different ways;

- Gaining different perspectives as a result of participating discussions and seeing others' thought
- Developing their own point of view as a result of seeing others' possible behaviors on a given case
- Broadened the perspective on teaching as a result of interaction with peers

iv. Thinking about Their Own Teaching

- Thinking about what they would do in that given situation, while reading others' responses and writing their own response.
- Discussing [especially writing] on sample cases forced the graduate assistants think about themselves as instructors (Brainstorming about their own teaching)
- Looking at their past teaching experience and criticize themselves.

v. Suggestions about Discussion Forum

- Need for synchronous discussion environment
- Voluntary participation required instead of mandatory
- Discussing what they want/need rather than given discussion topics (related to voluntary participation as given above)
- A private space for discussions rather than seeing others' responses (answer-reply between the participant and instructor rather than interaction with the whole group)

d. What are their perceptions about the effects of using exemplary teaching case and informative videos to their teaching profession? [Data Source : End-of-the-Semester Interviews and Weekly Surveys]

i. For the informative videos; student interviews and seminar videos have got higher mean scores compared to interviews with early-career faculty.

ii. For exemplary teaching case videos; innovative teaching strategies have got higher mean scores compared to relatively traditional strategies.

iii. Seeing different examples helped the graduate assistants to

- Have an idea about how-to teach in a more effective way (exemplary teaching case videos)

- Observe instructors' behaviors in the classroom (exemplary teaching case videos)
- Have an idea about how to behave as an instructor (informative videos: seminar videos)
- Become aware of different teaching strategies (exemplary teaching case videos)
- See implications for teaching in other disciplines (exemplary teaching case videos)
- See real classroom implications of related theoretical information covered in F2F meetings (exemplary teaching case videos)
- Observe students besides the instructor (exemplary teaching case videos)
- Observe impressive/inspirational instructors on teaching (exemplary teaching case videos)
- See examples of instructors' lives and experiences (informative videos: interviews with early-career faculty)
- Become aware of possible problems in advance (informative videos: interviews with early-career faculty)
- Know about different points of views (informative videos: interviews with early-career faculty)
- Make comparisons between different strategies and/or instructors

iv. Graduate assistants started to think about and plan their future teaching

- Thinking about their future course design process including possible problems (informative videos: interviews with early-career faculty).
- Thinking about how to incorporate different teaching strategies in their courses (exemplary teaching case videos).
- Planning to apply active learning strategies similar to the ones given on the videos (exemplary teaching case videos).
- Considering the effectiveness and usability of the given active learning strategies for their future courses (exemplary teaching case videos).

- Considering discipline-related issues in applying active learning strategies (exemplary teaching case videos).
- Change in perspective on teaching as a result of seeing active learning strategy implications in real life (exemplary teaching case videos).
- Thinking about their own classroom management strategies in future teaching (exemplary teaching case videos).
- Thinking more about the students' perspectives [as a prospective professor]; students' development, profile, points of view, experiences, difficulties etc in addition to how to communicate with students effectively and how to behave as an instructor in general (informative videos: interviews with 1st year students and part of Effective Instruction Seminars by METU).

v. Suggestions about Videos

- Variety.
  - Informative Videos: Interviews with early career faculty should be extended to faculty from other universities [in addition to METU] and senior faculty [in addition to early career].
  - Informative Videos: More students should be included in interviews; different grade levels should be presented.
  - Informative Videos: Number of seminar videos by educational experts should be increased.
  - Exemplary Teaching Case Videos: More examples of innovative teaching strategies should be provided.
  - Exemplary Teaching Case Videos: More examples from Turkish universities might be included.
  - Exemplary Teaching Case Videos: Teaching cases from different disciplines might be necessary.
- Content.
  - Informative Videos: Too personal opinions should be avoided in interview with early-career faculty videos.

- Informative Videos: content of the videos of early-career faculty interviews should be directly related to the specific week's subject.
- Exemplary Teaching Case Videos: Innovative teaching strategies should be presented rather than well-known classroom implications.

e. What are their expectations/preferences from an online environment regarding their professional development on teaching? [Data Source : End-of-the-Semester Interviews]

- Pros/cons of a possible online environment
  - Provides easy access to resources.
  - Provides access to accurate information on teaching instead of learning from peers and senior professors.
  - Provides opportunity to discuss.
  - Possible problems on discussion forum (Possible conflicts between the professor participants, while discussing).
  - Need for practice rather than discussions (Discussing would not be as helpful as practical implications).
- Content and components of a possible online environment
  - Resource materials (Practice-based materials are preferred rather than theoretical information).
  - Videos (An effective way of understanding things; necessary to enrich the environment).
  - Discussion forum- interaction with peers and educational experts (Participants required voluntary-based environment, discussions with faculty from different disciplines, and interaction with educational experts).

CHAPTER 5

DISCUSSION AND CONCLUSION

Summary of the Study

The current study aimed to explore teaching-related needs of early-career faculty and investigate the effectiveness of an online environment to support prospective faculty members' teaching profession throughout a graduate course. Exploratory mixed design has been employed as the research methodology and the whole research process was carried on through two main phases. The first phase aimed to explore the instructional needs of early-career faculty. Data have been collected by questionnaires and were analyzed through descriptive statistical analysis.

Based on the faculty members' needs and course instructor's opinions, the online environment was developed to support the graduate course EDS660 incorporating exemplary teaching cases, informative videos, discussion forum, and additional educational resources and teaching materials.

Second phase of the study aimed to investigate the effectiveness of the online environment designed to support graduate assistants' teaching profession as a part of the graduate course. Although mixed methodology was employed in this phase, the main approach has been qualitative that was supported by quantitative data collected through weekly surveys. End of the semester interviews provided a general evaluation of the environment, while both quantitative and qualitative data on weekly surveys gave detailed information for the evaluation of each online component on the web site.

Although this study mainly gives an in-depth look at METU, some findings can be relevant to other higher education institutions. This discussion focuses on the impact of

findings for online faculty instructional development implications mainly through the lens of transformative learning theory.

5.1. Discussion of Results

5.1.1. Early-Career Faculty Members' Needs on Teaching (Refers to Research Question1)

Survey results indicated that early career faculty are willing to take part of faculty instructional development programs. It was revealed that 74% of the survey respondents would attend activities to improve their teaching. Another study conducted by Odabaşı (2003) in a Turkish university similarly concluded that 85% of the faculty are interested in any activity which will donate them with effective teaching skills. Similarly, Yıldırım et al.'s (2011) study revealed graduate assistants' high interest on participating in activities to improve their teaching. These studies, in addition to the current study's findings, indicated that faculty members are highly interested in improving their teaching, so providing efficient and usable ways of support should become a focus of interest for administrators and policy makers in higher education system.

Details of the needs analysis showed that having students' active participation in class was among the most important and most problematic issues in teaching for early-career faculty at METU. This finding is partly consistent with Opre et al.'s (2008) research in which faculty members mostly needed to improve their skills to motivate students and to internalize active teaching methods.

In terms of the problems they face with most frequently, knowing the learning theories and attending professional development activities have been found to have the highest mean scores, in addition to students' active participation into classes. It could be claimed that early-career faculty are in need of knowing learning theories and attending faculty development activities. New faculty's high interest on improving their teaching is emphasized in Sorcinelli's (1994) study, in which she stated that a lot of new faculty's time was spent on thinking about teaching and facing with related difficulties. That can explain their need in very general issues on teaching like knowing learning theories and attending professional development activities.

In terms of the preferences on possible faculty development activities, workshops were among the mostly preferred methods, followed by internet-based systems, seminars and consulting to educational experts. Although a consultation system seems to have a lower rating according to the survey results of early-career faculty who are already teaching, participant graduate assistants of the EDS660 course suggested this among the most necessary parts of a possible faculty instructional development effort. Experience in teaching (Austin, 2002) and the culture they involved in during the graduate years might have an effect on faculty members' preferences on faculty development.

Another finding related to the preferences for faculty development activities is that early-career faculty preferred exemplary video cases and text-based exemplary cases on a possible Internet-based faculty development environment, compared to theoretical knowledge and discussions with peers and educational experts. This finding supports Sorcinelli's (1994) suggestion about using practice-based activities for supporting instructional development of early-career faculty. In addition, one of Knowles' (2005) assumptions on adult learning says that adults are problem-centered rather than subject-centered in their learning. therefore, it could be suggested that designing problem-centered and practice-based activities would be an effective strategy while developing faculty development programs or activities.

5.1.2. Graduate assistants' Behaviors in the Online Environment (Refers to Research Question 2a)

Participant graduate assistants' use of the online environment provided valuable information which could be useful in planning and designing similar environments for faculty instructional development purposes. One of the most interested findings related to the graduate assistants' behaviors was revealed through the content analysis of the discussion logs. Discussion topics and questions were determined based on the content of the week, and aimed to foster reflective thinking. Content analysis findings indicate that graduate assistants tended to take a position on the given topic, by standing usually with the common opinion. There were only a few forum posts against the common opinion or extending the scope of the discussion. One of the reasons for the participants' being generally moderate may be mandatory participation. Moreover, the

time shortage of the graduate assistants may have hindered them to write detailed forum posts.

In addition to web site log data, interviews provided information related to the use of the discussion forum. Although most of the participants tended to read the previous messages before replying to the discussion topic, some of them skipped that part and directly wrote their messages by answering the question posed by the moderator. This might be one of the reasons for similar/repetitive forum posts which some participants complained about. Lack of time appeared to be one of the factors which negatively affected graduate assistants' forum participations. As concluded by Hew and Hara (2007), lack of time is one of the most hindering factors in sharing knowledge in online environments. However, personal gain - as one of the motivators (Hew & Hara, 2007) - could be worked on to increase participation, which means considering faculty's needs and expectations in design.

Analysis of the web site logs indicated a general decrease of visit rates towards the end of the semester, which could be explained by graduate assistants' increasing workload by that time, in addition to a possible novelty effect of the new environment. Web site visits, as well as discussion participation and video material views showed similar patterns in terms of the total counts in a weekly manner.

Another finding related to the online environment usage is that graduate assistants mostly preferred to visit the web site and participate in discussions at evening times between 18:00-23:59, which is consistent with Baran's (2007) study on professional development of pre-service teachers. Even though this online environment was part of a compulsory course, it can be claimed that graduate assistants reserved after-work time for online instructional development activities.

Aydın (2003) suggested a hybrid model for faculty instructional development to work well in Anadolu University, however another study conducted by Kabakçı and Odabaşı (2004) concluded that the online staff development was not well attended mainly because of the time shortage of the faculty members. Findings of this study similarly indicated that time shortage and mandatory participation requirement area very

important factors in terms of faculty willingness to participate, therefore programs with voluntary participation could be a more efficient way in terms of not discouraging the faculty. Moreover, content and strategies provided within the faculty development programs is an important issue as explained by a participant that he is spending hours on online forums about his academic field, because those subjects take his attention. Therefore, designers of faculty development programs or activities should be aware of faculty needs and interests, so that they could be well attended.

Another finding related to discussion log analysis was that the arguments affirmed by the discussion participants to strength their position or explain their rationale were mostly based on hypothetical situations rather than explaining their beliefs and assumptions or giving factual information. This may be caused by graduate assistants' lack of teaching experience, so that they may not have many ideas to share about factual information and personal beliefs and assumptions on teaching-related issues. The type of forum posts by faculty members who are already teaching would be different than that of the graduate assistants'. According to Hew and Hara (2007), another important barrier to knowledge sharing in online environments is related to the knowledge deficiency of the participants. Since the graduate assistants were not actively teaching, their knowledge and experience accumulation may be limited, so that they may not be able to affirm opposite or challenging arguments. The inadequacy of participants' knowledge and experience compared to actively teaching faculty might have affected the depth of the discussions. This difference between graduate assistants and faculty could be an important issue to be considered while designing faculty instructional development programs or activities.

5.1.3. Graduate Assistants' Perceptions about the Effects of the Online Environment on Their Teaching Profession

Before discussing the findings related to the use of the online environment for faculty development aims, a brief discussion is given as first, about the graduate assistants' general impressions on EDS660 course.

First of all, findings revealed that taking a course to improve their teaching forced the graduate assistants to change their perspective on teaching generally or rather developing an educational perspective. Since the new trends in adult education emphasizes critical reflection and transformation rather than improving educators' skills and acquisition of new knowledge and techniques (Cranton, 1996; Webster-Wright, 2009), the perspective change that graduate assistants experienced while taking the course is an important finding. This aspect could be considered while evaluating the effectiveness of faculty instructional development activities or programs.

Exploring different aspects of their new role as a faculty member through taking the pedagogical graduate course might have been stimulating for graduate assistants. It was revealed that they were used to learn 'teaching' mainly by observing their professors and tend to follow traditional strategies. According to Gale (2011) and Remmik et al. (2011), new faculty have a tendency to seek for support through informal relationships. However, both the needs analysis and evaluation of the effectiveness of the graduate course indicated that early-career faculty need some formal support at the university. In this sense, taking a formal course helped the graduate assistants to develop an educational perspective which they did not think about before.

Another outcome of taking the EDS660 course for graduate assistants has been starting to think about and plan their future teaching. Graduate assistants clearly stated that they started to think about issues like course and syllabus design, teaching strategies, communication with students, classroom management, assessment and evaluation and individual differences of students for their own teaching. They gave some examples about the details of future classroom implications, which can be interpreted as the integration of consciousness which is generated at the beginning of the transformative learning process (Taylor, 1989). So, it could be suggested that the course helped graduate assistants to concretely think about their future teaching and classes, besides developing an educational perspective.

The course in general, and online environment and its components specifically have an effect on changing graduate assistants' perspectives on teaching, more than helping to

gain the necessary skills on teaching. Considering this fact, and based on the themes extracted during the analysis, findings related to the effects of the online environment in general and its components specifically are discussed through the lens of transformative learning theory. For research questions 2b and 2c; the overlapping categories for components of the online environment have been combined into headings referring to transformative learning phases on the following paragraphs.

A Disorienting Dilemma – Becoming Aware of Different Implications (Refers to Research Question 2b)

Findings revealed that graduate assistants became aware of different teaching strategies by viewing the exemplary teaching case videos. Moreover, most of the participants thought that the videos were complementing the theoretical knowledge given during the face-to-face sessions of the course. Observing a real classroom environment, real students, and a real instructor on teaching were generally appreciated. It was a good opportunity to observe the instructors' behaviors, and students' reactions to different strategies/implications in a videotaped classroom. Similar to this finding, Sherin and van Es (2005; 2009) concluded that videotape of real classes has the potential to contribute teachers' development about noticing and interpreting significant features of classroom interactions. For this study, it was an important point that graduate assistants were able to see the processes and outcomes of various situations in real teaching cases, without the obstacles of participating in a real classroom.

Besides the opportunity of observing various classrooms, the exemplary teaching case videos were found to be useful in terms of showing especially 'impressive' instructors on teaching. Findings revealed that the personal attributes, and communication and teaching skills of the instructors took graduate students' attention especially on traditional (instructor-centered) teaching case videos, while the teaching strategies themselves became more important on active learning cases.

As prospective faculty members, graduate assistants became familiar with various teaching strategies by seeing exemplary teaching case videos. Especially the active learning case videos were found to be valuable in terms of giving ideas on different

teaching strategies. Although the given strategies were from various disciplines, graduate assistants appreciated seeing teaching strategies from different disciplines, and usually reflected through their own discipline's perspective on discussion forum. It was important that the most innovative strategies and the ones which have never been thought or seen before were found to be more impressive and mind-opening by the participant graduate assistants. According to McKeachie (1997), viewing alternatives helps the improvement of faculty. He examined the critical elements in training the university teachers, and suggested that it is important to show some alternatives in terms of encouraging the new faculty to use different strategies from what has been done before. McKeachie (1997) stated, "Seeing different examples helps improvement, since it's difficult if you do not know how to do anything different from what has been done in the past" (pp. 107-108).

Both the interview and weekly survey data indicated that one of the mostly appreciated teaching case videos was an instructor's interview and demonstration on how she redesigned her course to meet disabled students' needs. Considering disabled students' needs in course design was an issue which has never been thought before by most of the graduate assistants. As stated by Mezirow (1991), self-examination of feelings and critical assessment of assumptions is a result of a disorienting dilemma which is the beginning of transformational learning. Viewing a real teaching case about an issue which has not been thought before may cause a disorienting dilemma for early-career faculty. Therefore, it could be a good idea to present authentic cases related to different aspects of teaching in faculty instructional development programs. Online environments may provide a good opportunity to be used for this aim.

Another active learning case called 'Fishbowl activity' was among the most beneficial and mostly mentioned teaching cases according to the interview and weekly survey data. Again, graduate assistants emphasized that they have never seen and thought about an activity like this before, which has a good potential to increase student participation, especially the shy ones, according to the participants. Mezirow (1991) stated that a disorienting dilemma can be caused by taking a course, an eye-opening discussion, a book, a piece of art, or by efforts to understand a different culture. Authentic cases

demonstrating best teaching practices may cause a self examination of beliefs and assumptions about the solutions to common problems on teaching, moving beyond the traditions to overcome the well-known problems. Therefore, this kind of cases could be a good way to support early-career faculty's instructional development.

In this study, the graduate course itself created an awareness about the teaching aspect of the faculty profession. Participants all mentioned that they started to think about 'teaching' as a serious work and cannot be accomplished just by their limited experience as a student or help from peers. In addition to the course's general impact, various teaching case videos and especially active learning cases provided in the online environment helped the prospective faculty to become aware of different aspects of 'teaching'.

It can be claimed that viewing especially innovative and non-traditional teaching cases/strategies has a potential to create a disorienting dilemma for graduate assistants. Since the findings indicated that teaching has been traditionally learned from previous instructors and/or peers, it's usually limited to an inadequate experience (Gale, 2011; Remmik et al., 2011). Seeing the possible varieties and especially 'different' ones may have helped the graduate assistants to extend the boundaries of 'teaching' on their minds, and start to examine their assumptions and beliefs.

Critical Assessment of Assumptions and Exploration of New Roles, Relationships and Actions –Perspectives about Teaching (Refers to Research Questions 2b & 2c)

One of the most visible effects of the graduate course was helping the graduate assistants to develop an educational perspective. Findings revealed that, as a result of taking the course, participants started to examine their beliefs and assumptions on teaching and may have started to explore new roles as prospective faculty members.

First of all, the informative videos presenting parts of interviews with first year students, effective instruction seminars, and interviews with early-career faculty at METU were found to be useful in terms of showing different aspects of teaching in higher education. Both interview data and weekly surveys indicated that listening to early career faculty's

expectations, and current situations including the obstacles of the profession especially on teaching forced the graduate assistants to have an idea about the environment they are going to face with after graduation. Viewing examples of early career faculties' lives and experiences helped the participants to see similar anxieties about the profession, as well as different points of views.

Especially viewing interviews with early career faculty might be useful for new faculty to overcome the feeling of isolation at the initial years of the profession which is put forward by many researchers including Sorcinelli (1994), Cox (1999), Rice et al. (2000), Austin (2002) and Remmik et al. (2011). Findings of this study indicated that prospective faculty found the interview videos useful in terms of preparing them for their future profession. Findings showed that even listening to the problems which they are already aware of may give the "I'm not alone" feeling, which may help to overcome the isolation feeling (Sorcinelli, 1994) of early-career faculty.

Parts from effective instruction seminars featuring presented by an educational expert who gave seminars about the psychological and social development of university students, and problems in students' active participation into classes are highly appreciated by the graduate assistants for creating an awareness about students' development, giving ideas about how to communicate with students effectively, and even how to behave as an instructor in general. Although workshops and seminars by experts are among the most widely used strategies to deliver faculty development activities, they are usually not well attended (Essex, 2004; Pickering, 2006; Hardy&Smith, 2006; Reinhart & Grassini-Komara, 2010). Workshops seemed to be one of the mostly preferred strategies for faculty development activities, according to the needs analysis of this study. Considering the facts given in the literature and findings of the study, it can be suggested that expert opinion is a need in early-career faculty's instructional support, but would be difficult to accomplish via face-to-face meetings. So, video streaming of seminars featuring educational experts would be an effective way of providing instructional development support for faculty.

Similar to the seminar videos, student interviews were found to be useful for understanding students' point of view. Interviews with especially freshmen who skipped the prep school were found to be valuable in terms of showing what problems new comers face with in university life. New faculty would benefit from any kind of materials which support their adaptation to the new role as a faculty member which is defined as one of the difficulties to cope with at the beginning years of the profession according to Simmons (2011).

Another component of the online environment -Online discussion forum- seems to be effective in terms of providing an environment which forces the participants to examine their beliefs and assumptions on teaching and explore new roles and relationships as a faculty member through sharing ideas and opinions with people from various disciplines. There is a body of research which put forward that online discussion environments have a potential to foster meaningful learning (Moore & Marra, 2005). Discussion topics about the roles and responsibilities of a university instructor, the mission of universities, students' perspectives, applying different teaching strategies and specific cases which faculty members may face with during their professional lives were discussed during the semester, and they made some contribution to the graduate assistants' understanding of their profession.

Participant graduate assistants declared a change on their perspective on several issues about teaching as a result of seeing others' thoughts and participating the discussions. This finding may support Mezirow (1991)'s statement that in transformative learning, the most significant learning occurs in the communicative domain which mainly focuses on learners' interaction to make meaning through understanding others. Online discussion environments that bring people together with different backgrounds have the potential to support rational discourse which helps to negotiate our own purposes, values, feelings, and meanings critically, reflectively, and rationally rather than simply acting like others as proposed by Mezirow (1991), Taylor (1998), Mezirow (2000) and Cranton (2006).

Discussion environment generally forced the graduate assistants to take a position on a given situation, explain their rationale for that, and think about their beliefs and assumptions on teaching. Although content analysis of the discussion logs showed a moderation in messages generally, interview and weekly survey data gave some details about the effectiveness of the discussion forum in terms of the graduate assistants' development. As proposed by Hew and Hara (2007), lack of time and inadequacy of participants' knowledge and experience on teaching might have hindered sharing knowledge. The moderation of the messages might have caused by these factors and may result differently, if early-career faculty who are already teaching participate the discussion forum instead of graduate assistants.

Discussing especially on exemplary teaching case videos forced the participants to reflect through their own field and explore different dimensions of teaching. Discussing on cases which present all dynamics of a classroom case with the instructor, students, content etc. helped the graduate assistants to improve their perspectives. This finding supports Abell et al.'s (1996) study on which viewing classroom videos is suggested as a good opportunity for preservice teachers to reflect on their practice and epistemological and pedagogical beliefs on teaching. Especially the combination of online forums with teaching case videos would support the teachers to investigate their beliefs on teaching related issues (Barnett et al., 2002), which can be extended to early career faculty based on the findings of this study.

In addition, findings revealed that existence of people with different backgrounds was one of the strongest aspects of the environment. Discussion forum was mainly seen as an effective environment to share and elaborate ideas by the participants of this study, which is considered as a necessary component in related literature on faculty development. According to Simmons (2011), discussions with other faculty, may influence the new faculty's role development in an institution, which may have an effect on shaping the teaching practice. Online forums can be effective environments for faculty's continuous communication .

Planning of a Course of Action - Thinking about and Planning Future Teaching
(Refers to Research Questions 2b & 2c)

Findings indicate that the effects of viewing videos and participating discussions on teaching were not limited to contributing the disorienting dilemma caused by taking the graduate course, and critical assessment of assumptions and exploration of new roles. It was found that participant graduate assistants started to think about and plan their own teaching as prospective faculty members. This theme can be interpreted to overlap with "planning of a course of action" phase in Mezirow's (1991) transformative learning theory. In this context, both the videos and discussion forum participation are discussed.

Traditional instructor-centered strategies are widely used in Turkish universities, and "what to teach?" is the important issue rather than "how to teach?" (YOK, 2007). As stated by most of the participants, they have never thought that students may have an active role in teaching/learning. Although needs analysis indicated that students' active participation was among the most important and most problematic teaching-related issues for early career faculty at METU, this "participation" may mean "asking questions" or "replying to the instructor's questions" rather than students' active involvement in the learning process. This study showed that participant graduate assistants developed a new perspective about the necessity of students' active participation in learning activities, but it would not be applicable without seeing examples of student-centered (active learning) strategies from real classrooms. In a similar study, Souza et al. (2011) examined how the faculty members evaluated exemplary teaching case videos and concluded that it was better to see a new teaching case rather than just talking about or reading it.

Viewing exemplary teaching case videos have been helpful in terms of showing how-to teach in a more effective way and see the details of different implications. Viewing especially active learning cases forced the participants to think about their own teaching, using different strategies, and design their future courses accordingly. In accordance with Souza et al.'s (2011) conclusions, authentic teaching cases might be a better way of introducing new strategies to the faculty compared to text-based materials

or abstract conversations. Their potential in supporting early-career faculty's instructional development should be considered by designers of such programs.

Both the interview data and weekly surveys gave some data about the details of participants' thoughts and plans for applying active learning strategies in their classes. These teaching cases forced the graduate assistants to think about their own discipline, characteristics of their future courses and applicability of specific learning activities in those classes.

It should be noted that again the Fishbowl activity was among the mostly referred teaching case examples by participants, while talking about future teaching. Participants stated that they are planning to use this activity, since it would increase student participation, especially the shy ones. This finding supports the needs analysis findings that having students' active participation while teaching is one of the most important and problematic issues in teaching according to the early career faculty members at METU. Opre et al.'s (2008) study similarly concluded that increasing students' motivation and internalizing active teaching methods were among the most important needs of faculty. Therefore, it could be suggested that presenting active learning case videos has a great potential to support early-career faculty's improvement on using these strategies in their classes.

Another finding related to planning of a course of action is that discussing on teaching-related issues forced the graduate assistants to think about their future teaching. Especially discussing on sample cases, reading others' responses and writing their own thoughts caused the graduate assistants to think about themselves as instructors.

Findings revealed that participants thought about their own strategies, especially after discussing on classroom management case video on 8th week, and ethical cases on the last week of the semester. These discussion topics gave cases and asked the graduate assistants about how they would behave in that given situation. Interview data revealed that both thinking themselves as instructors in a given situation and seeing peers' opinions forced the participants to think about and plan their own strategies. This findings supports that teaching cases from real life are excellent catalysts for discussions

and discussing them fosters engagement in problem solving (Levin et al., 2006). Discussion forums integrated with cases from real life can be used for supporting instructional development of early-career faculty in a way that they can think about and plan their own teaching in a more innovative way.

Since teaching is usually a private activity which takes place behind doors (Essex, 2004; Huber & Hutchings, 2006; Palmer, 1999), faculty members are usually not aware of the strategies and traditions valid in other departments/disciplines. Findings of this study showed that discussing with people from various academic fields may help the early-career faculty to see how teaching is happening in other departments so that they may feel more comfortable about their possible future service courses to other departments. Becoming familiar with teaching traditions/strategies of other academic fields would help the faculty feel comfortable in case of offering courses for them.

Thoughts, Suggestions and Preferences about Faculty Instructional Development
(Refers to Research Question 2d)

Findings pointed out that participant graduate assistants of the study think that there must be some kind of support for faculty instructional development in universities, since they faced with many inappropriate teaching implications and traditions during their educational lives, and realized this situation especially after taking the graduate course. It was revealed that graduate assistants usually learn teaching from their peers, and professors, which was mentioned by several researchers (Austin, 2002; Gale, 2011; Remmik, 2011; Simmons, 2011), but is definitely not preferred by the participant graduate assistants.

In terms of the target audience of possible faculty development efforts, most of the participants thought that it should not be limited to graduate assistants, also include faculty members who are already teaching, while there have been some opposite thoughts about excluding senior professors because of their possible self-confidence in teaching. A study conducted by Diaz, Santaolalla, and Gonzalez (2010) concluded that instructors who are older and have higher academic titles are less prone to accept change and update their teaching methods.

Suggestions for the strategies for faculty development have been varied from training and course participation like EDS660 to seminar attendance and consultation on specific teaching-related issues. Seminars were the mostly appreciated way for faculty development activities, followed by consultation systems in which faculty can get instant support for their specific needs on teaching. It should be noted that both the seminar and consultation strategies are suggested to be leaded by educational experts. This finding conflicts with research studies which suggest the local/context-related training to be more preferred by early-career faculty rather than centrally organized activities (Burnett & Meadmore, 2002).

In addition to other findings, participants' suggestions on using online environments for faculty development aims were examined in the study. Although almost half of the participants thought that it would be an effective way, half mentioned some negative aspects of the possible online environments. One of the biggest problems of an online environment would be faculty members' possible conflicts on a discussion environment, according to the participants.

Similar to the online environment used in this research, participants preferred a discussion environment, resource materials, and video components and additionally, interaction with educational experts in a possible online environment for faculty development aims. However, it should be noted that the participant graduate assistants have not participated in any kind of faculty instructional development activities, and have not taken an online supported course before, so their suggestions may be limited to their experience in EDS660 course.

Findings revealed that graduate assistants see discussion forum as a necessary component of an online environment designed for faculty instructional development aims. They thought of a similar environment like the one they used in EDS660 course, and suggested a discussion forum in which faculty members from different disciplines can discuss about teaching-related concepts and their experiences. However possible conflicts between the faculty in an open discussion environment seemed to be a possible problem.

Besides the interaction with peers from other disciplines, participants suggested interaction with educational experts to answer participants' questions or moderate the discussions. This finding is consistent with their appreciation of seminar videos given by educational experts, and their preference on seminars and consultation systems as a way of supporting faculty instructional development, as explained on the previous paragraphs and previous heading.

Although interview data pointed out positive opinions about online discussion forum, weekly surveys showed that discussion forum was among the lowermost components of the online environment based on participants' ratings. One of the reasons for that – as indicated by open-ended questions of the surveys – was mandatory participation and participants' restrictions on discussing the topics they determined. Therefore, voluntary participation was suggested as necessary for possible online environments for faculty instructional development aims. Another reason could be graduate assistants' workloads and time constraints about participating discussions properly. Interview data revealed that sometimes participants did not have enough time to read others' responses and reply the discussion questions without full effort. Latchem, Odabaşı and Kabakçı (2006) stated that time commitment and workload were important factors in participants' willingness to enroll and participate faculty development activities. This issue should be considered by the designers of these programs, and faculty needs should drive the design, so that it would not be seen as a time-consuming activity by the participants.

Partly related to time constraints of the participant graduate assistants, another problem was the mediocrity of the forum posts. Both the interview data and open ended responses of the weekly surveys revealed participants' complaints about repeating ideas in forum posts. Content analysis of the discussion logs supports this finding by revealing that most of the forum posts were about participants' position statements which stay with the group's common opinion. Both data resources indicated that not many assertive or challenging comments have been made by discussion participants. As explained before, this can be caused by both the restrictions of mandatory participation, and graduate assistants' time constraints/priorities about spending time for a course out of the classroom. Moreover, it should be noted that the discussion forum might have been a

bit artificial, directed by the course instructor's and moderator's inputs, since the graduate assistants were not completely involved in teaching, and do not have real problems/issues about their teaching.

A voluntary discussion environment which is directed by faculty members' needs and interests has the potential to support early-career faculty's instructional development. Another suggestion about improving the discussion forum was to add a synchronous part, so that faculty members would be able to have instant communication with peers, and even with educational experts.

Findings pointed out that both informative and exemplary teaching case videos were suggested as necessary components of a possible online environment designed for faculty instructional development aims. On the other hand, some suggestions have been made to improve the effectiveness of this media to be used for instructional development.

One of the suggestions was about increasing the variety of the videos in general. Participants needed to see interviews with students from different levels, and with early-career faculty from other universities, as well as senior professors.

Another suggestion was about increasing the variety of the exemplary teaching cases. More examples from Turkish universities, and from various disciplines have been proposed to be included by the participants. Most of the graduate assistants taking the course were from the Colleges of Engineering and Sciences. The only graduate assistant from the College of Architecture especially mentioned the need for other disciplines in the videos. Since that field usually incorporates teaching strategies which are unique to that discipline, seeing teaching strategies which are only applicable in other contexts may be useless. Culturally-embedded knowledge is a requirement for faculty instructional development (Remmik et al. , 2011). Similarly, Gibbs and Coffey (2004) suggested that if the values and attitudes of the training program and early-career faculty members' departments do not fit, they would not benefit the training. This point could be important to the faculty instructional program developers.

Findings provided additional information about the variety of the exemplary teaching case videos. Graduate assistants found some exemplary teaching case video to be less effective for their instructional development, since they were already familiar with those strategies. It could be put forward that participants are expecting innovative implications from a faculty development attempt, rather than what they already know or use.

5.2. Conclusion

Since teaching aspect of the faculty profession traditionally has been inadequately promoted compared to research in higher education institutions, graduate assistants usually do not have enough preparation for teaching which is among the main struggles of early career faculty members especially during the initial years of the profession.

Based on findings, it can be claimed that needs analysis is essential in designing faculty development activities or programs. Detailed analysis of the online components showed that the ones which meet a common problem in teaching -like students' active participation- are among the mostly appreciated materials according to the participants' evaluation.

The study revealed that pedagogical courses have a potential to help the graduate assistants gain an educational perspective as well as improve their skills and knowledge which would result in effective teaching. The course's main outcome according to the graduate assistants' perceptions was forcing them to examine, question, validate, and revise their perspectives on teaching. In this sense, transformative learning theory provided a useful lens to examine the online components in terms of their effects on graduate assistants' instructional development.

Based on the findings of the study, it could be suggested that online environments have a great potential to be used for faculty instructional development aims. It was revealed that exemplary teaching case videos might be useful tools for fostering transformative learning. Especially examples of never seen teaching strategies which would address common problems in teaching may contribute to creating a disorienting dilemma about what 'teaching' means.

Although there are not many studies on using exemplary teaching case videos for faculty instructional development, they have been widely used and researched in the teacher education area. Related research mainly emphasize that classroom videotapes have a potential to contribute to teachers' development about noticing and interpreting classroom interactions and viewing how-to imply different strategies, which is the case for the participants of this study. But the difference in this study is that the participants were prospective faculty who usually do not attend any pedagogical course or training before starting their career, contrary to teacher education programs. Early-career faculty's established conception of teaching which is mainly based on their observation of professors and peers might have been challenged by viewing different and effective classroom implications.

Besides the exemplary teaching cases, parts of instructional seminars and interviews with people from different sections in the university have a potential to clarify prospective faculty's exploration of their new roles, relationships and actions in their new profession. Interviews with other faculty and students, and instructional seminars have a potential to contribute to the development of an educational perspective and understanding of the profession. Offering them in streaming video format may be an effective way because of easiness for online access and broad storing capacity.

In addition to the videos, discussing with peers from various disciplines may have contributed to prospective faculty's exploration of new roles, relationships, and actions in the profession, according to the findings of the study. So, discussions provide opportunities to foster communicative learning which focuses on learners' interaction to make meaning through understanding others. It might be an effective way of supporting prospective faculty's instructional development, but possible conflicts in the discussion forum might be an important issue according to the participants.

Moving beyond the perspective changes of prospective faculty on teaching, an online environment enhanced with video cases and discussion forum would force them to think about and plan their future teaching. Participants of this study mostly mentioned issues related to planning of a course of action as one of the phases in transformational

learning. Viewing classroom case videos showing "how-to"s and discussing on their own teaching experience may result in thinking the details of and planning future teaching for graduate assistants. Viewing real-life examples in video format are definitely suggested to be more effective ways of contributing to future plans about teaching compared to just reading or listening about them.

5.2.1. Suggestions for Practice

Faculty instructional development became a necessary component in higher education institutions. As revealed in the study, especially early-career faculty need some support about teaching. This study provided an example of a blended pedagogical course aimed to support prospective faculty's instructional development. Findings provided suggestions to practitioners including higher education administrators, faculty developers and designers.

For Administrators

- Early-career faculty including the graduate assistants which were the focus of this study are an important group in faculty development efforts, so administrators and faculty developers should put special effort to this group while designing instructional development programs or activities.
- Prospective and early-career years are good opportunities to develop an educational point of view for faculty. Therefore, faculty development activities might be designed differently for seniors and early-careers in which seniors might be focused on some special problems related to their teaching, and early-career might be interested in more general concepts about teaching and mainly becoming aware of what could be done to improve teaching.
- Needs of the faculty members should be considered while designing development programs. Faculty have a tendency to benefit more, if the provided effort meets their specific needs on teaching.

For Faculty Developers and Program Designers

- In addition to the knowledge and skills, approach to teaching should be considered in faculty instructional development activities/programs. Developing a pedagogical perspective, thinking about what teaching means, what are a faculty member's roles and responsibilities might be among the issues to be considered, especially for the new and prospective faculty.
- In terms of the methods to provide instructional support, online environments have a great potential to be used as complementary to the face to face activities. A faculty development initiative in a higher education institution could start with face to face meetings and then use online environments for ongoing communication and support. It would be a good idea to introduce the online system to new and prospective faculty during the orientation program or first meeting of faculty development initiative.
- Enhancing the online environment with videos of exemplary teaching cases may increase the efficiency of the environment. Different classroom implications and especially best practices may force the early-careers to examine their beliefs and assumptions on teaching and have a potential to encourage the new faculty to use different strategies from what has been done before. In that way, they could become aware of new trends in teaching, instead of being limited to their experience as a student and observer of peers.
- Another advantage of the exemplary teaching case videos would be showing details of classroom implications, so that early-career faculty would see the 'how-to' in case of applying a similar strategy in their classes. Authentic classroom cases and best practices have a potential to improve participant faculty members' teaching, so should be included in a faculty instructional development program.
- Interviews with other faculty and students might be included in an online environment, so that participants can gain ideas about the different aspects of the profession. Moreover, informative seminars by experts would provide a good resource for faculty. Technology would offer great opportunities to enrich faculty instructional development programs.

- It’s important to include examples from the local context. Both the exemplary teaching cases and interviews as informative videos should represent the university’s culture, in addition to examples from different cultures, so that user faculty would overcome the feeling of “this is not applicable here”.
- Especially combining the video cases with discussions may provide a good opportunity for critical reflection and discourse about faculty members’ teaching practice which may result in examining their beliefs and assumptions on teaching. However, the needs and characteristics of the participants including seniority should be considered by both the designers of the environment and moderators of the discussions.
- An important finding revealed from this study is that faculty members’ characteristics and needs are important issues to be considered by designers of faculty development programs or activities. Graduate assistants mostly look for expert advice in a possible faculty development program, but this is not the case for early career faculty who have been teaching for 6 years at most. In this sense, graduate assistants could be provided with more expert-based activities in instructional development activities, while actively teaching faculty may benefit from a wide variety of resources.
- Networking and relationships are necessary features of faculty development programs, and online environments with discussion would help to meet this need. They could help to eliminate the possible obstacles of face-to-face meetings and bring the like-minded professionals together.

5.2.2. Suggestions for Further Research

Other research studies may be conducted to further examine the use of online environments for faculty instructional development aims. First of all, a follow-up study could be conducted to understand how graduate assistants have benefited from their education as a full-time teaching faculty. Moreover, other needs which they were not aware of could be investigated through this follow-up study. This may provide valuable data in redesigning the course and the online environment.

This study evaluated the effectiveness of an online environment through participants' perceptions and use. The efficiency of such environments could be evaluated through observing participants' absolute professional knowledge. Further research may look at participants' teaching as the outcome of the treatment.

Another important issue is that authentic case videos are effectively used in especially pre-service teacher education. There are several research studies examining the effectiveness of these tools for teacher education, studies related to their use for faculty instructional development aims is limited. Further research can focus on effective use of authentic case videos for faculty instructional development.

Although graduate assistants are usually included inside the early-career faculty concept in the related literature, the needs of the early-career faculty who are already teaching might be different than graduate assistants'. Since this study focused on graduate assistants' use of an online environment for faculty development aims, further research would look at faculty's use of it.

In this study, transformative learning has been used as a lens to discuss the findings. Further research could be conducted in a way that participants' perceptions could be measured through a pre-test post-test design, so that the change could be observed clearly. Moreover, a quantitative approach to transformative learning could be followed in terms of contribution to the related literature which is widely dominated by qualitative studies.

Mandatory participation was one of the limitations of this study, which was especially visible on data related to the use of discussion forum. Studies with voluntary participation of early-career faculty may provide valuable findings about the design of online environments for faculty instructional development aims.

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APPENDIX A

Needs Analysis Survey

ÖĞRETİM ALANINDAKİ MESLEKİ GELİŞİME YÖNELİK İHTİYAÇ ANALİZİ ANKETİ

Bu anket yürütülmekte olan bir doktora tez çalışması için hazırlanmıştır. Anketin amacı Ankara'daki üniversitelerde görev yapan öğretim elemanlarının eğitim-öğretim alanındaki mesleki gelişimlerine yönelik görüş ve beklentilerinin belirlenmesidir.

Anket iki bölümden oluşmaktadır ve doldurulması yaklaşık 8-12 dakika sürmektedir.

Toplanan kişisel bilgiler araştırmacı tarafından kesinlikle gizli tutulacaktır. Araştırmanın başarıyla sonuçlandırılabilmesi için değerli katkılarınızı esirgemeyeceğiniz için şimdiden teşekkür ederiz.

Çalışmanın devamına katılmak isterseniz lütfen 3684 no'lu telefon veya yecan@metu.edu.tr adresi aracılığıyla iletişime geçiniz.

Saygılarımızla,
Arş.Gör. Esra Yecan (yecan@metu.edu.tr)
Doç.Dr. Kürşat Çağıltay
Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü, ODTÜ

Görev yaptığınız üniversitenin adı : _____

Görev yaptığınız Bölümün/Enstitünün adı : _____

Eğitim durumunuz: ☐ Lisans mezunu
☐ Y. Lisans mezunu
☐ Doktora mezunu

En son mezun olduğunuz üniversite/enstitü: ☐ Yurtiçi
☐ Yurtdışı

Yaşınız: _____

Cinsiyetiniz: ☐ Kadın ☐ Erkek

Ünvanınız: ☐ Profesör
☐ Doçent
☐ Yardımcı Doçent
☐ Öğretim Görevlisi
☐ Uzman
☐ Araştırma Görevlisi
☐ Diğer (lütfen belirtiniz) _____

Toplam kaç dönem ders verdiniz? (Ders asistanlıkları ve laboratuvarlar haricinde) _____

Kendi geliştirdiğiniz bir ders var mı? ☐ Evet ☐ Hayır

Kendi geliştirdiğiniz derslerin (varsa) sayısı: _____

Bölüm I :

Aşağıda eğitim-öğretim etkinliklerine ve kişisel gelişmeye yönelik bazı konular yer almaktadır. Verilen her bir konu için, o konuyu **ne derecede önemli bulduğunuzu** ve o konuyla ilgili **hangi sıklıkla sorun yaşadığınızı** size uygun gelen seçenekleri işaretleyerek belirtiniz.

	Sizce bu konu ne derecede önemlidir?				Bu konuyla ilgili hangi sıklıkla sorun yaşıyorsunuz?			
	Hiç	Biraz	Oldukça	Çok	Hiç	Bazen	Sık sık	Her zaman
1. Geleneksel öğretim yöntemlerinin ders verirken kullanımı	☐	☐	☐	☐	☐	☐	☐	☐
2. Öğrenci-merkezli öğretim yöntemlerinin ders verirken kullanımı	☐	☐	☐	☐	☐	☐	☐	☐
3. Öğrenme kuramların bilme	☐	☐	☐	☐	☐	☐	☐	☐
4. Üniversite öğrencilerinin yaşlarına göre gelişimlerini dikkate alma	☐	☐	☐	☐	☐	☐	☐	☐
5. Öğrenci farklılıklarını dikkate alma	☐	☐	☐	☐	☐	☐	☐	☐
6. Dersin belirlenen hedefler doğrultusunda planlanması	☐	☐	☐	☐	☐	☐	☐	☐
7. Ders izlencesi (syllabus) hazırlama	☐	☐	☐	☐	☐	☐	☐	☐
8. Ders geliştirme	☐	☐	☐	☐	☐	☐	☐	☐
9. Öğretim teknolojilerinin derste kullanılması	☐	☐	☐	☐	☐	☐	☐	☐
10. Ders konularının gerçek yaşantıyla ilişkilendirilmesi	☐	☐	☐	☐	☐	☐	☐	☐
11. Öğrencilerin derse aktif katılımını sağlama	☐	☐	☐	☐	☐	☐	☐	☐
12. Sınav materyali hazırlanması	☐	☐	☐	☐	☐	☐	☐	☐
13. Ödev, proje ve benzeri sınavları değerlendirme	☐	☐	☐	☐	☐	☐	☐	☐
14. Eğitim-öğretim etiği	☐	☐	☐	☐	☐	☐	☐	☐
15. Kalabalık sınıflarla başa çıkma yöntemleri	☐	☐	☐	☐	☐	☐	☐	☐
16. Öğrencilerle iletişim kurma becerileri	☐	☐	☐	☐	☐	☐	☐	☐
17. Kendi mesleki gelişiminize yönelik etkinliklerde bulunma	☐	☐	☐	☐	☐	☐	☐	☐
18. Diğer (lütfen belirtiniz) _____	☐	☐	☐	☐	☐	☐	☐	☐

Bölüm II

1. Daha önce, Bölüm I'de adı geçen ve benzeri konularda herhangi bir gelişim/eğitim programına katıldınız mı?

☐ Evet ☐ Hayır

Eğer 1. soruya yanıtınız **"Evet" ise, 2. sorudan** devam ediniz. Yanıtınız **"Hayır" ise 4. sorudan** devam ediniz.

2. Programa ilişkin ayrıntıları lütfen belirtiniz.

Programın adı : _____

Katıldığınız yıl : _____

Süresi : _____

Katılma nedeni : _____

3. Katıldığınız programın etkili olduğunu düşünüyor musunuz? ?

☐ Evet ☐ Hayır

Neden?

_____

_____

_____

_____

4. Siz, Bölüm I'de sayılan konularda düzenlenecek eğitim/gelişim programlarına katılmayı düşünür müsünüz?

☐ Evet ☐ Hayır

5. Bu tür programlar sizce nasıl düzenlenmelidir? (Birden fazla kutuyu işaretleyebilirsiniz)

☐ Seminerler şeklinde

☐ Uygulamalı Çalışma (Workshop)

☐ İnternet tabanlı destek sistemi

☐ Dönemlik ders şeklinde

☐ Konu uzmanlarına danışma

☐ Diğer (lütfen belirtiniz) _____

Eğer **'İnternet tabanlı destek sistemi'ni işaretlediyseniz 6. sorudan** devam ediniz. Bu seçeneği **işaretlemediyseniz 7. sorudan** devam ediniz.

6. İnternet üzerinden yayınlanacak bir destek sistemine katıldığınız durumda Bölüm I'de belirtilen konulara yönelik olarak hangi bileşenlerin bulunmasını istersiniz? (En gerekli bulduğunuz 3 bileseni isaretleyiniz.)

__ Teorik Bilgi Metni

__ Örnek Olay Metni

__ Örnek Olay Videosu

__ Diğer öğretim üyeleriyle fikir alış-verişi

__ Eğitim uzmanlarıyla fikir alış-verişi

7. Eklemek istediğiniz diğer görüş ve önerilerinizi aşağıda belirtiniz.

_____

_____

_____

_____

APPENDIX B

List of The Materials Presented on the Online Environment

Week1
Becoming a University Teacher: Expectations and Realities

- Video: Genç Öğretim Üyelerinin Görüşleri - genel file
- Video: Genç Öğretim Üyelerinin Görüşleri - öğretim file
- Video: Genç Öğretim Üyelerinin Görüşleri - araştırma file
- Tartışma: Çalışmayı İstediğimiz Akademik Ortam Forum
- Makale: Istenilen Akademik Calisma Ortami Powerpoint presentation
- Makale: Istenilen Akademik Calisma Ortami Word document

Week2
Student Development

- Seminer Videosu: Üniversite Öğrencisi = Genç Yetişkin file
- Seminer Videosu: Öğrencilerin Derse Katılımındaki Sorunlar file
- Video: Genç Öğretim Üyelerinin Görüşleri - öğrenciler file
- Video: ODTÜ 1. Sinif Öğrencilerinin Gorusleri - Universite Hayati file
- Video: ODTÜ 1. Sinif Öğrencilerinin Gorusleri - Arkadaslik Iliskileri file
- Tartışma: Öğrenci Gelişimini Dikkate Almak Forum
- Assignment: Öğrenme Stilleri (Learning Style) Testi

Week3
The World of Educational Paradigms and Learning Theories

- Foundations of Education Ders Sunumu **YENI** Powerpoint presentation
- Makale: Learning and Teaching Styles in Engineering Education PDF document
- Style Constructs of the Learning Process PDF document
- Egitim Felsefesini Belirlemeye Yonelik Anket file
- Video: Öğrenci Farkliliklarini Gozeterek Ders Hazirlamak Resource
- Tartışma: Öğrenci Farklılıkları ve Ders tasarımı **YENI BASLIK ACILDI** Forum
- Assignment: Kendi alaninizdan ornek syllabuslar ** YENI**
- Assignment: Gelistirmek istediginiz derse yonelik kavramlar **YENI**

Week4
Course Design

- Course Design Ders Sunumu *YENI* Powerpoint presentation
- Challenges for Turkish Higher Education * YENI* PDF document
- Video: Genç Öğretim Üyelerinin Görüşleri - ders tasarımı file
- Dönem Başı Bilgi Toplama Anketleri PDF document
- Dönem Sonu Değerlendirme Etkinlikleri PDF document
- Syllabus Ornegi 1: Enerji ve Cevre PDF document
- Syllabus Ornegi 2: Egitim Psikolojisi Word document
- Syllabus Ornegi 3: Öğretimin Planlanmasi ve Degerlendirilmesi Word document
- Tartışma: Ders tasarımı Forum
- Assignment: Dönem Sonu ve Dönem Başı Anketleri *YENI*
- Assignment: Ders Tasariminiza Yonelik Etkinlikler **YENI**
- Guide: Standards for Specifying Learning Outcomes ***YENI*** PDF document

Week5
Instructor-Centered Teaching Strategies

- Instructor Centered Strategies - Ders Sunumu (10 Nisan) Powerpoint presentation
- Video: First Meeting - Biyoloji (10 Nisan) file
- Video: First Meeting - Fizik (10 Nisan) file
- Video: Instructor-Centered Strategies: Biyoloji (10 Nisan) file
- Video: Instructor-Centered Strategies: Fizik (10 Nisan) file
- Video: Instructor-Centered Strategies: Uluslararasi Iliskiler (10 Nisan) file
- Dersinizin Video KAydını Izlemek (10 Nisan) Resource
- Tartisma: Geleneksel Öğretim Yontemleri (10 Nisan) Forum
- Assignment: Self-Evaluation of Your Teaching (20 Nisan)

Week6
Active Learning Strategies

- Active Learning Strategies - Ders Sunumu (27.04) Powerpoint presentation
- Video: Why "lecturing" may not be enough? KN-1 (27.04) file
- Video: Why "lecturing" may not be enough? KN-2 (27.04) file
- Video: Group Work in Organic Chemistry Class, KN-3 (27.04) file
- Video: Group Work in Chemistry Class, DP (27.04) file
- Video: Active Learning Strategy- Fishbowl Activity, DP (27.04) file
- Video: Active Learning strategy - Case Study&Group Work, DR-1 (27.04) file
- Video: Active Learning strategy - Case Study&Group Work, DR-2 (27.04) file

- Tartışma: Aktif Öğrenme Stratejileri konusunu 3 baslikta tartisiyoruz Forum
- Assignment: Kendi Alanınızda Bir Active Learning Etkinliği Hazırlayınız (27.04)
- Active Learning Activity Guideline for Assignment (06.05) YENI Word document
- Survey: Bu Hafta Etkinliklerinin Degerlendirilmesi file

Week7

Classroom Management

- Video: Uluslararasi Iliskiler dersinde file
- Video: Uluslararasi Iliskiler Dersi - devami (YENI) file
- Video: Bilgisayar Muhendisligi dersinde Resource
- Tartışma: Iki Farkli Sınıf Yönetimi Durumu Forum
- Assignment: Kendi alaninizdan sınav örnekleri getiriniz

Week8

Assessment and Grading in Higher Education

- Video: Ders Sonu Değerlendirmesi: One-minute Evaluation Example file
- Tartışma: Olcme ve Degerlendirme (Assessment and Grading) Forum
- Assignment: Seçtiğiniz Bir Ders İçin Ders Sonu veya Basi Değerlendirme Quizi Hazırlayınız
- Assignment: Etik case örnekleri getiriniz

Week9

Ethics and Professional Development in University Teaching

- Tartışma: Karsilastigimiz Etik Durumlar Forum
- Assignment ve Donem Sonu
- Reading: Ethical Principles in University Teaching

APPENDIX C

Evaluation Form for the Pilot Study

EDS660 Web Sitesinin Değerlendirilmesi

Merhaba,

Geçtiğimiz dönemde EDS660 dersinde kullandığımız online sistem ve videolarla ilgili sizin bazı görüş ve değerlendirmelerinizi almak istiyorum. Bu formu sizlere göndermedeki amacım, araştırma görevlilerine "eğitim-öğretim" konusunda katkıda bulunmayı amaçlayan EDS660 dersini farklı türde materyallerle zenginleştirerek dersin daha etkili bir şekilde işlenmesi için neler yapabileceğimizi belirlemek. Geçen dönem bildiğiniz gibi derse ek olarak Metu-online'ı kullanmıştık ve bir tartışma ortamıyla birlikte çeşitli videoları sizinle paylaştık. Bu formla sizden alacağımız geribildirimler sayesinde geçmiş dönemi değerlendirme ve gelecek dönemlerde bu ders için daha faydalı olabilecek online-erişilebilir materyaller geliştirebilme şansımız olacak.

Aşağıda maddeler halinda verdiğimiz videolara tekrar göz atarak, bu videoları, **EDS660 dersinin amaçları ve sizlerin "teaching in higher education" konusundaki mesleki gelişiminiz açısından nasıl değerlendirirsiniz?**

Ayrıca aşağıda verilen her madde için bu konudaki görüşünüzü yazdıktan sonra, o hafta konusuyla ilgili **sizce başka ne tür online materyaller/aktiviteler eklenirse faydalı olabileceğini yazar mısınız?**

1. İlk hafta konusu olan "Becoming a University Teacher: Expectations and Realities" konusunda izlediğimiz genç öğretim üyeleriyle yapılan görüşme videoları;

   mms://lagun.cc.metu.edu.tr/EDS660/2008/Esra/1/OU_definition.wmv

   mms://lagun.cc.metu.edu.tr/EDS660/2008/Esra/1/expectations_gen.wmv

   mms://lagun.cc.metu.edu.tr/EDS660/2008/Esra/1/expectations_R.wmv

   mms://lagun.cc.metu.edu.tr/EDS660/2008/Esra/1/expectations_T.wmv

Görüşünüz ve Önerileriniz:

2. İkinci hafta konusu olan "Characteristics of University Students and Learning Styles" konusunda izlediğimiz,

- Genç öğretim üyelerinin öğrenciler hakkındaki görüşlerinin bulunduğu video;

  mms://lagun.cc.metu.edu.tr/EDS660/2008/Esra/1/expectations_S.wmv

- İki yabancı öğrenciyle yapılan görüşme videosu;

  mms://lagun.cc.metu.edu.tr/EDS660/2008/Esra/1/student_int_1.wmv

Görüşünüz ve Önerileriniz:

3. Dördüncü hafta konusu olan “Course Design” konusunda izlediğimiz genç öğretim üyeleriyle yapılan görüşme videoları;

   mms://lagun.cc.metu.edu.tr/EDS660/2008/Esra/1/course_design.wmv

Görüşünüz ve Önerileriniz:

4. Beşinci hafta olan “Instructor-Centered Teaching Strategies” konusunda izlediğimiz,

- Dr. Feldman (biyoloji) ve Dr. Lewin (Fizik)’in ‘first meeting’ videoları;

  mms://lagun.cc.metu.edu.tr/EDS660/2008/Esra/1/feldman_intro.wmv

  mms://lagun.cc.metu.edu.tr/EDS660/2008/Esra/1/physics_intro.wmv

- Biyoloji bölümü ve Bilgisayar Mühendisliği bölümünden örnek dersler;

  mms://lagun.cc.metu.edu.tr/EDS660/2008/Esra/1/biyoloji.wmv

  mms://lagun.cc.metu.edu.tr/EDS660/2008/Esra/1/bilmuh.wmv

Görüşünüz ve Önerileriniz:

5. Yedinci hafta olan “Classroom Management” konusunda izlediğimiz örnek videolar;

   mms://lagun.cc.metu.edu.tr/EDS660/2008/Esra/1/clss_management1.wmv

   mms://lagun.cc.metu.edu.tr/EDS660/2008/Esra/1/clss_management2.wmv

Görüşünüz ve Önerileriniz:

6. Derste kullandığımız online tartışma ortamı hakkında ne düşünüyorsunuz (Ortamın kullanılabilirliği ve derse/size olan katkısı açısından)?

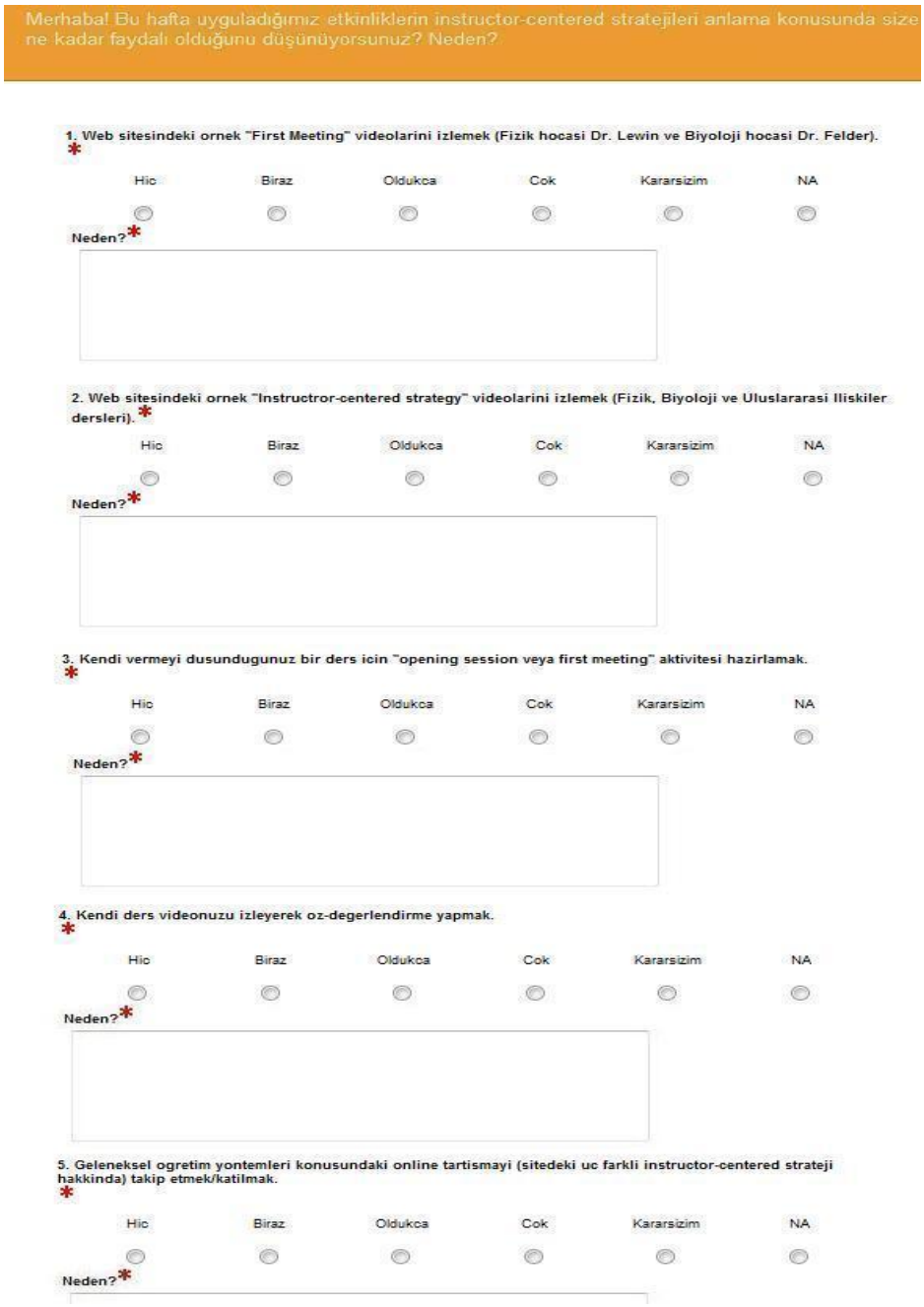
7. EDS660 dersinde kullandığımız online materyaller ve etkinliklerle ilgili eklemek istediğiniz başka görüş ve önerileriniz var mı?

Katılımınız için teşekkürler...

Esra Yecan

APPENDIX D

Example of the Weekly Survey



APPENDIX E

End-of-the-Semester Interview Schedule

Introduction

Merhaba, ben Esra Yecan. Eğitim Fakültesi'nde araştırma görevlisiyim. Geçen dönem aldığınız EDS660 dersi ile ilgili olarak görüşlerinizi almak istiyorum. Bu görüşmede amacım, dersin ve ozellikle derste kullandığımız online ortamın sizlere mesleki anlamdaki etkilerini öğrenmek; Araştırma görevlilerinin öğretim alanındaki mesleki gelişimlerine katkıda bulunmak amacıyla verilen EDS660 dersi ve derste kullanılan online system ve materyallerin değerlendirmesini yapmaktır. Bu nedenle sizin, EDS660 dersi, online system ve genel olarak etkinliklerle ilgili görüşleriniz, değerlendirmeleriniz ve önerilerinize yönelik düşüncelerinizi öğrenmektir. Görüşlerinizi benimle paylaşacağınız için şimdiden teşekkür ederim.

- Görüşmemize başlamadan önce, görüşmemizin ve görüşmemizde konuşulanların gizli olduğunu ve araştırma sonuçlarını yazarken kimliginizi aciga cikarabilecek herhangi bir bilgi rapora kesinlikle yansıtılmayacağını belirtmek/vurgulamak isterim.
- Başlamadan önce, bu söylediklerimle ilgili belirtmek istediğiniz bir düşünce ya da sormak istediğiniz bir soru var mı?
- Görüşmemizin kaydedilmesi için izin verir misiniz? Bu bana verilerin elde edilmesi ve analizinde kolaylik saglayacaktir.
- Görüşme sonunda istemediğiniz bazı bilgilerin kayıttan çıkarılmasını isteyebilirsiniz.
- Görüşme kayıtlarını yazılı hale dönüştürdükten sonra, metinleri size gönderip sizin onayınızı almadan kullanmayacağım.

- Bu görüşmenin yaklaşık 30 dakika süreceğini tahmin ediyorum. İzin verirseniz sorulara başlamak istiyorum.

Background Questions

1. Hangi bolumdesiniz? Doktoranizin kacinci donemindesiniz?
2. Öğretim üyesi olmayi planliyor musunuz? (OYP vs bagimsiz ars.gor kadro durumunuzu aciklar misiniz?)
3. Ders asistani olarak deneyiminiz nedir? (Her donem verdiginiz belli dersler var mi? Lab mi, ders anlatimi mi? Kac donemdir yapiyorsunuz?)

Interview Questions

1. Oncelikle bir öğretim üyesi adayi olarak EDS660 dersini genel olarak nasıl değerlendirirsiniz?

    - Dersin amaclari açısından
    - Icerik açısından
    - Odev ve aktiviteler açısından

2. EDS660 dersinde kullandigimiz online ortam hakkindaki goruslerinizi alabilir miyim?

    - Dersin amaclarina uygunlugu açısından
    - Sizlerin öğretim üyesi adaylari olarak öğretim konusundaki ihtiyaclarinizi karsilamasi açısından
    - Kullanilabilirligi açısından
    - Ortam bilesenlerinin yeterliligi açısından
        - Ders sunumlari
        - Videolar
        - Tartisma ortami
        - Ek makaleler
        - Ornek materyaller (quiz ornekleri, etik durum ornekleri vs)

- Ileride derslerinizde bu tur bir ortami kullanma/kullanmama düşünceniz açısından

3. Online ortamdaki videolarla ilgili olarak;
    a. Ne siklikla izlediniz?
    b. Bu videolari izlemenin/gormenin size mesleki anlamda etkisi oldugunu düşünüyor musunuz?
        i. Öğretme yontem ve teknikleri açısından
        ii. Üniversite öğrencilerini tanima açısından
        iii. Öğrencilerle iletisim yontemleri açısından
        iv. Ders gelistirme/planlama
        v. Sınıf yonetimi açısından
        vi. Öğrencileri ve dersi değerlendirme açısından
    c. Bu tur videolarin yukseköğretimdeki egitim-öğretim faaliyetlerinde kullanilabilirligi konusunda ne düşünüyorsunuz?
4. Online tartisma ortamiyla ilgili olarak
    a. Ne siklikla katildiniz ve ne tur paylasimlarda bulundunuz?
    b. Tartismalara katilan diger üyeler ne tur paylasimlarda bulundular?
    c. Bizim derste yaptigimiz online tartismalari düşününce, bunlarin size mesleki anlamda etkisi oldugunu düşünüyor musunuz?
        i. Öğretim üyeligi mesleginin sinirlari ve kapsami konusunda
        ii. Öğrenci kisilik ozellikleri ve farklılıkları konusunda
        iii. Öğrencilerle iletisim yontemleri açısından
        iv. Ders tasarimi konusunda
        v. Öğretim stratejileri konusunda
        vi. Sınıf yonetimi konusunda
        vii. Öğrencileri ve dersi değerlendirme konusunda
        viii. Etik konusunda
    d. Bu tur bir tartisma ortaminin öğretim üyeleri tarafindan kullanilabilirligi konusunda ne düşünüyorsunuz?
    e. Bu online tartisma ortaminin daha etkili olmasi için neler yapilabilir sizce?

5. Sizce üniversitelerde öğretim üyelerine öğretimle ilgili konularda destek olmak uzere destek mekanizmalari gerekli midir?

    - Gerekli ise bunlar neler olabilir? (online bir system, cesitli seminerler veya bir danisma merkezi vs)

6. ODTU'de öğretim üyelerine öğretimle ilgili konularda destek olmak uzere online bir ortam hazirlanacak olsa, sizin ne gibi onerileriniz olur?

    - Icerik açısından (hangi konularin islenmesini istersiniz)
    - Sunum yontemleri/bilesenler açısından (ne tur materyaller bulunmali? Teorik bilgi, ornek materyaller, videolar, tartisma ortami vs)

7. EDS660 dersinin, bu donem asistanligini yapacaginiz derslere bir etkisi oldugunu düşünüyor musunuz? Nasıl?

    - Burda derste yapilan aktiviteler açısından:
        - Kendiniz hakkinda reflective paper yazmak
        - Donem sonu ve donem basi için değerlendirme anketleri ve ders sonu değerlendirme formu hazirlamak
        - Opening session hazirlayip sunmak ve ozdeğerlendirme yapmak
        - Kendi dersiniz için "active learning" aktivitesi hazirlamak
        - Kendi dersiniz için bir sinav ornegi hazirlamak
        - Online ornek videolari izlemek
        - Online grup tartismalarina katilmak

8. EDS660 dersinin ileride öğretim üyesi olarak vereceginiz derslere bir etkisi olacagini düşünüyor musunuz? Nasıl?

    - Burda derste yapilan aktiviteler açısından:
        - Kendiniz hakkinda reflective paper yazmak
        - Donem sonu ve donem basi için değerlendirme anketleri ve ders sonu değerlendirme formu hazirlamak
        - Opening session hazirlayip sunmak ve ozdeğerlendirme yapmak

    - Kendi dersiniz için “active learning” aktivitesi hazirlamak
    - Kendi dersiniz için bir sinav ornegi hazirlamak
    - Online ornek videolari izlemek
    - Online grup tartismalarina katilmak
- Bu dersin daha etkili olabilmesi için neler onerirsiniz?

9. Konuyla ilgili eklemek veya görüş bildirmek istediğiniz başka konular var mı?

APPENDIX F

Online Discussion Topics

Week 1: Becoming a University Teacher: Expectations and Realities

İlk tartışma konumuz sizin ileride çalışmayı düşündüğünüz akademik ortam hakkındaki beklentileriniz... Acaba sizlerin ideal çalışma ortamı tanımınız nedir? Fiziksel koşullardan insanlararası ilişkilere kadar bircok konudaki beklentilerinizden bahsedebilirsiniz.

Week 2: Characteristics of University Students and Learning Styles

Bu haftaki tartisma sorusuna gecmede once, bu haftaki öğrenci videolarinda (universite hayati ve arkadaslik iliskileri isimli videolar) son derste bahsedilen konulardan farkettiginiz ornekler oldu mu acaba? Dersteki konularla öğrenci gorusleri arasinda ortak noktalar var mi?

Week 3: The World of Educational Paradigms and Learning Theories

Topic 1: Bu hafta egitim felsefesi konusuyla ilgili bir konuda goruslerinizi almak istiyoruz... Sizce universitede uretilen bilim bilim icin mi, yoksa toplum icin midir? Ve bir öğretim uyesi degerler egitiminden sorumlu mudur? Bu konuda yapmasi gereken seyler var midir?

Topic 2: Yaklasik olarak 2 yil sonra, hoca olarak ders vermeye basladiniz ve icerigine hakim oldugunuz bir lisans dersi verildi size... Henuz dersi hazirlama asamasindayken ve ders suresince "mumkun oldugunca cok öğrenci profiline hitap edecek bir ders" icin nelere dikkat etmeniz gerektigini dusunuyorsunuz? Somut ve spesifik ornekler verebilirseniz iyi olur..

Week 4: Course Design

Bu haftaki derste "Course Design" konusu islendi. Ders amaclarinin belirlenmesi, bu amaclar dogrultusunda planlanmasi gibi konulardan bahsedildi. Bu hafta aktivitelerinde size cesitli bolum hocalarının ilk derslerinde öğrencilere uyguladiklari anketler ve donem sonunda yapilan cesitli uygulamalarla ilgili ornek dokumanlar hazirladik. Siz bu tip uygulamalarin dersi gelistirmeye etkisi olacagini dusunuyor musunuz? Nasil?

Week 5: Instructor-Centered Teaching Strategies

Bu hafta uc farkli ders videosu hazirladik. Dersleri veren öğretim uyeleri farkli alanlardan secildi. Bunlar, Biyoloji, Fizik ve Uluslararasi Iliskiler. Bu derslerde hocaların kullandiklari yontemler hakkinda ne dusunuyorsunuz acaba? Daha cok hangileriyle karsilastiniz?

Week 6: Student-Centered and Active Learning Strategies

Topic 1: DP'in Fishbowl aktivitesini* etkili/faydali buluyor musunuz? Sizce bu tur bir sinif aktivitesi uygulamanin zorluklari var midir?
*http://www.yecane.com/moodle/mod/resource/view.php?id=99

Topic 2: bu hafta sitede uc farkli grup calismasi videosu hazirladik..
KN; *http://www.yecane.com/moodle/mod/resource/view.php?id=98*
DP; *http://www.yecane.com/moodle/mod/resource/view.php?id=100*
ve DR; *http://www.yecane.com/moodle/mod/resource/view.php?id=101*

ve *http://www.yecane.com/moodle/mod/resource/view.php?id=102*
Bu yontemler hakkinda ne dusunuyorsunuz? Kendi alanlariniz acisindan kullanilabilirliklerini degerlendirebilir misiniz?

Week 7: Managing the University Classroom

Topic 1: http://www.yecane.com/moodle/mod/resource/view.php?id=105

Sizce bu durumda hocanin yapacagi en dogru davranis ne olmalidir?
Siz olsaniz ne yapardiniz? Bu hafta bunu tartisiyoruz. Burdaki tartisma bittiginde hocanin ne yaptigini gorecegiz.

Topic 2: http://www.yecane.com/moodle/mod/resource/view.php?id=108

Bu sinifta sizin acinizdan bir problem gorunuyor mu? Bu durum size tanidik geliyor mu? Ne dusunursunuz ve eger sorunlu bir durum varsa ne onerirsiniz?

Week 8: Assessment and Grading in Higher Education

Topic 1: Dah onceden tanidigimiz Dr. Paulson'in dersinde yaptigi bir on-degerlendirme uygulamasinin* sizin dersleriniz/alanlariniz acisindan uygulanabilir oldugunu dusunuyor musunuz?
* mms://lagun.cc.metu.edu.tr/EDS660/2008/Esra/1/DP_bluebook.wmv
Öğrenciyi o haftanin okumalarini yapmaya tesvik etmesi icin yapilan bu uygulama sizce verimli mi? Bu tur bir aktiviteyi nasil degerlendirmeliyiz, notlandirmaya katmali miyiz ornegin?
Ayrica buna benzer farkli ornekleri olanlar paylasabilir, farkli uygulamalari gorme sansimiz olabilir boylece...

Topic 2: Öğrencilerin verdigimiz odevleri ve sinavlari durust bir sekilde yapmalarini istiyoruz, yaptigimiz ehrsey onlar daha iyi öğrensin diye.. Tabi ki donem boyunca harcadigimiz emeklerin karsiligini bir sekilde gormek istiyoruz ama nedense kopya olayi cok siklikla yasaniyor ve hoca icin buyuk bir hayal kirikligi. Hem sinavlar hem de odevlerde öğrencilerin durust davranmalarini saglamak icin hocaların uzerine dusen gorevler yok mu acaba?

Week 9: Ethics and Professional Development in University Teaching

Topic 1: Sinav sirasinda bir öğrencinin sordugu soruya cevap vermek etik midir? Öğrencinin sordugu bu soruyu tum sinifla paylasmak uygun mudur?

Topic 2: A adli bir universiteden gelen bir teklifle kimya alaninda bir proje B universitesi ile ortaklik baslatmistir. Tum calismalari ve deneyleri B universitesindeki arastirmacilar yurutmus ve A universitesinden proje bitene kadar bir katki saglanmamistir ve rapor yine B universitesi tarafindan hazirlanmis. Ancak raporda A universitesi fikir onlarin oldugu icin isimlerinin one konulmasini talep etmisler.

Yayin konusunda ise calismalari gerektiginde yine A universitesi ne analizler konusunda ne de konu konusunda bilgi sahibi olmadiklari ve hic bir sekilde yayina katki yapamiyacaklari anlasilmistir. B universitesi yine 2-3 hafta surecek analizleri yapmislar ve bunlari A universitesinin yayina cevrimle icin paylasmislar. Yine bir cevap ya da calisma alamamislar.

Etik Ikilem:

a) Sizce A universitesi ilk yazar olma hakki var midir?

b) B universitesi partnerilerinle ortak yayin yapabilmek icin nasil bir yol izlemelidir?

c) Bir etik ihlal varsa B universitesi bu konuda neler yapmalidir?

Topic 3: 2007 Akademik yilinda OYPli universite öğrencileri yayin ihlali paytiklari konusunda ceza aldilar ve kurumdan uzaklastirildilar. Ancak öğrencilerin yaptiklari yayinlarda danismanlarinin da adlari vardi fakat bu danismanlar bu konudan etkilenmeden ciktilar hatta hem TUBITAK hem de ODTU yayin odulu aldilar.

Etik ikilem:

Bir yayinin hazirlanmasinda danismanin rolu nedir? Bu ornek olayda nasil bir yol izlenilmeliydi?

Topic 4: Mimarlik Bolumu'nde, mimarlik studyolarinda, öğrenci degerlendirmesinde agirlikli olarak juriler yapilmaktadir. Donem icinde 2 yada 3 tane ve donem sonunda da, final juriler yapilmaktadir. Bu jurilerden en onemlisi ve en zorlayicisi final jurilerdir. Juriler, 2 gun surmektedir. Bir gun oncesinden de projeler teslim alinmaktadir.

Konunun etik konusuyla baglantisinin kurulmasi konusunda, bolumdeki hoca ve asistanlarin cok tartistigi bir durumu anlatmak istiyorum. Teslim saati geldiginde, 10 gun boyunca calisan öğrencilerin cok az bir kismi projelerini yetistirebilmekte, digerlerinde ise pek cok eksik sey olmaktadir. Bu nedenle de, öğrenciler, 2 gun surecek olan jurilerde sonlara dogru cikmak istemekte ve o zamana kadar da projelerindeki eksikleri tamamlamak icin teslim etmek istememektedirler. Burada soyle bir durumla karsilasiyoruz. Öğrenci acisindan baktigimizda, öğrencinin hakli oldugunu dusunebiliyoruz. Yetistirenler erken ciksin diyebiliriz, genelde de boyle yapilir. Digerleri calisirlar ve kesinlikle izlemesini istedigimiz jurileri de izleyemezler. Fakat, yetistiren öğrenciler acisindan dusundugumuzde de onlara bir haksizlik yapildigi konusu gundeme geliyor.

Bu donem, bu durum icin aramizda tam uzlasma saglayamasak da soyle bir sey yaptik. Herkesten projelerinin oldugu kadarini alip kilitledik ve juri baslarken kurayla cikacak kisiyi belirleyip, herkesin istedigi zaman cikmasini engelledik ve surekli studyoda bulunmalarini ve juriyi izlemelerini sagladik. Tabi projelerin cogu eksikti, bundan da pek hosnut degildik.

Etik Ikilem:

Projelerin tam bitmemis olsa da ayni anda teslim alinmasi firsat esitligi acisindan onemlidir. Ote yandan "öğrencilere basarmalari icin firsat veriniz" (provide opportunities for success) maddesi de pedagojik acidan onemlidir. Sizce bu ornek olaydaki durum etik midir? Nasil bir cozum uretilebilir?

Topic 5: Tum bolumlerin aldiklari bir kultur dersinde bir öğretim uyesi performans notunun yuksek olmasi ve docent kadrosuna atanabilmesi icin ustu kapali olarak öğrencilerine bu konuda comert davranmalarini ve onun da harf notu verdigi zaman comert davranacagini bir kac sefer derste duyuruyor. Öğrencilerine belli etmedigi halde sinavda cikacak benzer sorulari ust uste derste cozduruyor.

Etik Ikilem:

Sizce öğretim uyesinin bu talebi etik midir?

Öğretim uyesinin sinavda verecegi̇nden emin oldugu benzer bir problemi derste surekli cozdurmesi etik midir?

Topic 6: Her sinavdan once, asistanligini ve koordinasyonunu yaptigim ders icin, dersin öğretim uyesi tarafinadan, laboratuvar kismi ile ilgili bir soru hazirlamam istenir. Iki sene once yine boyle bir durumda, sinav icin bir soru hazirladim ve dersin hiocasina teslim ettim. Sinava birkac gun kala, öğrencilerimden birisi, benim sinavda sordugum soruyu, rakamlarini bile degistirmeden gelip bana sordu. Bu olay karsisinda cok sasirmistim, cunku soru orjinaldi, gecmis senelere ait degildi ve ilk defa soruluyordu. Hic bir tepkide bulunmadan, öğrenciye cok

mesgul oldugumu, daha sonra tekrar gelebilecegini nazik bir dille ifade edip gonderdim. Bir yandan bir gencin hayati soz konusu oldugu icin, vicdanim surekli emin misin diye beynimi sorguluyordu. Diger yandan sorunun original olduguna yeni hazirlandigina ve rakamlarinin bile ayni tutma olasiliginin nasil olabilecegini dair sorular ve dusunceler beynimi kemiriyordu. Sonunda dusundum ve durumu hoca ile paylasma kararini verdim.

Daha sonra bolumde yapilan detayli tetkikler sonucunda korkunc bir manzara ortaya cikti. Bir grup öğrencinin hocaların bilgisayarlarina girerek sinavlari caldiklari ortaya cikti. Ustelik bunu sadece benim asistani oldugum ders icin yapmamislardi. Gecmiste bu yontemle indirdikleri sinavlardan basarili olarak verdikleri bircok ders bulunmaktaydi. Bu grup icerisindeki bazi öğrenciler, bilgisayardan sorumlu asistanlarin yanlarinda öğrenci asistani olarak part time calisiyorlardi. Bilgisayardan sorumlu asistanlarin yanlarinda bulunduklari surec icerisinde, bu öğrenciler, hocaların bilgisayar sifrelerini öğrenmislerdi ve daha sonra kotu bir amac icin kullanmislardi. Bu olay ortaya ciktiktan sonra, bu öğrenciler, sinavlarini caldiklari dusunulen derslerden otomatik olarak birakildilar ve bir kismi disiplin kurulu tarafindan okuldan uzaklastirilma cezasi aldi. Bolum ise yeni bir kararla ana kullanici sisteminden, herkesin kendi bilgisayaranin kullanicisi oldugu yeni bir sisteme gecme karari aldi. Boylelikle bilgisayardan gorevli arastirma gorevlileri dahil hic kimsenin bir başkasının bilgisayarina girisimi engellendi.

Etik Ikilem:

Sinav suresince öğrencilerin sinavlari caldiklari dusunulerek derslerden otomatik olarak birakilmalari dogru mudur?

APPENDIX G

Informed Consent Form

Bu çalışma, Arş.Gör. Esra Yecan tarafından yürütülen bir doktora tezi çalışmasıdır. Çalışmanın amacı çevrimiçi bir öğrenme ortamının, araştırma görevlilerinin öğretim alanındaki mesleki gelişimlerine etkisini ortaya çıkarmaktır. Çalışmada, geliştirilen çevrimiçi materyalin bir dönem boyunca kullanılması sonucunda araştırma görevlilerinin öğretim alanındaki mesleki gelişimleri açısından değerlendirmesi yapılacaktır. Çalışmaya katılım gönüllülük temelinde olacaktır. Katılımcıların kimlik bilgileri ve görüşme verileri, web sitesi log verileri ve dönem boyunca hazırlanan tüm ödev verileri gizli tutulacak, sadece araştırmacı tarafından değerlendirilecek ve raporlama sürecinde kimlikler saklı tutularak sunulacaktır.

Görüşme formları ve dönem boyunca hazırlanacak ödevler genel olarak kişisel rahatsızlık verecek durumları içermemektedir. Çalışma boyunca, sorulardan veya dönem boyunca kullanılacak olan materyalden herhangi bir nedenle kendinizi rahatsız hissederseniz çalışmaya katılımınızı yarıda bırakmakta serbestsiniz.

Böyle bir durumda araştırmacıya çalışmadan çekildiğinizi söylemeniz yeterli olacaktır. araştırma sonunda, bu araştırmayla ilgili sorularınız cevaplanacaktır. Bu çalışmaya katıldığınız için şimdiden teşekkür ederiz. Çalışma hakkında daha fazla bilgi almak için Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü öğretim üyelerinden Doç.Dr. Kürşat Çağıltay (Oda:Z-19, Tel: 210 36 83, e-posta: kursat@metu.edu.tr) veya araştırma görevlilerinden Esra Yecan (Oda:Z-14, Tel: 210 36 84, e-posta: yecan@metu.edu.tr) ile iletişim kurabilirsiniz.

Bu çalışmaya tamamen gönüllü olarak katılıyorum ve istediğim zaman yarıda kesip çıkabileceğimi biliyorum. Verdiğim bilgilerin bilimsel amaçlı yayımlarda kullanılmasını kabul ediyorum. (Formu doldurup imzaladıktan sonra uygulayıcıya geri veriniz).

İsim Soyad Tarih İmza Alınan Ders

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PUBLICATIONS

Conference Presentations and Proceedings

Yecan, E. (2005). *Learning strategies of the students with different cognitive styles in a hypermedia environment.* Unpublished masters thesis, METU.

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